

ISSN 1913-9020

INTERNATIONAL EDUCATION STUDIES

**Vol. 2, No. 2
May 2009**



Canadian Center of Science and Education

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Capturing Urban Middle School Students' Voices on the Use of Science Inquiry in their Classrooms

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Abstract

The present study seeks to explore middle school students' perception of the kind of science instruction going on in their classrooms and its relevance to their daily lives outside the classroom. Data were collected using a five point Likert type survey instrument that was administered to 262 middle school (Grades 6, 7& 8) students in six middle schools in Southern California. This instrument consisted of demographic information and thirty six statements organized in clusters to elicit responses on a number of statements about students' 1) their emotional disposition toward science, 2) perception of and understanding of the usefulness of science, and 3) emotional disposition towards science inquiry and their perceptions of their teacher's use of inquiry-based instruction in their classrooms. Results revealed that generally, students' percentage responses were low for all the three research questions even though they were high for specific survey statements for the three clusters of survey statements. Suggestions were made for future research on the topic.

Keywords: Perception, Inquiry, Professional Development, Emotional disposition, Adolescents, Voices

1. Introduction

As early as 1904, Stanley Hall warned that "the future of humankind was, in large measure, determined by the quality of education received at the crucial age of adolescence" (p. xv). According to Jackson and Davis (2000), "significant progress has been made in the journey to provide young adolescents with a developmentally responsive education". However, "we are only halfway up the mountain, with the most important and perhaps most difficult part of the climb remaining". (p. 5)

The National Assessment of Educational Progress (NAEP) seems to support this assertion by their report that the general National middle school achievement data reveals troublesome trends. In science, achievement has fluctuated, declining in the 1970s then increasing in the 1980s and declining again in the 1990s. (Mullis, Martin, Gonzalez, & Chrostowski, 2004). Furthermore, Grigg, Lauko, & Brockway (2006) reports that "on the average science score in 2005 showed no significant change compared to results in 1996 and 2000" (p.2). Evidence from Third International Math and Science Studies (TIMSS) 2003 report shows that by the eighth grade, the U.S. students had slipped to the middle of the list of nations and under-performed even students from several less-developed nations in science and math (Mullis et al., 2004).

Fortunately, the No Child Left Behind (NCLB) act of 2001 has put the spotlight as never before on the issues of middle school reform and recommends that schools use scientifically-based research to improve student achievement (US Department of Education, 2006). This act suggests that scientifically-based research provides evidence on how and why a program or practice works, its effect on student achievement, and its success in various settings and situations.

In conjunction with this stipulation, the National Research Council (NRC) conducted a research on science based education reform citing in its report that inquiry should be placed at the center of science teaching and learning (National Research Council, 1996). The national science education standards (NRC, 1996) suggest that students in

grades 5- 8 science classrooms should be provided with opportunities to engage in full and partial inquiries as they develop both “abilities necessary to do scientific inquiry” and “understandings of scientific inquiry”. The standard encourages science teachers to use these as “powerful vehicles to help students learn science content” (NRC, 1996, p. 121). It suggests that the use of appropriate curriculum and adequate instruction will enable middle school students develop abilities to carry out investigations and the understandings needed for scientific inquiry.

Review of the literature on inquiry-based instruction revealed that studies generally focused on student behaviors and products to the exclusion of the description of actual instructional practices that influenced those behaviors and products (Flick and Ault, 1995). Despite the long standing and persistent call for the use of inquiry-based instruction, the actual implementation of this strategy in the classroom has remained an assumption. The present study seeks to capture urban middle school students’ voices regarding the use of inquiry in their classrooms and these students’ understanding of the usefulness of science in their everyday life. This is especially needful because hitherto, studies are limited in the knowledge that exists about students’ perceptions of the kind of instruction that goes on in their science classrooms. Students’ attitudes and perceptions have been typically inferred through teacher or principal interviews and surveys (Powell, 1997), and other general information received from adults such as parents, teachers, and administrators, as data sources. Even though there are a few exceptions (e.g. Powell, 1997; Shultz and Cook-Sather, 2001), students’ voices are usually less solicited and honored as valuable perspectives on schooling and so are usually missing from important discussions about their schooling. Students are known to be thoughtful enough to provide valuable insight into what happens in their classrooms and schools (Jackson & Davis, 2000; Oldfather & McLaughlin, 1993). This study addresses the gap in the research literature by including students’ voices and examining middle school students’ perceptions and experiences with science, science instruction, and inquiry as members of a learning community. Specifically it seeks to address the questions:

- (1) What are middle school students’ emotional dispositions towards science?
- (2) What are middle school students’ perceptions of the usefulness of science?
- (3) What are middle school students’ emotional disposition towards science inquiry and their perceptions of their teacher’s use of inquiry-based instruction in their classrooms?

The NRC (1996) document defined abilities to do scientific inquiry as posing questions about objects, organisms, and events, planning and conducting investigations, gathering and analyzing data, using data as evidence to construct explanations, and communicating findings and understandings about scientific inquiry including knowledge of how scientists conduct their work as well as having in-depth conception of the nature of science.

Several studies on science inquiry have reported significant positive effects especially on academic, process skills, and attitudes toward science (Shymansky et al., 1990; Geban, Askar, & Ozkan, 1992; Ertepinar & Geban, 1996; Chang & Mao, 1998, Osisioma & Onyia, 2008). These positive effects have been attributed to 1) students in the inquiry classroom being involved in asking questions and formulating ways to answer their questions (Gibson & Chase, 2002; Hand, Wallace, & Yang, 2004), 2) inquiry-based instruction promoting students’ deep conceptual understanding (Lloyd, 1988), and 3) inquiry-based instruction being learner-centered allowing teachers to build on students’ prior experiences (Fradd & Lee, 1999) and engaging them actively in their learning.

The science education community have made laudable efforts for inquiry-based science to be implemented in the classrooms through reform-based science materials, science methods classes, and professional development programs, (Abell et al. 2005; Barton, 2001; Fraser-Abder, Atwater & Lee, 2006; Lowden, 2005; Osisioma & Onyia, 2008; Supovitz & Turner, 2000; Tobin, Roth & Zimmerman, 2001). However, one question that has continued to hunt the science education community is whether this research based strategy has found its way into the science classrooms and if it has, whether the students for which they are used are actually aware that it is being used and are benefiting from its use.

1.1 Science Inquiry in the Classroom

The science education community has come to a consensus on the need to revive the concept of inquiry as representing the essence of science education. Indeed most recent science education reform efforts have focused on the development of inquiry-based programs for use at both professional developments, science methods courses and in the K-12 science classrooms. For example, two very important National reform documents-the National Science Education Standards (NSES) and Project 2061’s Benchmarks for science literacy have promoted inquiry as the central strategy for science instruction. The NSES presented inquiry as an indispensable form of learning that focuses on real questions generated by students themselves based on their prior experiences (NRC, 1996). In NRC’s (1996) contention, when students employ inquiry, they use their critical thinking skills effectively in asking questions about events, developing and testing explanations based on available scientific knowledge, arriving at conclusions based on evidence and communicating these to others. Unfortunately according to Bateman (1990), most teachers do not use it because they do not yet understand how powerful the strategy is in promoting meaningful learning of science concepts. Consequently,

they have held on to their traditional didactic mode of transmitting scientific knowledge. This traditional approach according Van Driel and Verloop (2001) has continued to promote students' lack of interest in science with its attendant poor understanding of the science concepts.

The foregoing necessitated the current call by NSES to deemphasize this traditional mode of transmitting information (which promotes rote memorization of de-contextualized science facts, Krajcik, et al., 2005) and create more student centered learning environments in which students are actively involved in their learning (Kennedy, 1998). There is preponderance of evidence that indicate that engaging students in inquiry is more likely to promote students deeper understanding of science content while equipping them with science process skills (e.g., Brown & Campione, 1994; Metz, 1995).

Krajcik et al (2005) contend that, "students need help to become knowledgeable about content, skilled in using inquiry strategies, proficient at using technological tools, productive in collaborating with others, competent in exercising self-regulation, and motivated to sustain careful and thoughtful work over time"(p. 284). This can only be achieved when students are guided through the process of making sense of what they are learning as well as using the knowledge that develops to create multiple representations of this knowledge. However, as at yet we have little knowledge of whether this is happening in the classrooms and if it is, how students are responding to it.

1.1.1 Professional Development

Literature is replete with national-level studies that indicate that many teachers lack teaching expertise in areas associated with science education reform (Haney, & Lumpe, 1995, Huffman, 2006). According to Jacobson and Doran, (1991) the most commonly used instructional strategies by science teachers are lecture, question and answer, and assignments. To corroborate this claim, Tali, Krajcik, & Blumenfeld (2006) argued that even those that have began to use inquiry based strategies in their classrooms are far from being fluent in doing so.

Spillane and Thompson (1997) reported that the capacity of local education policymakers was not enough to support instructional reform and that continued attempts to regulate teacher behaviors in the classroom through policies and programs have proved abortive. School leaders' responses to reform reflect fundamental differences in their views about the subject area, not only on what counts as knowledge in that subject areas but also in their perceptions of subject areas (Burch & Spillane, 2005). Several other researchers have found that teachers habitually remake or overlook policies that are anticipated to impact their classroom practices (Cohen & Ball, 1990; Wilson & Corbett, 1990, Huffman, 2006). Consequently, educators have turned lately to professional development as the best bet for changing teaching practices (Smylie et al., 1996) and improving student achievement.

A number of recent studies have explored the relationship between professional development and teaching practice. Borchers, Shroyer, and Enochs (1992) implemented a professional development program to encourage the use of technology in science classrooms and reported that effective professional development altered the beliefs of teachers and their subsequent behaviors. Based on this, they proposed that change in teachers' behaviors and attitudes are promoted by a professional development model that includes training, and continuous implementation support in the classrooms. Furthermore, Allen and Lederman (1998) reported the success of a Teacher Academy for science and mathematics that was based on rigorous professional development.

In another study in which teachers participated in Ohio's Statewide Systemic Initiative in science and mathematics, Supovitz et al., (2000) reported that intensive inquiry-based professional development altered teachers' attitudes towards reform, their readiness to use reform-based practices, and their actual use of inquiry-based instructional practices in their classrooms and that these changes persisted many years after the teachers finished the training.

This provided an implicit rationale for the current effort by the science education community to redirect their efforts in the use of professional developments to promote the use of inquiry strategy in the classrooms (Abell et al. 2005; Barton, 2001; Fraser-Abder, Atwater and Lee, 2006; Lowden, 2005; Supovitz & Turner, 2000; Tobin, Roth and Zimmerman, 2001). Studies of professional development that targeted the use of inquiry based instruction have however shown contradictory reports.

Okhee Lee et al., (2004) investigated the impact of professional development intervention with the goal to help elementary teachers promote science inquiry among culturally and linguistically diverse students on teachers' beliefs and practices. They reported a discrepancy "between teachers' perceptions of their improved science knowledge and practice (as indicated on the questionnaire and in interviews) and the lack of significant change in their actual instructional practices (as evidenced in the classroom observations)" p. 1037.

Even though most of these studies demonstrated the effectiveness of professional development in influencing general instructional practices, much is yet to be known about how students are responding to and what they have to say about the reform strategies. The knowledge of how students are responding to inquiry will help science educators re-evaluate and re-structure the way inquiry should be implemented in the classrooms to ensure that students benefit from it. Herein lies the focus of the present study that specifically seeks to explore students' perception of the kind of science

instruction being implemented in their classrooms by hearing student's voices about inquiry based science instruction in their classrooms and its importance in their everyday life.

1.1.2 Urban Students and Science Education

It is a well known fact that urban students see school science as a contradiction of their beliefs and experiences. They view science as impractical, alien and not having any connection with their homes or lives outside of the classroom. This situation according to Basu, & Barton (2005), accounts for students' association of science with emotions such as boredom, anxiety, confusion, and frustration. Over the years, there has been a general consensus that professional curriculum and instructional standards in mathematics and science especially in urban settings should reflect that learning is a process in which students are active participants in the acquisition and construction of knowledge (National Science Foundation {NSF}, 1998). Inquiry based instruction is essential for student learning (Lunetta, 1998; Roth, 1995), and allows for this active students participation. It is during inquiry instruction that students are provided with the opportunities "to find solutions to real life problems by asking and refining questions, designing and conducting investigations, gathering and analyzing information and data, making interpretations, drawing conclusions, and reporting findings" (Krajcik, Blumenfeld, Marx, & Soloway, 2005). According to NSES (NRC, 2000): developing the ability to understand and engage in this kind of activity requires direct experience and continued practice with the processes of inquiry. Students do not come to understand inquiry simply by learning words such as "hypothesis" and "inference" or by memorizing procedures such as "the steps of the scientific method." They must experience inquiry directly to gain a deep understanding of its characteristics. (p. 12).

This student centered type of instruction that emphasize inquiry and the use of open-ended questions, has been reported to be more effective in promoting deep conceptual understanding of science (Anderson, 1997; Darling-Hammond, 1996 in Von Secker, & Lissitz, 1999). However, verification of the extent to which teachers are already using this strategy is sparse at best (Von Secker, & Lissitz, 1999).

2. Methodology

2.1 Research Context and Participants.

The present study was conducted in a school district in Southern California with a high proportion of minority students from diverse languages and cultures. The ethnic make up of the student population was 83% Hispanic, 3% of African Americans, 1% Asian Americans, 1% Pacific Islanders and 2% other. Participants include 242 middle school students (88, 6th grade; 92, 7th grade; and 62, 8th grade). Of these, 42% were males while 39% were females. The current school district was selected by purposive sampling method for the study because for several years, the science teachers have been involved in intensive professional development on the use of inquiry-based science instruction through summer institutes and their follow up meetings in addition to taking science methods courses where inquiry-based science instruction has been the mainstay. The motivation for the study was based on the need to find out whether students' understanding of inquiry is aligned with studies that point to effectiveness of inquiry based professional development as a support for teacher effective planning and implementation of inquiry based instruction.

2.1.1 Data Collection

Data for the present study was collected using a survey instrument that consisted of demographic information and thirty nine statements that elicited responses on a number of statements about students' perception of the kind of science instruction that goes on in their classrooms. Specifically, these statements were organized into clusters to reflect students' (a) emotional disposition towards science, (b) perception of and their understanding of the usefulness of science, and (c) students' emotional disposition towards science inquiry and their perceptions of their teacher's use of inquiry-based instruction in their classrooms. Students expressed their level of agreement or disagreement with 36 survey statements by choosing from one of a Likert-type scale- Strongly Disagree (SDA), Disagree (DA), Somewhat Agree (SWA), Agree (A), and Strongly Agree (SA). The coding of responses was: SD = 1, D = 2, SWA = 3, A = 4 and SA = 5. Non-response received a negative code. The data was analyzed to obtain percentages, means and standard deviations of students' responses.

Mayer (1999) as cited in Smith et al (2007) points out, "research has shown that survey measures of teaching, especially composite measures such as those we used in this study, can be effective in describing and distinguishing among different types of teaching practices" p. 180.

Science teachers in the study district administered and collected the surveys over a one month time period. This may have imposed some limitations to the study that include possible influence on student responses by teachers and lack of spontaneity of student response. Despite the use of simple words that the students would easily understand, it was still possible that students did not understand some of the technical words used in the survey tool hence the lack of response to several items on the survey instrument and/or responses that contradict earlier responses to similar questions in a different domain. A total of 95 percent (n= 242) of the surveys were returned.

2.1.2 Reliability and Validity

The survey used in this study was a one page questionnaire developed by researchers and an evaluation team. The survey was validated by a summative committee comprised of science teacher leaders, administrators who are aware of science practices and science methods professors. This team reviewed the construct validity of the survey statements to ascertain the fidelity with which the responses from this category were coded. Construct validity is an indicator of the logical, conceptual connection between a test and what it is designed to measure. Reliability analysis of the items resulted in an alpha coefficient of .92, indicating a strong internal consistency of items. This format ensured both reliability and validity of the instrument. The final student survey statements were reduced from 45 to 36 after the validation process.

3. Results

Data analyses for the present study are reported below based on students' responses on the three research questions and the clusters of survey questions namely 1) students' emotional dispositions towards science, 2) students' understanding of the usefulness of Science, 3) students' emotional disposition towards science inquiry and their perception of their teacher's use of inquiry-based instruction in their classrooms. For the purpose of this study, students' responses are documented in 1) percentages with the strongly agree and agree responses being merged into one to show students' general agreement and differences along grade level lines with each of the survey questions organized in clusters as shown in the figures and 2) means and standard deviations were used to provide further validation of students response data under the three clusters as shown in table 1. For this purpose, we calculated the mean value of the five rating scale for the survey statements to be 3. A mean score of 3 and above was therefore considered acceptable score for agreeing with the three clusters of survey statements.

Place Table 1 about here

3.1 Research Question 1: Student' Emotional Disposition towards Science

Table 1 above reveals that 39.67% of participating students expressed positive emotional disposition towards science (mean= 3.02; sd =1.43). A closer look at students' responses to specific survey statements (SS) shows that 58% of students reported that they enjoy doing science very much (SS #1) {mean = 3.60; sd = 1.14}, 69% expressed likeness for the science activities they do in their classrooms (SS #2) {mean=4.2; sd= 0.99}, 79% thought that doing science experiments is fun (SS #3) {mean = 3.87; sd = 1.20 }, 61% expressed that they feel comfortable doing science (SS #4) {mean = 3.77; sd = 1.07}, and 58% reported that they usually understood what they talked about in science (SS #7) (mean = 3.63; sd =1.01). These high percentages of positive responses were for five out of seven statements that reflected positive disposition towards science. See appendices I and II.

It is also important to note the low percentages of students who responded in affirmative to statements that reflected negative emotional disposition towards science. For example, only 21% of students thought they did not like anything about science (SS #8), {mean=2.27, sd=1.32}, 22% expressed that they feel nervous when someone talks to them about science (SS #9), {mean=2.40, sd=1.32}, 17% reported that they feel nervous to think about science (SS #10), {mean=2.29, sd=1.25} 18% feel that doing science experiments is a waste of time (SS #11), {mean=2.08, sd =1.31} and 26% reported that no matter how hard they tried, they could not understand science (SS # 15) {mean=2.41, sd=1.34}. See Appendices I and II.

Comparing data for students' responses to the above research question by grade levels without taking other variables like students' maturity, length of exposure, and teachers' perceptions, shows that 7th graders (53.50%, mean = 3.32, sd = 1.24) expressed more positive emotional disposition towards science than 6th graders (37.34%, mean = 2.82, sd = 1.61) and 8th graders (32.42%, mean = 2.84, sd = 1.33). A closer look at specific survey statements reveals that a greater percentage of 6th graders responded positively to SS #s 1 through 4 with 73%, 92%, 98%, and 82% respectively. While 7th graders had 53%, 45%, 65%, and 49% and those for 8th graders were 45%, 71%, 74%, and 53% for SS #s 1 through 4. Looking at the survey statements that reflect negative emotional disposition (SS #s 8-11 & 15), the percentages for 6th graders were 2%, 3%, 0%, 10% and 5% while those for 7th graders were 45%, 47%, 42%, 41%, and 53% and those for 8th graders were 16%, 15%, 6%, 11% and 19%. This tends to suggest that not only does the high positive responses from 7th graders come from their responses to SS that reflect negative emotional disposition towards science but reveals that 6th graders had more positive emotional dispositions towards science followed by 8th graders. Furthermore, the standard deviation for each grade level compared to the mean score shows a cluster of response around the mean. Analyzing the grade level data based on the standard deviation and mean shows how close the distribution of the data set is from the responses to the specific sections of the survey instrument. This low cluster to the mean is reflected in all the data set for the research questions.

3.1.1 Research Question 2: Students' Perceptions of their Understanding of the Usefulness of Science.

Table 1 shows that over all, 44.75% (mean=3.54, sd=1.04) of students expressed understanding of the usefulness of science. A close look at specific survey statements show that only 19% (mean=3.48, sd= 1.07) of students agreed with

the SS 16 which states that “science is useful for solving everyday problems”; while 65% (mean=3.83, sd=1.04) agreed with SS 17 in which they thought that “science is helpful in understanding today’s world”, 57% (mean=3.62, sd= 0.94) agreed with SS 18 that most people should study science. Thirty-eight percent (mean = 3.25, sd = 1.03) of these students did not see the need for science in most jobs.

A closer look at the grade level data for this research question reveals that a greater percentage of 7th graders (53.50%) expressed understanding of the usefulness of science compared to 42.25% of 6th and 38.25% of 8th graders. However, this high percentage responses reported for 7th graders mostly comes from SS 19 that stated that “there is little need for science in most jobs.” Interestingly, as the results suggest 57% of 7th graders did not see the need for science in most jobs. See Appendices I and II.

3.1.2 Research Question 3: Students’ Emotional Disposition towards Science Inquiry and their Perceptions of their Teacher’s use of Inquiry-based Instruction in their Classrooms

Data from Table 1 indicates that 44.71% (mean = 3.26, sd = 1.50) of the students agreed that some form of inquiry is being done in their classroom. However, further analysis of students’ responses to specific survey statements showed that 70% (mean =3.81, sd = 1.31) of students agreed with SS 21 which states that “their teachers made science interesting, 65% (mean =3.78, sd =1.18) agreed with SS 22 that they learn to state hypothesis, design experiments, and defend their conclusions, for SS 24 68% (mean = 3.83, sd = 1.24) thought that their teachers explains science in a clear way, while their responses to survey statement 28 indicated that 62% (mean = 3.79, sd = 1.17) agreed that they are able to ask questions about what they are learning and to find answers to these questions. Also, 51% of the students agreed to SS 29 (mean = 3.59, sd = 1.16) that they were actively involved in their learning and are able to express their opinions in their science class, while 57% (mean=3.64, sd= 1.01) agreed with SS 31 that they remembered most of the things they learned in their science classes.

Regarding students’ emotional disposition toward inquiry based instruction, results of the study tend to suggest that students have positive emotional disposition towards inquiry based instruction. This is corroborated by the fact that even though only 38% (mean = 3.21, sd 1.13) of students thought that most students in their class are “keen about laboratory assignments”, a greater percentage of them thought that: (a) “their science teacher made science interesting” (70%, mean =3.81, sd = 1.31), (b) “doing experiments gives them critical and analytical mind” (49%, mean =3.49, sd = 1.13), (c) they are able “to ask questions about what they are learning and to find answers to these questions” (62%, mean = 3.79, sd = 1.17), and (d) they are actively involved in their learning and are able to say their opinion (51%, mean = 3.59, sd = 1.16). These foregoing responses in our own opinion suggest that students have positive disposition towards inquiry based science. This explains why a large number of students recognized the benefits of their science instruction as reflected on their responses.

Across grade levels, even though results generally showed low percentages across grade levels, 6th (46.88%) and 7th (47.82%) graders had more positive emotion about inquiry and were more favorably disposed to the survey statements that agreed with their teachers’ implementation of inquiry based science instruction in their classrooms than 8th graders.

4. Discussion and Educational Implications

Results reveal that generally, students’ percentage responses were low for all the three research questions even though they were high for specific survey statements under 1) positive emotion towards science, 2) perception of usefulness of science for their everyday life, and 3) positive emotional disposition towards inquiry while affirming that inquiry-based instruction was being used in their classrooms.

4.1 Students’ Emotional Disposition towards Science

The findings of the present study reveal that overall, the percentage of study students who had positive emotional dispositions towards science were low even though they came up high on specific survey statements that supported positive emotions towards science. In this regards, the study results served as evidence in support, of Basu, & Calabrese Bartons’ (2007) finding that middle school students from low-income, inner-city backgrounds developed sustained interest in science when “their identity, beliefs, experiences, and conceptions of the future were built into the science they studied”. It also lays credence to their contention that “when students encountered science classrooms in which they could choose and engage in activities connected to their visions of the future, how they valued relationships, and their definitions of science, they developed a strong, long-term commitment to pursuing science” (p.487). This was evident in the study students’ positive responses to the survey statements that had to do with the importance of science in helping them understand the world. Sixty-five percent of the students responded in affirmative to this survey item and 57% thought that most people should study science.

However, this finding contradicts Basu, & Calabrese Bartons’ (2007) notion that “many urban, low-income students described science as a discipline that generates sentiments such as boredom, anxiety, confusion, and frustration” (p.466). Results of our study show that 79% of students claimed that “doing science experiments are fun” (SS #3), 61% expressed that they feel “comfortable in the science classroom” (SS #4) and 69% expressed likeness for the science

activities they do in their classrooms (SS #2). On the other hand, only 21% of students expressed dislike for science as a subject (SS #8).

Consistent with the above findings is the low percentage of students who responded positively to the survey statements that reflected negative emotional disposition toward science. We contend that study students may have developed likeness for and positive dispositions toward science as a result of the use of some form of inquiry-based instruction in their classrooms. Although teachers were not surveyed for their understanding or use of inquiry based instructional strategies in science, our position based on the foregoing is that the teachers of the study students may have been using some form of inquiry-based strategy in their classrooms and that this may have contributed to students' apparent positive attitude towards science that is evident in their responses to survey statements.

4.1.1 Students' Perception of the Usefulness of Science to Everyday Life

Results show that a low percentage (44.75%) of the students reported understanding of the importance of science in every day life, even though 65% thought that "science is helpful in understanding today's world" and 57% agreed that "most people should study science". These survey responses present a concern regarding the role of science instruction in preparing students in urban school districts to understand the connection between the science content they do in the classrooms to their applications in everyday life. Data analysis also leads to an assumption that the 38% of students who did not see the need for science in most jobs may imply a lack of understanding of the survey questions or the inquiry process. This data presents research opportunities in the field of education in regards to finding out if there is a correlation between the responses of students that scored highly in the positive emotional disposition towards science with their understanding of its usefulness in every day's life.

With regards to grade levels, there appears not to be much difference between the different grade levels in their understanding of the usefulness of science.

4.1.2 Students' Emotional Disposition towards Inquiry based Instruction and its Implementation in their Classrooms.

Generally, students' responses under this survey cluster not only point to the presence of inquiry in their classrooms but show that students agreed to have developed positive emotional disposition toward inquiry-based instruction even though the percentage of their overall responses are not considered high. (44.71%).

A note worthy finding of the current study is that much of what the students reported through the survey point to the use of inquiry-based instruction in their classrooms. For example, 62% of students reported that they were able to "ask questions about what they are learning and to find answers to these questions", 65% agreed with SS 22 that they "learn to state hypothesis, design experiments, and defend their conclusions", and 51% reported that they were "actively involved in their learning and were "able to say their opinion". We contend that their responses confirm the presence of inquiry attributes in their classrooms and resound NRC's (1996) assertion that when students employ inquiry, they use their critical thinking skills effectively in asking questions about events, developing and testing hypothesis and explanations based on available scientific knowledge.

The result of this study supports several studies reported in Gipson and Chase (2002) which showed that students who use an inquiry approach have improved attitudes towards science compared to those taught through traditional methods. Students' responses to survey questions used in this study point to the benefits of the use of inquiry-based instruction as reported by (a) Fradd and Lee (1999) who posited that inquiry-based instruction is learner-centered allowing teachers to build on students' prior experiences, and (b) Lloyd's (1988) that inquiry-based strategy helps students to engage actively in their learning, while promoting their deep conceptual understanding.

We however, are unable to ascertain that students actually understood what inquiry-based teaching looked like based solely on their responses. The conclusions and recommendations from their responses will present opportunities for further research in science education and psychology. Since there is a dearth of literature reporting students' perception about inquiry, and even though the present study is froth with obvious limitations, we posit that this is a good starting point in involving students in the inquiry process in such a way that they actually understand the concept of inquiry enough to enable them make claims about its strategy and process in the science classroom.

Across grade levels, the lack of clear distinctions between the responses to some questions by 6th and 7th grade students might just reflect their level of understanding at the time of the study. However, the perceived differences between 6th, 7th grades and 8th grade might actually suggest that the 8th graders had better understanding of both the inquiry process and the survey statements than 6th and 7th graders. There is need to probe further into these differences in future research in order to make more valid and reliable conclusions.

4.1.3 Summary

The present study provides evidence for the need to use multiple survey questions to solicit students' voices regarding the teaching and learning process that go on in their science classrooms. It also provides support for research studies that validate the use of inquiry based science instruction to facilitate students' positive attitudes, understanding and

interest towards science. It is apparent from the result of the study that urban middle school students can be guided in using the right kind of instructional strategy to develop interest in science to the extent that they would intentionally choose science content that will enable them successfully pursue a science oriented career. Traditional methods of instruction, which often include lectures, note taking and “cook-book” science may not be as effective as inquiry-based strategies in doing this. There is however a dire need to conduct further studies on this aspect of student involvement in their learning, especially in science. These studies we recommend should use in addition to surveys, other data collection measures such as observations, formal, and informal interviews as a means of eliciting further clarifications from students about their perceptions of the kind of science teaching and learning going on in their classrooms. Observing teachers in the study schools may be beneficial in finding out what exactly students perceive as inquiry based instruction. It will also add to the body of educational research if a study is conducted with a wider student population. In addition, studies can be conducted to check if there is a correlation between the responses of middle school students and their teachers’ training in inquiry based instructional strategies. In conclusion, this study provides a critical area for future research work that will take into consideration variables that can motivate urban middle school students to become more interested in science.

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Table 1. Summary of Percentages, Means, and Standard Deviations of Students' Responses to Survey Statements.

Three Clusters of Survey Questions	Grade 6			Grade 7			Grade 8			All Grade Levels (6-8)		
	% SA & A	Mean	SD	% SA & A	Mean	SD	% SA & A	Mean	SD	%SA & A	Mean	SD
Students' Emotional Disposition Towards Science.	37.34	2.82	1.61	48.86	3.32	1.24	32.42	2.84	1.33	39.67	3.02	1.43
Students' Perception of their Understanding of the Usefulness of Science.	42.25	3.52	0.94	53.50	3.67	1.07	38.25	3.38	1.09	44.75	3.54	1.04
Students' emotional disposition towards science inquiry and their perceptions of their teacher's use of inquiry-based instruction in their classrooms?	46.88	3.33	1.83	47.82	3.31	1.26	36.18	3.09	1.26	44.71	3.26	1.50
All	42.16	3.14	1.68	50.16	3.35	1.24	35.62	3.02	1.28	43.04	3.19	1.44

Appendix 1

Table 2. Students' Emotional Disposition towards Science

Survey Questions (SQ)	Grade 6 N= 88			Grade 7 N= 92			Grade 8 N= 62			All Grade Levels (6-8)		
SQ #	% SA & A	Mean	SD	% SA & A	Mean	SD	% SA & A	Mean	SD	% SA & A	Mean	SD
1	73	4.01	0.90	53	3.34	1.16	45	3.35	1.22	58	3.60	1.14
2	92	4.51	0.70	45	3.26	1.26	71	3.79	1.23	69	3.87	1.20
3	98	4.90	0.34	65	3.79	1.09	74	4.15	1.00	79	4.29	0.99
4	82	4.23	0.77	49	3.43	1.11	53	3.57	1.15	61	3.77	1.07
5	45	3.35	1.10	59	3.54	1.18	27	2.74	1.37	44	3.27	1.24
6	59	3.64	1.02	50	3.29	1.29	39	3.25	1.17	49	3.41	1.81
7	73	3.85	0.82	47	3.42	1.13	53	3.59	1.01	58	3.63	1.01
8	2	1.35	0.65	45	3.19	1.26	16	2.27	1.18	21	2.27	1.32
9	3	1.71	0.88	47	3.17	1.35	15	2.19	1.16	22	2.40	1.32
10	2	1.50	0.77	42	3.17	1.25	6	2.15	0.99	17	2.29	1.25
11	0	1.22	0.54	41	3.07	1.30	11	1.89	1.16	18	2.08	1.31
12	10	2.05	1.01	33	2.93	1.30	21	2.60	1.14	21	2.52	1.22
13	13	2.37	2.50	59	3.67	1.10	21	2.47	1.20	31	2.88	1.85
14	2	2.05	0.75	46	3.25	1.35	15	2.40	1.12	21	2.59	1.22
15	5	1.58	0.88	53	3.37	1.25	19	2.23	1.12	26	2.41	1.34

Table 3. Students' Perception of and their Understanding of the Usefulness of Science,

Survey Questions (SQ)	Grade 6 N= 88			Grade 7 N= 92			Grade 8 N= 62			All Grade Levels (6-8)		
SQ #	% SA & A	Mean	SD	% SA & A	Mean	SD	% SA &A	Mean	SD	% SA &A	Mean	SD
16	13	3.36	0.92	32	3.73	1.17	13	3.26	1.02	19	3.48	1.07
17	76	4.09	0.87	62	3.69	1.06	56	3.62	1.17	65	3.83	1.04
18	60	3.69	0.78	63	3.66	1.03	47	3.46	0.98	57	3.62	0.94
19	20	2.94	0.80	57	3.60	1.01	37	3.20	1.15	38	3.25	1.03

Table 4. Students' Perception of the Implementation of, and their Emotional Dispositions towards Inquiry Based Instruction in Their Classrooms.

Survey Questions (SQ)	Grade 6 N= 88			Grade 7 N= 92			Grade 8 N= 62			All Grade Levels (6-8)		
SQ #	% SA & A	Mean	SD	% SA & A	Mean	SD	% SA &A	Mean	SD	% SA &A	Mean	SD
20	3	1.90	0.92	60	3.51	1.37	23	2.58	1.33	29	2.67	1.40
21	97	4.74	0.51	52	3.15	1.30	58	3.42	1.36	70	3.81	1.31
22	84	4.24	0.81	46	3.22	1.30	66	3.92	1.11	65	3.78	1.18
23	36	3.32	1.03	51	3.24	1.26	27	2.98	1.02	38	3.21	1.13
24	97	4.59	0.60	50	3.18	1.38	56	3.66	1.22	68	3.83	1.27
25	59	3.81	0.97	57	3.54	1.08	31	2.91	1.22	49	3.49	1.13
26	49	3.51	0.97	51	3.30	1.23	31	3.14	1.06	44	3.34	1.10
27	7	1.56	0.95	48	3.22	1.31	11	3.16	1.11	22	2.33	1.35
28	75	4.14	1.87	53	3.51	1.29	56	3.71	1.23	62	3.79	1.17
29	68	4.02	0.87	46	3.24	1.26	40	3.46	1.18	51	3.59	1.16
30	44	3.49	1.03	55	3.41	1.18	39	2.89	1.31	46	3.30	1.18
31	68	3.90	0.82	54	3.45	1.09	48	3.52	1.08	57	3.64	1.01
32	8	2.03	0.98	49	3.31	1.27	16	2.60	1.10	24	2.66	1.26
33	18	2.68	1.05	51	3.38	1.12	34	3.03	1.20	34	3.03	1.16
34	8	2.90	5.28	51	3.45	1.09	18	2.60	1.15	26	3.02	3.32
35	10	2.50	1.66	47	3.25	1.22	19	2.66	1.21	25	2.64	1.31
36	66	2.85	1.08	41	2.81	1.52	42	3.27	1.08	50	3.32	1.34

Appendix II. Attitude toward Science and Inquiry Lessons

This questionnaire seeks your views about your science lessons. Please fill in the blank spaces in Sections A and place a check mark (x) in the box that best describes your view in Sections B and C.

SECTION A

Name of school Optional).....

Grade level.....

Sex.....

Male/Female.....

Science Subject..... Ethnicity.....

SECTION B

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
Students' Emotional Dispositions Towards Science				
1. Science is something which I enjoy very much.				
2. I like the laboratory activities we do during science classes.				
3. Doing science experiments are fun.				
4. I feel comfortable in a science lesson.				
5. I like to read about science.				
6. Science is easy for me.				
7. I usually understood what we talked about in science lessons.				
8. I don't like anything about science. It is boring!				
9. When I hear the word science, I have a feeling of dislike.				
10. I feel nervous when someone talks to me about science.				
11. It makes me nervous to even think about doing science.				
12. Doing experiments is a wastes time				
13. Most of the ideas in science aren't very useful.				
14. I spend too much time in school studying science.				
15. No matter how hard I tried, I could not understand science.				
Students' Understanding of the Usefulness of Science				
16. Science is useful for the problems of everyday life.				
17. Science is helpful in understanding today's world.				
18. Most people should study some science.				
19. There is little need for science in most jobs.				

SECTION C

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
Students' Perception of the Implementation of and their Emotional Dispositions Towards Inquiry based Instruction in Their Classrooms				
20. In our class, the teacher tells us the facts; we do not carry out experiments to find things out				
21. My science teacher makes science interesting.				
22. In our science class, we learn to formulate hypotheses, do experiments, and defend our conclusions				
23. All students should develop abilities necessary to do scientific inquiry and understandings about scientific inquiry				
24. Most students in my class are interested in doing lab. work				
25. My science teacher presents material in a clear way.				
26. Doing experiments makes me think critically				
27. I am able to think independently because of our science inquiry lessons				
28. We should avoid doing experiments in science classes because it is dangerous				
29. My teacher prefers to use the textbook to teach science				
30. I am able to ask questions about what I am learning and to find answers to these questions.				
31. I am actively involved in my learning and I am able to say my opinion in my science class.				
32. The teacher makes us do stuff by ourselves and this has improved my confidence.				
33. My science teacher allows me to do stuff by my self during science lessons				
34. I remember most of the things I learned in science.				
35. Inquiry lessons are rowdy and uninteresting				
36. I would rather be told scientific facts than find them out by investigating.				

THANK YOU

In many cases (92%), the respondents reported that the professional development activities are linked to the mission of their institution (mean = 4.15; sd = .91). Additionally, 99% of the respondents report that professional development activities contribute to student learning (mean = 4.37; sd = .67).



Discontinuation among University Students in Southern Thailand

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The research is financed by the Commission on Higher Education of Thailand

Abstract

This study uses a statistical model to account for the pattern of discontinuation of university study at Pattani campus of Prince of Songkla University (PSU) in southern Thailand. University records for 11,408 bachelor degree students enrolled between 1999 and 2006 were used. Discontinuation rates were analyzed by using a logistic regression model to determine the joint effects of year of admission, duration of study, faculty, and religion-gender group on discontinuation. The annual average discontinuation rate over the eight year period was 5.3%. The students discontinued most in their first or second year of study. These rates were substantially higher for students entering after 2003, possibly due to demographic changes in the intake.

Keywords: University discontinuation, Southern Thailand, Logistic regression

1. Introduction

University discontinuation is a global academic problem. This drop-out is influenced by many factors related to both the individual and their social environment. Using sociological concepts of integration Tinto (1975) developed a theory of student retention explaining to some extent why university students discontinue, and many studies of this question have followed. In an early study Johnes & Taylor (1989) found that the non-completion rate of university students differed substantially between UK universities and that inter-university variation in discontinuation rates could be explained by three factors: the scholastic ability of a university's new entrants, the subject mix of the university, and the proportion of students accommodated in a hall of residence. Thomas (2002) argued that greater diversity leads to an increase in student drop-out. Another study in the UK found that the causes of drop-out are the extent of prior academic preparedness and the social integration at university (Smith & Naylor, 2001). A study in Italy by Di Pietro (2004) examined factors underlying enrollment and discontinuation decisions using a bivariate statistical model. Montmarquette et al (2001) also used a probability model to examine factors associated with university discontinuation. A US study by Barefoot (2004) concluded that factors related to the classroom situation, student persistence and the way instruction was designed were associated with discontinuation.

There are few previous studies about factors influencing university drop-out in Thailand and none fully reported in English apart from a preliminary study by the present authors (Sittichai et al, 2008), although several studies have addressed discontinuation in vocational colleges. Those concerned with determining underlying causes based on questionnaires and interviews generally find that the main reasons for discontinuation are personal factors such as lack of finance, health problems, lack of basic knowledge, poor time management, and college factors including strict rules, instructor or counselor conflict, family factors such as lack of parental guidance or conflict with home duties, and social factors including conflict with friends, differences in social strata, and lifestyle conflict.

Our study is based on data routinely collected by the Registrar's Office for students enrolled at Pattani Campus of Prince of Songkla University (PSU) in Southern Thailand from 1999-2006. The objective of this study was not to

investigate the reasons why the students discontinued, but simply to model the probability that a student discontinued study after being enrolled for a given number of years as a function of demographic variables, namely, the gender, religion, admission year, and faculty of enrollment of the student. Prince of Songkla University is the major university in Southern Thailand, one of the four geographical regions in Thailand with a population of approximately 8 million at the 2000 Census, and was the first in the region, established in 1966 in Pattani province. The university now has four additional campuses in Songkla, Phuket, Surat Thani, and Trang provinces, the major one being in Hat Yai City in Songkla. Pattani is located near the border with Malaysia to the south, and approximately 1000 kilometers south of Bangkok. The population in Pattani and the other two southernmost provinces from which Pattani campus draws its students is predominately Muslim (close to 80% according to the National Statistical Office, 2000). By 1989 Pattani Campus had four faculties (Education, Humanities & Social Science, Science & Technology, together with the College of Islamic Studies). Further faculties were added in 2002.

2. Methods

The data comprised all students who enrolled to commence the normal four-year bachelor degree in one of the four original faculties, over the eight-year period from 1999 until 2006 inclusive. There were 11,408 students who were admitted to four-year bachelor degree programs and commenced study between 1 June 1999 and 31 October 2006. The study followed them up until 31 March 2008. Normally students enroll early in June for study in two 16-week semesters commencing in June and November, respectively.

Discontinuation, due either to voluntary departure by the student or retirement of the student by the University due to their lack of academic achievement, was defined as the binary outcome variable of interest. Students who departed or changed their enrollment for any other reason, such as graduation, still studying at 31 March 2008, death, or transfer to another program at PSU Pattani necessitating a change of their student number (and thus absence of further information about their status in the University's computerized enrollment database) were treated as censored data.

The factors considered as determinants of the outcome were (a) gender, (b) religion (Muslim or other), (c) faculty (four categories), (d) admission year (eight categories defined as from 1 April until 31 March of the following year), (e) study year (five categories: first, second, third, fourth, or later year).

Logistic regression (Hosmer & Lemeshow, 2000; Kleinbaum & Klein, 2002; Venables & Ripley, 2002) was then used to estimate the probability of the outcome as a function of two factors. The first factor was taken as the combination of admission year and study year, giving 34 levels corresponding to five levels for each of the first five admission years, and, since information was not available beyond 31 March 2008, four, three and two levels, respectively, corresponding to admissions in 2004, 2005 and 2006. The second factor was taken as the combination of gender, religion and faculty, giving 14 levels due to the fact that no non-Muslim students were admitted to the College of Islamic Studies. The proportion p_{ij} of these outcomes in level i of the first factor and level j of the second factor was thus expressed as

$$\ln \frac{p_{ij}}{1 - p_{ij}} = \mu + \alpha_i + \beta_j \quad (1)$$

To avoid over-specification of the parameters, the coefficients were constrained to have weighted means equal to 0 based on adjusted prevalences. To calculate the adjusted prevalence $p_{i\bullet}$ for category i of the first factor, the term β_j in equation (1) was replaced by a constant β_0 , chosen to make the sum of the expected number of outcomes equal to the sum of the observed number, that is,

$$\sum_{i=1}^m p_{i\bullet} n_i = \sum_{i=1}^m p_i n_i \quad (2)$$

n_i being the sample size in category i . The constant β_0 was computed using a Newton-Raphson iterative procedure with Marquardt damping. Similarly, to calculate the adjusted prevalence $p_{\bullet j}$ for category j of the second factor, the term α_i in (1) was replaced by a constant α_0 , again chosen to ensure that the sum of the expected number of outcomes equaled the total observed. Standard errors based on weighted sum contrasts (as described in Venables & Ripley, 2002, Chapter 6) using weights proportional to the sample sizes for each factor level were used to compute standard errors for the estimated prevalences.

The statistical analysis was performed using R (R Development Core Team, 2008).

3. Results

For the preliminary study, we looked at the students who enrolled from 1 June 1999 to 31 October 2003 where the data were last updated at 31 March 2005. It was found that the overall discontinuation rate per student over the five year period was 12%, with the Faculty of Science and Technology having a higher discontinuation rate than the other faculties, particularly for students admitted in 1999. The discontinuation rates were higher for students entering after 2001, with Muslim students having lower drop-out rate than other students (Sittichai, Tongkumchum, & McNeil, 2008).

Table 1 shows the total numbers of students admitted by year of admission, faculty and religion-gender group during 1999-2006. Over this eight-year period several major changes occurred in the enrollment pattern. The number of students enrolling in four-year bachelor degree programs in the four faculties increased almost by a factor of two between 1999 and 2002 and then decreased slightly for the next two years before dropping substantially in 2006. The corresponding percentage of Muslim students enrolling increased by a much greater factor from just 22.6% in 1999 to 53.3% in 2004 with a further jump to 75% in 2005, and level off to 77.3% in 2006, which is close to the percentage of Muslim people in the region surrounding the campus. Despite this increase in Muslim enrollment the percentage of students admitted to the College of Islamic Studies decreased from a maximum of 20.5% in 2004 back to just 9.2% in 2006, approximately the same as it was in 1999. The corresponding percentage of students admitted to the Faculty of Education also decreased substantially from close to 30% in the period 1999-2003 to less than 12% in the following three years.

In contrast, the overall percentage of women students enrolling remained constant at just under 75% during the whole period.

Table 2 shows the numbers of students discontinuing before 31 March 2008 from 1999 to 2006 by year of admission, faculty and religion-gender group. There were 2,311 students who discontinued during this period (20.3%).

Figure 1 shows a plot of adjusted prevalences for each of the two factors with 95% confidence intervals, after fitting a logistic regression model, using the data in Tables 1 and 2. We fitted the model to the grouped data obtained by taking every combination of the two determinants to obtain 476 (34×14) cells, in each of which the number of discontinuations is given in Table 2 and the corresponding number at risk is computed by subtracting the number of discontinuations and censored events in preceding years of study from the number of students admitted. The fitted model gave a residual deviance of 675.25 with 429 degrees of freedom. The left panel of Figure 2 shows a plot of the observed number of discontinuations in each cell versus the expected number given by the model, while the right panel shows a plot of the deviance residuals versus the normal quantiles, where two outliers are visible. These outliers correspond to (1) 69 non-Muslim women who enrolled in the Faculty of Science and Technology in 1999 where 23 discontinued in their first year of study, and (2) 16 (Muslim) men who enrolled in the College of Islamic Studies in 2005 where four discontinued in their second year of study. Otherwise the fit of the model appears to be satisfactory.

The logistic regression model indicated that each of the two factors, the admission year & study year combination and the faculty-gender-religion combination, were strongly associated with discontinuation. The analysis of variance gave reductions in deviance of 1492.78 (33 degrees of freedom) for admission year & study year and 374.00 (13 degrees of freedom) for faculty-religion-religion.

Figure 1 clearly indicates that the discontinuation pattern remained much the same over the first four admission years from 1999 to 2002, with most discontinuations occurring in the first and second years of study. But in the following four years the pattern changed substantially, first with drop-outs doubling in the students' second year of study starting in 2003, next with an increase in the first-year drop-out rate commencing in 2004, and finally with students dropping out in their third year of study in 2005. However, some of the third-year drop out increase in 2005 can be attributed to the fact that Thai government provided a large number of scholarships and career position for nursing studies in 2006, and 66 the students studying at PSU Pattani decided to resign in order to take up this opportunity.

4. Discussion

With respect to the pattern of enrollment, the major finding of interest from our study was the rapid increase in the proportion of Muslim students entering Pattani campus of PSU from a 23% minority in 1999 to a 77% majority in 2006 (see Table 1). During the first six years of this period the percentage of Muslim students enrolling in the College of Islamic Studies was fairly constant, averaging 42% and ranging from 35% to 52%. One could conclude that these students, who mostly came from families with little or no tradition of university education, were attracted to a faculty where they felt at home and could succeed with their studies. However, in 2005 the proportion of Muslim students entering the College of Islamic Studies dropped to 24%, and by 2006 it had decreased further to just 12%. A possible reason for this decrease is that the students found that the education they received from the Islamic College did not provide them with the qualifications needed to work in Thailand, a country with only a small overall proportion of Muslims, who mostly reside in southern Thailand where employment opportunities for university graduates remain extremely limited.

The second major finding of interest is that despite substantial changes in both the size and the pattern of enrollment at PSU Pattani the proportion of women students remained constant at just under 75%. This could be due to lack of employment opportunities for university graduates in the southernmost provinces, where the economy is largely agricultural and male bread-winners travel to Malaysia to find skilled work.

The other features of the enrollment pattern during 1999-2006 were the overall decrease in enrollment after 2002 culminating in a substantial decrease in 2006. However, these decreases were largely due to two factors. First, new faculties of Communication Science, Fine and Applied Arts, and Political Science were established at PSU Pattani after 2002, and these attracted students away from the original four faculties. Second, in 2004 the Faculty of Education introduced a 5-year bachelor degree program for training professional teacher, replacing their 4-year teacher training degree, with the 4-year degree reserved for students majoring in Psychology, Education Evaluation and Research or Educational Technology.

Turning to the pattern of discontinuation, the drop-out rate in the Faculty of Science and Technology was nearly double that for the other faculties. Higher discontinuation rates among science majors have been observed elsewhere in Thailand. Rincome (2002) reported that the highest discontinuation rate among students at Chiang Mai University was in its Faculty of Science. Various reasons have been put forward by academic staff at PSU for this problem, including lack of adequate preparation among students coming from local high schools, particularly those where religion is an important component of the curriculum. However, our preliminary study (Sittichai et al, 2008) found no evidence of differences in drop-out rates between religious and public high schools. Another possible explanation is the fact that, in common with other universities in Thailand and in contrast to the current practice in most western countries, students majoring in science disciplines at PSU are still required to undertake foundation units in basic science including Physics, Chemistry, Biology and Mathematics, irrespective of their chosen science major. Further study on this question is needed.

Among the four demographic groups, non-Muslim males had the highest rate of discontinuation. In their UK study Naylor & Smith (2001) found that males had higher drop-out rates than females.

Our finding that students tended to discontinue at a greater rate during the first two years of their study is consistent with results reported by Rincome (2002) in her study at Chiang Mai University, and by Yorke (1997) and Thomas (2002) for British students.

The last and possibly most important result from our study was the substantial increasing trend in the drop-out rate in the latter four-year period. Clearly, further study is needed, particularly qualitative research based on interviews with students to establish why this is happening, and particularly to focus on the factors underlying students' satisfaction and dissatisfaction with their studies.

Acknowledgement

We are grateful for Professor Don McNeil for his helpful advice and suggestions. The study is granted by the Commission on Higher Education of Thailand.

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Cultural Differences and Cultivation of Cross-cultural Communicative Competence in Chinese FLT

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Abstract

In order to improve their abilities in cross-cultural communication, language learners should develop not only their language competence, but also communicative competence. This paper presents an understanding on the general cultural differences between the west and China by applying the cultural dimensions of Hofstede and Bond, and points out that the success of cross-cultural communication depends on the competence of cross-cultural communication and gives some suggestions concerning the goals of foreign culture acquisition and the ways of culture training.

Keywords: Cultural differences, Cross-cultural communication, Cultivating suggestions

1. Cultural differences

What is culture? Among researchers who have given a variety of definitions of culture, As is pointed out by G.Hofstede that culture is a kind of "collective programming of the mind, which distinguishes the members of one category of people from another"¹. With the globalization of world business, the problem of cross-cultural communication arises gradually seriously between China and its culturally different Western partners continues to increase at an unprecedented rate. Hofstede explained that culturally-based values systems comprised four dimensions: power distance, individualism/ collectivism, masculinity/femininity, and uncertainty avoidance. Further research by Michael Bond² identified a fifth "Eastern" dimension called long-term/short-term. By applying Hofstede's and Bond's cultural dimensions, a cultural comparison between America and China is made.

Insert Table 1 and Table 2 Here

In general, China stresses the social role of the group, whereas Western people emphasize individuality. Collectivism is believed to generate more submissive behavior among Chinese in group interaction processes. Specifically, the collectivist concern of Chinese to avoid interpersonal disharmony becomes salient, and this concern can consequently encourage an Chinese group member to avoid open disagreements with other group members and shift toward the majority position more often than Westerners do. Compared with their Western counterparts, Chinese are more situation-centered and are more externally oriented. Chinese people believes in "yuan", which derives from Buddhism and is often used by Chinese as an explanation for personal outcome by alluding to fate. Westerns admire the self-made person---the one who, with neither money nor family influence, fights his or her way to the top. Chinese culture stresses the importance of maintaining harmonious interpersonal relationships and acting in a manner appropriate to one's position in a hierarchical social situation. Therefore in group interaction processes, they are inclined to be more restrained, cautious, patient, and self-contained, and less impulsive, excitable, spontaneous, and natural than Westerns

2. The Importance of Cultivating Cultural Creativity in FLT

The teaching of a foreign language inevitably involves the teaching of foreign cultures. We all know that language is a tool for people to communicate with each other. It consists of documents, articles and words people often write. And culture is often referred to the country, the language, the people, the religion, the political institutions, the economy, the social welfare, the mass media, the social behaviors and attitudes and so on. Therefore, language is a part of culture and a means of the culture transmission at the same time, language is influenced by culture and influences culture itself, too.

English, as a foreign language in China, should be regarded not only as a resource for learning foreign cultures but also as a means of cultural interaction. In fact, it necessitates cultural interaction. But in the past, the overemphasis on language structure treats English as a set of abstract linguistic rules, an empty code system or a culturally neutral instrument. However, by focusing on the teaching of language structure, we may not establish a foundation for developing learners' capability for interaction, given that a good understanding of both home culture and foreign culture is the basis for interaction. Therefore, the study of culture, to some extent, may lead to liberation of the mind, to greater international understanding and cooperation, and an acceptance of other people's ways and values. Nevertheless, it is

too simplistic to think that the study of foreign culture will automatically lead foreign language learners to develop creative power and capacity for change. In other words, the learners may gain cultural knowledge through cultural studies, but this does not guarantee an understanding of the target culture and change of attitude. As Corson (1989) stated,

It is a mistake to equate a growth of “knowledge and awareness of the differences that exist between cultures” with a growth of empathy and understanding. Knowledge and awareness provide little more than the building blocks upon which attitudes can be erected: individuals can hold undesirable and intolerant attitudes, while still being knowledgeable and aware.

In attempting to solve this problem, we suggest that we should focus on developing Chinese students’ cultural creativity in FLT. Cultural creativity refers to “a capability which is to be achieved through acquiring knowledge about foreign culture, embedded in language and beyond language, through using this knowledge in the performance of inter-cultural communication and creating new thinking for a new action” (Chen, 1986). Cultural creativity is a kind of creative power to be obtained through language and culture learning. We use “creativity”, rather than “capacity” here, for the notion of cultural creativity pays more attention to the students’ capability to take part in cultural interaction rather than his/her ability to use a language. To develop students’ cultural creativity, first of all, we should consider how to help the Chinese student gain knowledge and raise their cultural awareness. When a person knows little about foreign people and countries, they assume that the ways of life of people in foreign countries are exactly the same as those at home.

As a result, they use their own norms of behavior to interpret foreign people’s thinking, behavior and even appearance. So Chinese students should be exposed to sufficient information about foreign culture and then they can turn external knowledge into their own internal knowledge. Secondly, Chinese students should understand foreign culture and their home culture on the basis of previous experience and new knowledge. Finally, from knowledge to understanding, Chinese students should be encouraged to develop an independent ability to perceive “their previous perceptions” so that they establish a dialectical relation with reality.

3. Approaches to Cross-cultural Awareness FLT

Cross-cultural awareness acquisition is one of the major goals of foreign language teaching. Cultural awareness is the term used to describe sensitivity to the impact of culturally induced behavior on language use and communication. In order to improve students’ consciousness on intercultural communication and cultivate their socio-cultural abilities, the best way is to immerse them in the English cultural atmosphere and make contact with native speakers in person. For doing this, we cannot only get some rational knowledge on their culture, but also learn their culture through the perceptual comparison between their culture and ours. Some approaches are recommended here to help English-learners better perceive and understand cross-cultural awareness:

3.1 Creating western cultural atmosphere

We can create Western cultural atmosphere, make ourselves plunged in the atmosphere and learn to speak proper language in different situations. On the cultural atmosphere’s creation, we can achieve this by watching movies or by cultural performance. It is an effective method for us to improve our socio-cultural abilities through cultural performance. For example, we can imitate the situation in daily life, such as greetings, chats, reserving by telephone, sending a birthday present, etc. We play the roles and realize the cultural differences, and then we can enhance our understanding and endurance on their culture.

3.2 Making Chinese Students Learn some original textbooks

For many years, our textbooks, especially some primary textbooks have put much emphasis on linguistic style while neglect their social meanings and using in real situation. We can see such dialogues in many textbooks:

–What’s your name? –My name is... .

–How old are you? –I’m

–Where are you from? –I am from... .

These dialogues are made up of “Chinese idea + English style”, they all ignore whether it is appropriate to say so. In Western countries, except hospitals or police station, nobody would ask questions like this. On the principle “use what we’ve learned”, we often break westerners’ cultural rules, but in the original books, there are no such problems. Thus, we have to learn from the original books and understand more about their culture and customs.

3.3 Cultivating Students’ Intercultural Awareness by reading Literature widely

Many people think that reading comprehension is a process of understanding words, sentences, and then translating them into our native language. In fact, reading is a complicated thinking process, it’s a process in which one’s language knowledge, cultural knowledge and other specialized knowledge are affected together, and also it’s a process of guessing and correcting our thoughts by using this knowledge. It is generally accepted that literature is a reflection of

society's view, values and beliefs: a reflection of the social, political, cultural development of any society. It reveals people's ideas and dreams in the most creative and imaginative way. Literary works live in time---in the past, at the present, in the future; there is also a certain continuity of time. This continuity can be interpreted in the following way: in the literature of the past we can find the roots of the present; in the literature of the future we believe we'll see the traditions of the past. Therefore, Literature texts are suitable for developing intercultural communicative competence. Not only do they invite their readers to view subjectively a nation or an ethnic group by portraying specific values, prejudices and stereotypes, but they also offer their audience the chance to exchange their culturally restricted points of view together with the hero or heroine of the narrative, or with the narrator telling his story. Literature texts guide their readers through the reading process focusing their attention not only on actions and characters (Rosenblatt 1982; Bredella, 1996). The 'efferent reading' of texts, a special way of reading fictional texts 'aesthetically' (Rosenblatt, 1981; Bredella, 1996), enables and strengthens the readers' interaction with the text, their predicting abilities, their emotional responses as well as their forming and re-forming of hypotheses during the reading process, all of which are necessary to fill the text with meaning.

3.4 Making Chinese students seek every opportunity to speak with foreign teachers

Needless to say, foreign teachers who are authentic culture carriers of their native countries are ideal narrators of their own culture. Most of us are sure that we can learn more about cultural background knowledge of the English-speaking countries from our foreign teachers. We can hear our foreigners' personal and oral explanation about their own culture from daily contact with them face to face, and observe and sense the shades of differences between Western and Chinese cultures through their actions and responses to the existing culture.

3.5 Making Chinese students learn from English teachers actively

In English study, our English teacher plays the role as a bridge and an explainer. He is very familiar with our Chinese culture and Western culture and can help us avoid using our cultural standards to judge Western culture, and then helps us build up intercultural consciousness as soon as possible. For example, he will explain to us words having cultural meanings, such as fireplace, pudding, sandwich, etc. These things belong to Western culture and can hardly be seen in China, but with the teacher's help we can get their meaning fast and understand them better.

3.6 Goals of foreign culture acquisition and cultural testing

In FLT, two languages and indeed, two cultures come into contact because the native speaker of any language has built into his language repertoire his unique cultural assumptions and values. As cross-cultural communication competence has included socio-cultural ability, foreign culture acquisition should be incorporated into EFL acquisition. Based on the works of some experts and linguists (Hu, 1988, Porter and Samovar, 1985), the author suggests the following goals of foreign culture acquisition in EFL teaching and learning in China.

- 1) To familiarize EFL students with the mundane situations of the English speaking countries— their customs and habits, life-styles, generally-accepted world outlook, etc. It is in the most mundane situations where we find the most obvious cultural differences. Students' attention must be drawn to cultural stereotypes— generalizations which surely help the EFL students to understand some aspects of the foreign culture, but they inherently involve overgeneralization which may block understanding diversities within the foreign culture.
- 2) To enable EFL students to understand the interaction between language and such social variables as age, sex, race, social classes and occupation, which affect the way people speak and behave.
- 3) To promote EFL students' cross-cultural awareness and help them know the similarities and differences between Chinese culture and western culture.
- 4) To enable EFL students to know about history, social and economic circumstances, literature, geography from culture other than their own. These kinds of knowledge can facilitate cross-cultural understanding.
- 5) To cultivate EFL students' ability to evaluate the culture of the target country in an objective manner. Two extremes— resistance to and the blind worship of western culture— must be avoided. Teachers should enable EFL students to understand and appreciate cultural diversity without losing sight of their national identity or their native cultural norms and values, and to understand the values of ideas from a multicultural perspective knowledge base.

Cultural testing, the last step but not the least, is an indispensable part of a language program. In the sense of intercultural awareness training and intercultural competence development, tests offer opportunities to evaluate this component of the whole curriculum. When designing their tests, teachers of different courses can adopt different test types and should make them properly culture loaded. Teachers of culture courses should especially pay attention to the reliability, validity and practicality of their course evaluation. They should be flexible in designing their test. Role-plays, individual or group presentations, performance shows, etc. should be on their test list.

4. Conclusion

On the whole, the relation between language and culture determines the importance of culture teaching. Especially in ELT, it is necessary and urgent to teach not only cultural knowledge information but cultural communication information as well. Briefly, Culture is an indispensable ingredient of communication and cultural competence --- the mastering of the shared knowledge, assumptions and values of the culture, is one part of communication competence, of which cross-cultural communication competence is a further development, including non-linguistic competence, macro-linguistic competence and communicative competence. Only those competent in the message sender's culture as well as the message receiver's culture can succeed in cross-cultural communication.

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Table 1. *Cultural Dimension Scores of United States and China*

Legend for Chart:

B - **Cultural** Dimension Scores Power Distance

C - Individualism

D - Masculinity

E - Uncertainty Avoidance

F - Long-term Orientation

A	B	C	D	E	F
United States	40	91	62	46	29
China	80	20	50	60	118

Table 2. Cultural Differences between America and China

Legend for Chart:

A - **Cultural** Dimensions

B - USA

C - **China**

A	B	C
Individualism/Collectivism	Strong individualism	Strong Collectivism
Power Distance	Medium	Centralized, tendency toward democracy
Uncertainty Avoidance	Risk-taking	Risk-avoiding
Masculinity/Femininity	Medium Masculinity	Medium Femininity
Long/short-term Orientation	Short-term Orientation	Long-term Orientation



Some Teaching Reform Ideas on Management Information System of Master of Business Administration

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The research is financed by the key research project of Shanghai Municipal Education Commission of China. No. 06ZZ34; This research was the research project of Shanghai Association of Higher Education No. GJZC12-08 (Sponsoring information)

Abstract

Management information system (MIS) is one of the core courses of master of business administration (MBA). Based on the educational characteristics of MBA, this paper studies the teaching issues and strategies of MIS course of MBA. The discussion includes three parts: modification of educational content; improvement of educational ability; case methods of teaching.

Keywords: Management information system, Master of business administration, Teaching reform

1. Introduction

Management Information System (MIS) is an essential tool to support business, management and making decision in various companies and organizations. And MIS is regarded as a powerful weapon to grab the competition advantages, reach the strategic goals by many companies and organizations. Thus, MIS is a compulsory subject for MBA in most universities.

As the rapidly development of information technology, MIS has not only developed at the same time in the field of concept, content and method of system construction, but also made a greater impact on the operating patterns of companies and organizations. In this case, to be as a MBA student, it is necessary to have a good understand of MIS's meaning, content and construction strategy.

In early 1990s, there is a great amount of need for software engineer in the society. Influenced by this social acquirement, the conventional teaching content of MIS lays stress on the design and development of software system. Recently, with the rapidly increase of the amount of MBA, it calls for reforms of MIS curriculum's target, curriculum's content, teaching method for the education of MBA. Especially pay more attention to these aspects to guide the study of this subject: improve the company's management and support the development of strategy. In this case, it is necessary to reform MIS curriculum of MBA on conventional teaching content and method, which means with the characteristics of MBA, reform the teaching content and implement the teaching reform.

Recent years, many academic documents about MIS curriculum reform had been published. However, few papers about MIS curriculum reform especially for MBA had been published. The author of this paper has been the consultant of information system management in above 50 companies for 10 years and has been teaching MIS of MBA for a long time. This paper gives some teaching reform Ideas on MIS of MBA, hoping that it could help the research and application of MIS curriculum of MBA in China.

2. Modification of Teaching Content

2.1 Set Teaching Target Properly

There are different requirements in MIS's teaching to different major students, which requires teachers regard students differently when teaching. For example, for the major of Information Management and Information System students, the target to cultivate them is to MIS engineer. So they need to know the basic theories and its trend but also need to have knowledge of software development method and process as well. What's more, they need to analysis and apply

different development methods in face of practical situations. While for the students of Business Administration, the target to cultivate them is to managers and users of organizations. For the sake of their weak abilities of computer, they consider more from being a manager or user that how to use MIS to improve the efficient of the organization, to help make decisions. So they only need to get to know the method and process of MIS development and basic concept.

Teaching targets decide teaching content and pattern. The cultivation target of MBA is manager of companies and administrations instead of technique engineer. According to the author's experience, MBA students who have backgrounds of software industry account little among the all, not to mention about those who intend to be software program engineer as job after graduation. For MBA, therefore it is obvious that cultivate them into programmer, developer of information system, specialist of computer is not the target of MIS curriculum. What should be the goal is cultivating them to adapt to the need of modern information society, get the knowledge of basic principles of modern economic management, control the knowledge of modern information skills and applied skills, and cultivate them into an excellent comprehensive talent specialize in economic management with wide fundamental knowledge and great ability.

Development of information techniques makes the companies' operating circumstances and methods change all the time. A modern manager can't get control of information skills professionally, nor do they need to, but he or she needs to know the abilities and characters of information techniques or information systems macroscopically, as well as information techniques that how to support the improvement of companies management and accomplishment of implement strategies. Based on such general cultivation target, it can be ensured that the concrete teaching target of MIS curriculum is that: make students get to control the related basic principles of MIS, have a clear awareness of information and a great ability of information application; make students have a sufficient understanding of the supportive role of information system information techniques in the information society to the strategies; make students be familiar with function principles and methods of various management information system, like ERP, CRM, PDM, DSS etc, make them get to control the construction of management information system and implement methods, to know how to apply manage, evaluate and preserve the management information system; lead them to pay a careful attention to the development of new information techniques and find out the business values.

2.2 Modify Educational Content Scientifically

In order to reach the teaching target of MIS curriculum, it should be modified scientifically and properly and design the teaching content. MIS curriculum which covers deep and a wide rang of knowledge changes quickly combines Economics, Management, Information Science, System Science, Behavior Science, Computer Science and Network Communication Techniques all together, so it is a great academic practical and comprehensive curriculum. For the students who are majored in MBA, their knowledge of economic management is excellent but weak in the field of information techniques, meanwhile, their structure of knowledge and direction of cultivation leans to management, therefore it should avoid regarding MIS curriculum as computer subject, but a kind of management subject. This major should put stress on the basic knowledge of computer, which means on the basic of understanding of data base, various software and hardware platform, put the main teaching content in the functions of information techniques to solve management problems and improve management abilities. The curriculum should include four different parts:

Part one: basic concept. This part consists of three aspects: introduction of MIS's definition concept and structure; basic knowledge of management information and system; the meaning of company information (Fan Chongjun, 2006). What the author believes is that, the MBA students should understand how information improves the level of companies management and how strategy accomplish the supportive function, as well as the inner management and information mutual action (Fan Chongjun, 2004).

Part two: information technique, include computer hardware, software, network and data base these for aspects.

Part three: application system, it is mainly about introduction of important information system, which account for most part. Enterprise Resource Planning (ERP) contains much, like purchase and stock, sale and retailer, production plan and control, quality management, equipment management, financial accountant and management accountant etc. Other systems consist of Customer Relationship Management (CRM), Human Resource Management, Development Management, Decision Support System (DSS) and Business Intelligence (BI), E-Business, E-Administration, Cooperation Business and Automatic Office, Enterprise Application Integrate (EAI), Enterprise Information Portal (EIP) etc. In author's point of view, MBA students should broaden their horizon through the introduction of each application systems, this will help the students have a better and deep understanding of information techniques' concrete functions in the companies' management.

Part four: system construction. Includes for aspects: information system planning, which is also called information technique strategy planning (Fan Chongjun, 2004, Fan Chongjun, 2006); information system selection (Fan Chongjun, 2006, Fan Chongjun, 2007); information system implementation (Fan Chongjun, 2006); information and business process reengineering (Fan Chongjun, 2004); information system development. Author holds the view that it should

lessen the content of information system development, while the mature software's modification implement and reform management should be regarded as the essential content to introduce.

3. Case study Teaching Methods

When teaching the MIS theories, this subject should pay attention to cultivating of information awareness, information ability and information character to help student form abilities of applying the curriculum knowledge in practice. In order to reach this target, case study should substitute for teaching purely principles. Teachers should guide students take advantages of MIS knowledge to analyze and solve practical management problems by connecting principles and practice through case study, to improve the management efficiency, decision making level and profits of business, to make the students have a direct understanding of totally new concept and ways of working brought by information times.

Case study plays an important role among many kinds of subjects of MBA, as well as MIS.

Actually, many companies have already used various information systems to manage business, some of author's MBA students have experiences of system application or even practical construction. In the way of some familiar cases to the students, like ERP system in some industries, CRM system's construction and operation etc., can make them have a direct understanding of MIS. The proper cases adapt for theory teaching content should be selected firstly. When teaching the concrete theory knowledge, case used through the whole teaching is recommended, cases step forward as theories do, guide the students to be positive, profound and logically solve problems. As soon as the whole teaching content is finished, cases will leave a deep impression upon students with theories and practice. Lively cases not only increase the level of students' emotional understanding, contribute their interests in study, but also reach the target of one example three practical applications through students' imitations of cases and consideration.

During the teaching of theory, especially for the MBA students' characteristics, it is necessary to emphasize the new characteristics and behavior patterns of management theories and thoughts in the times of information. It emphasizes the case methods of teaching which is dominated by analysis. Through the discussion and analysis of practical cases, students will concern about the development of companies information, and their initiative will be stimulated.

Now domestic textbooks are lack of proper cases, that requires teachers to research catalog and accumulate cases as much as possible, so that cases base for both teaching and students reading and referencing can be found then. Besides, in order to improve the students' creativity and share their experience, students can also design search cataloging and analyze cases on their own and make speeches in the class. What's more, their prepared cases can be put in the cases base for next grade students.

Cases come from companies practical cases, but pay attention not to get rid of theory systems in the textbooks, otherwise, students may not understand the fundamentals of the questions. Thus, firstly, explained briefly the main theory knowledge related to the cases, secondly, instruct students to put cases into practice so that theory knowledge and practical cases will be combined together.

Teachers can instruct students to discuss cases according to the teaching content after each unit, to analyze the questions brought up before, and new questions will be found at the same time, finally lead students discuss and express themselves. Acting different roles in different cases is undoubtedly a good and vivid way, or even makes each small groups debate fiercely on purpose, which can arouse students' interests and recognition of MIS.

What concerns about is not the so-called correct answer to the cases after analysis. Probably there is simply no correct answer to one case or the answer is not unique. The result of cases analysis perhaps is a fruit from one part of the whole process, with some questions that are left without solutions. In this case, "Process more, result less" should be the method to adopt.

4. Practice Teaching Methods

Except for the great integration, another characteristic of MIS is its strong practical application. The practice part of MIS class is so important that would be helpful to study and understanding the curriculum. By practice, students could apply their learned knowledge from curriculum as possible and improve their abilities to analyse and solve problems all by themselves at the same time.

For the business management students, the experiment curriculum for them should be distinguished from the science students', be careful not to make MIS practice teaching become information system developing class, instead, according to the teaching targets, let students get to master the dealing processes of companies management business under the modern information technique circumstances, and master how to operate and apply the management information system when doing the practical works, so that students' adaptable ability operating ability and creative ability will be improved a lot. As far as this part of teaching content, we believe it contains experience experiment and simulation analysis experiment.

4.1 Experience Experiment

The target of this experiment in this part is to instruct students have a perceptual recognition, learn the basic structure and functions of MIS, master the skill of applying MIS to manage business.

This experiment put several students in one experimental group, each member simulates one terminal user and operate on the information system according each one's roles. After finishing their flow missions according to the set business process, students could learn how the companies' function and management could come into practice with MIS and also learn how MIS could connect information techniques with company management. This experiment asks students to submit an experiment report which consists of two parts: one is the explanation of the experienced system's basic structure basic function and business and process covered by the system, with management knowledge. The other is the analysis and judgment of the experiment system from two aspects: management and technique. All this will encourage students to find questions and come up with modified solutions.

4.2 Simulation Analysis Experiment

This experiment is accord to the process of information system development, based on the setting of one simulated company, doing system analysis and design, to let students step into every cycle of information system's development and correctly understand missions in related sessions, which requires students sublimate their perceptual cognition to sensible cognition. Considering the fundament of MBA students, the degree of the experiment should be controlled, and the system analysis should come before the design, under this thought, the teachers instruct students doing experiment. This experiment report mainly consists of business management of system analysis and design sessions, and another is process analysis and design of management data, this examines students how to apply information techniques to deal with companies' requirements, how information techniques is combined with companies business of strategy level tactic level and executive level, the analysis ability of management requirement research and the information system modeling ability based on this.

5. Improvement of Teaching Ability

MIS curriculum contains both relative many abstract theories and colourful application background, negative study is hard to assimilate the knowledge. While class discussion and ask-and-answer part which analyse questions on the class is a very efficient method, and this is popular among the MBA students. Meanwhile, teachers will find out problems of teaching during the class discussion, what's more, modify the teaching plans in time for each member in the class.

5.1 Enrich the Teaching Methods

MIS is a fruit which combines information techniques and management thought. Not only the introduction of the basic concept of information techniques should be noticed, which presents the whole process of information system development, but the introduction of functions of mature business management software and application tactics as well. And drawing a great many of easy-understanding diagrams should not be ignored, like organization structure diagrams, function structure diagrams, business process diagrams, data flow diagrams and data dictionaries. Depending on modern teaching methods and equipment, taking advantages of information techniques to make vivid multi-media courseware can take MBA students out of abstraction and tediousness, and help improve their ability by using multi-media instruments in the work.

Situation teaching is an additional form of case teaching, which explains experiences and simulates the cases. For example, invite the companies' information directors or information management consultant to make speeches or play their lecture shows; make courseware by multi-media techniques; make videos of situation cases for curriculum. Besides, author always make DVs of the processes of students' cases analysis and play the videos to them or even other students. Without any doubt, this vivid reappearance of situations arouses students' interests and minds.

5.2 Improve the Teaching level

Because of the MBA students' work experiences of being senior managers in companies before, teachers are required higher degrees, especially the practical experience. To improve the teaching quality of MIS curriculum, not only should update the teaching content, but also modify the teaching methods, and the most important is constructing a more powerful group of excellent teachers.

As MIS is a comprehensive interdisciplinary, marginal, practical subject, in addition to the rapid development of information techniques, to act as the teacher of this subject, not only should prepare a knowledge of software theory, computer, management, but also should cultivate the ability of computer application, at the same time, the experience of developing MIS or application experience of ERP and CRM is also important. Teachers need to learn the developing direction of this subject and changing trend of techniques, take part in more practical activities of this fields, optimize the structure of knowledge rapidly, add new knowledge into teaching content in timely.

6. Conclusion

MIS, as a core subject of MBA, is a comprehensive and applicable subject, with the development of information techniques and management thought, its teaching content and teaching pattern should be modified and reformed rapidly, in order to adapt to the new requirement of MBA cultivation, in the new economic situation.

Acknowledgements

This research was supported by the key research project of Shanghai Municipal Education Commission of China (No. 06ZZ34). This research was the research project of Shanghai Association of Higher Education (No. GJZC12-08). Expresses the thanks.

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Moving Ahead for Academic Excellence through International Journal Publication

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Abstract

One of the several roles partaken by academicians in institutions of higher education in Malaysia is the quest in publication. The objective of establishing a critical mass of researchers and knowledge corpus that enable Malaysia to reach the global standard of technology creation and innovation as clearly stated in the newly launched October 2007 Strategic Action Plan of the Ministry of Higher Education, Malaysia Thrust Number 5, would aptly be manifested in the presentation and documenting all forms of research and innovation through publication. This paper examines the expansive opportunities for academicians to keep in track with the local and global needs, not only in manifestation of the Fifth Thrust, but also of the Seventh Thrust in the strategic plan i.e. activating internationalisation initiative. Nonetheless, this also includes active participation in publication in international journals, as a result of active research and innovation activities within and outside the university. A presentation of this nature, should provide a clearer insights of what it takes and what entails, as far as publication is concerned, to help place Malaysian academic excellence at par in the global arena. Besides, it also seeks to assist potential prolific contributors to get published in international journals. A reminder to all, as this is race of the era, if not participated, academicians can remain in the closet of complacency which has always been proven to be quite lethal as the notion of 'publish or perish' still holds strong and this affects self-development academically throughout one's career.

Keywords: Academia, Excellence, Journals, Publications, Citation index, High impact

1. Introduction

Academic publication involves the presentation of document research, review and observatory works which are of high quality, original and important findings within a specific scientific area of studies. In an example of one of the world's acclaimed journal platforms known as WSEAS Transaction, its aim is to publish important findings in science, engineering, technology, education and business areas. Researchers in the academia are very much encouraged to share results of work within the scope and relevance to the mission of respective journals.

Still holding strong, the phenomenon of 'publish or perish' demands the commitment of members of the academia the world over, the seniors and the juniors as well, to get published. This drive for publication opportunity may pose both

desirable and undesirable effects on the genuine aspiration of academicians that is to excel in teaching, research and publication or providing professional services. However, taken in with a different stride, with ingenious collaboration and early academic career mapping, academicians can deliver knowledge which would be effectively translated into publication materials as the world today sees bountiful avenues and vast opportunities to publish, particularly with the advent of information and communication technology in which online publication is found rampantly.

2. Rationale to publish

However pressing the demand to publish, there are academicians who write for several drives. One of these is for peer assessment in which the approach is used to develop faculty members the ability to work cooperatively, to be critical of others' work and receive critical appraisals of their own work. This strategy if driven early among young academicians can spur the desire to work within the expectations of what entails being excellent academicians. Another driving factor for publication is peer recognition, herewith the term 'peer' need not necessarily be interpreted as 'colleague'. This is a state of which faculty member may be recognized for excellent academic capability or exceptional skills by other academic staff within the institution. Peer recognition also applies to a reputation of excellence in a profession recognized by individuals or groups in the same profession.

In every institution of higher education, publication is a criteria for possible promotion in an academic career path and due to this it has been a mandatory 'sentence' which requires faculty staff to fulfill to meet the requirement. However, besides this push factor to publish, for some faculty member writing has been due to strong motives for the interest and to some of them publication is considered as one of the best ways for academicians to make contributions to the society and to be recognized professionally. Time and again to remain an excellent academic, the race to publish as many papers as possible in a number of prestigious international and professional journals has been the game up to current time.

Apart from the academic proponent, the rationale of publication preceded from the funds that have been spent on research conducted. Much has been spent on research, and subsequently publication is the distillate of that expensive work. Thus, if publication is not propagated, the research conducted will be lost and so will the funds and grants that have been spent to perform the research. It is pertinent that any research done has to be made available to others who may be interested in the area of studies, are learning in the same field, are exploring possibilities and may use it for future referencing of the field. Thus, publication is the significant manifestation of research which is made available to the masses. (<http://www.uwm.edu/Dept/SecU/asgov/docs/ASD23.pdf>). Whether it is for the senior or junior faculty members, there are important websites that may provide the platform for academic excellence as far as publication is concerned.

3. Criteria that renders for publication

In providing direct information for this purpose, particularly for junior faculty members, this paper attempts to assist many in the academia to explore the possibility of sharing research findings and hence, publishing. Academic writing is primarily an exercise in which requirement for highly stylised linguistic capability with distinctive elements of scientific paper calls for proper sequence of components. Research work should be communicated effectively and clearly using simple words of effective meaning. This is when the best English, which is the key language in academic writing, is to make the point in the fewest short words. When writing papers for international journal publication, the use of simple and short sentence instead of complex and long sentence is highly recommended. Where there are long sentences, writer divides the long sentence into two or three simple short sentences. It is worthy reading of simple declarative sentence using clear and short words. Writers can make editors happy with plain, simple, and freshman level composition. Thus, if the ingredients are properly organised, the paper will almost write itself.

The next criteria for an article to be accepted for publication is the originality of writing that is presented in the print. Novel or creative research methodology is highly considered for possible publication. In any research work conducted, new and important findings which are unfolded will be distinctive new knowledge and proves worthy for others to have a share. Nevertheless, scientific quality of the article is also being considered for publication as appropriate statistical analysis entails validity and reliability of the research undertaken. It also reflects the depth of investigation in which experimental design and methodology have been meticulously considered for findings to be reliably discovered. In accepting submission the publisher would also consider its importance to the scientific field. The usefulness of findings to scientists, specific users and the general public provides future references for decision and policy-making in areas which are relevant to the requirement of the research done.

4. Suggested format for publication

As discussed in the previous section, clarity of presentation is a plus point for publication acceptance, as this ensures cohesiveness and coherence in the presentation of reporting, be it research result, reviews or opinions. Therefore, language competence is not to be compromised as paper has to be grammatically impeccable, acceptable readability level and clarity of message presentation. The organization of presentation follows the stipulated format in accordance

with the requirement of the publishing house concerned. Ideal components in original research manuscript are scheduled as follows for effective referencing, but not necessarily true for international journals publication.

Insert Table 1, Table 2, Table 3, Table 4, Table 5, Table 6 Here

Having all these laid out systematically and orderly, another consideration that an academician needs to be aware of is the relevance of the article submitted for publication. The subject matter has to be of sufficient interest to the readership to a specific journal as lack of new information may not warrant acceptance for publication, for instance, a mere extension of an already presented and published paper. It is also important to note that inevitable rejection for publication can be due to the detection of results that are trivial, predictable or duplicative of others. An effective write up needs to provide international importance or interest and scientific quality that does not compromise on standard which is possible if it is due to poor experimental design and methodology. In addition, improper conclusion which does not provide in-depths thoughts and insights is another setback for acceptance. Finally, the most too common academic dishonesty, if detected, obviously results in rejection by the publisher. Thus, any form of academic misconduct such as fabrication and plagiarism is definitely taboo in writing for publication.

5. Some considerations in the international opportune

Several types of journals are available for academicians to attempt for publication and one of these includes Journal Impact Factor (J.I.F.). Journal Impact Factor is from Journal Citation Report (JCR), which is a product of Thomson ISI (Institute for Scientific Information). JCR provides quantitative tools for evaluating journals. The impact factor is involves a measure of the frequency with which the "average article" in a journal has been cited in a given period of time. The impact factor for a journal is calculated based on a three-year period, and can be considered to be the average number of times published papers are cited up to two years after publication. For example, the impact factor 2008 for a journal would be calculated as follows:

A = the number of times articles published in 2006-7 were cited in indexed journals during 2008

B = the number of articles, reviews, proceedings or notes published in 2006 – 2007

Impact factor 2008 = A/B

It is useful to note that the impact factor 2007 will be actually published in 2008, because it could not be calculated until all of the 2008 publications had been received. Impact factor 2008 will be published in 2009. The following calculation is also used:

The impact factor = the total number of citations a journal receives in ISI Source Journals in one year/the total number of "citable" articles it published in the previous two years.

- A = Total cites in 2007
- B = 2007 cites to articles published in 2005-2006 (this is a subset of A)
- C = Number of articles published in 2005-6
- D = B/C = 2007 impact factor

Impact factors are only meaningful in context with other journals in the same field. However, academician should strive to get published and not to worry on how it is calculated. Nevertheless, striving to get published in high impact factor journals should be managed within the focus of academia.

In the following examples, the highest of all amongst forestry-based journals are as follows:

Sample 1 :

AgriculturalMeteorology
Editor-in-Chief:
K.T.PawU
See:editorialboard

For all editors information
Description

Agricultural and Forest Meteorology is an international journal for the publication of original articles and reviews on the inter-relationship between meteorology and the fields of plant, animal and soil sciences, ecology, and biogeochemistry. Emphasis is

on basic and applied scientific research relevant to practical problems in agriculture, forestry, and natural ecosystems. Articles must appeal to an international audience. Theoretical models should be tested against experimental data. Special issues devoted to single topics are also published.

Typical topics include canopy micrometeorology (e.g. the characterization of radiative transfer, turbulence evapotranspiration, and the exchange of trace gases and energy within and above managed and natural ecosystems), aerobiology (e.g. the dispersion of pollen, pathogens, insects and pesticides), biometeorology (e.g. the effect of weather and climate on plant distribution, crop yield, water-use efficiency, phenology of plant and animal development, and the energy balance of animals), forest-fire/weather interactions and the role of vegetation on climate and weather.

Audience

Meteorologists, Soil Scientists, Agricultural Hydrologists, Agronomists.

Impact factor of this journal

2005: 2.461

Journal Citation Reports® 2005, published by Thomson Scientific

Sample 2:

Description

European Journal of Forest Research

Editor-in-Chief: Hans Pretzsch

ISSN: 1612-4669 (print version)

ISSN: 1612-4677 (electronic version)

Journal no. 10342

Springer Berlin Heidelberg

Online version available

Online First articles available

Description

Aims and Scope:

European Journal of Forest Research publishes Research Articles and Reviews addressing the following subjects:

- biological, ecological and socio-economical knowledge relevant to wood and forest
- systems analysis and modeling of forest and landscape
- forest ecology, conservation and management
- forestry-to-wood production chain

European Journal of Forest Research is aimed at researchers, managers and policy makers.

Impact factor: 0.562 (2005)

Section "Forestry": Rank 25 of 36

There is another category of worthy publication, which is the Citation Indexed Journals. The citation indexing began in the 1950s. It has been responsible in tracking references that authors put in the bibliographies of published papers. The publication has been dominated by the Institute for Scientific Information (now Thomson Scientific), the creator and publisher of the three citation indexes available today namely:

- Science Citation Index (SCI)
- Social Sciences Citation Index (SSCI)
- Arts & Humanities Citation Index (AHCI)

International publication considers a high role of editor-in-chief who is the guardian of scholarly record and he has to ensure that the published article has high quality scientifically and is free from error. The manuscripts written based on the opinions of other scientists have to be evaluated by the editor-in-chief through his judgement on the quality of submitted papers. This evaluative undertaking is known as peer review process

(http://www.jisc.ac.uk/uploaded_documents/rowland.pdf) which is applied to several kinds of scholarly activities, and it is centrally done on the scholarly journal articles publication. The main criteria of article acceptance decided upon by the editor-in-chief includes 'the dissemination of current knowledge, archiving of the canonical knowledge base, quality control of published information and assignment of priority and credit for their (editor's) work to authors'.

6. Conclusions

For the attainment of academic achievement, faculty members at the beginning of their career, need to be informed that it is worth getting papers published in local or international journals or merely for self-interest. They are advised to try getting published in journal of impact factor, citation indexed journal and refereed journals. It is advisable too that cooperation between the senior and junior faculty members are enhanced through engagement with co-authors and established or renowned researchers and paper writers, if necessary.

In supporting the aspiration of the Ministry of Higher Education, international linkages established with the top ten world class universities such as Harvard, Oxford, Cambridge, Yale, Stanford and MIT has to be a dual obligation one striving for such collaboration and the other an undivided support to local academicians financially and morale. Which are sometimes much challenged and shortchanged.. For reality check, universities in the country must have undivided commitment to ensure the academia have the opportunities to be attached to world class universities, centers, laboratories.

However, the crucial possibility of financial support should start from the university by giving opportunities to academic paper presenters to thrust on at world class congress, conference and seminar abroad. After which, from this exposure and experiences, confidence and commitment rides on easily for publication to be enhanced, especially in journals of high impact factor. After all, for the top notch ranking of university, publication amount is the key criteria of selection as listed below in accordance with THES-QS World University 2007, which is the aspiration of university the world over.

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<http://biology.plosjournals.org/perlserv/?requestt>

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Kamaruzaman Jusoff. (2007). *Getting Published in International Journals*. A power point presentation on 12 March 2008, Institute of Global Network Lecture Series, Universiti Teknologi MARA, Shah Alam, Selangor. 44p.

Table 1. Title

	The primary purpose of Title is to describe the nature and content of research concisely and accurately.
	Title should describe the content of study with the fewest words <12 words.
	Title should be clear and informative.
	Title should capture the importance of the study and the attention of the reader.
	Title should describe actual findings that can be supported in the manuscript.

Table 2. Abstract

	The primary purpose of Abstract is to enable readers to identify the basic contents of a paper quickly and accurately.
	State what has been done and how it was done.
	Presents results concisely.
	Information in the abstract should be presented in the main text.
	Not exceeding between 200-300 words depending on the organisation requirements.

Table 3. Introduction

	The primary purpose of Introduction is to provide the readers with sufficient background information to evaluate the results of the research.
	No more than 1 typed page
	Focus on the main subject
	Brief and well integrated review of pertinent work
	Cite key and current literature references
	Extensive review of the literature is not needed
	Explain the importance of your research <ul style="list-style-type: none"> • What new or important scientific information is needed to strengthen the subject area? • Provide rational or state the problems clearly why the research is needed and worth doing
	State the general objective (goal) of your work + specific (aim) objectives

Table 4. Materials and Methods

	The primary purpose of Materials and Methods is to provide sufficient analytical information so that work can be repeated.
	Use appropriate experimental design to answer the research question.
	Cite and use the accepted and current methodology.
	If a published method is modified, such modifications must be described in detail.
	Describe new methods in detail
	Describe statistical analysis of data if appropriate.
	Use subheadings as needed for clarity.

Table 5. Results and Discussion

	The primary purpose of Results is to present research data concisely and to interpret the data scientifically.
	Results should be short and sweet with no excess verbiage.
	Work done should be consistent with the objectives stated in the introduction.
	The reproducibility and sensitivity of analytical method.
	Report representative data rather than endless repetitive data.
	Numerical data with the correct number of significant digits.
	Present results concisely using tables and figures as needed.
	Table and figure legends should be accompanied with sufficient information for main point so that the minimal text is needed.
	Do not present the same information on tables, figures and in the text.
	All tables and figures must be numbered in the order in which they are mentioned in the text.

Table 6. Conclusions

	The primary purpose of Discussion is to show the relationships among observed facts.
	Point out any exceptions or any lack of correlations, and define any unsettled points.
	Discuss the discrepancies between new results and previously reported results in similar studies.
	Discuss the research limitations.
	Discuss the theoretical implications and possible practical applications of your research.
	The primary purpose of Conclusion is to point out the key findings and application to your research
	Conclusion should not be a summary of the work done or a virtual duplication of the abstract
	Conclusions should be justified by the experimental design, methods, and results

Table 7. References

	Cite current and key pertinent references.
	Reference citations are accurate and complete.
	The number of references should be appropriate without a complete historical bibliography



WTO Members' Commitments in Education Services

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Abstract

The establishment of World Trade Organization is in line with the conclusion reached at the end of the Uruguay Round in April 1994 by the bulk of the world's trading nations. WTO is in charge of managing multilateral trading system. WTO's "General Agreement on Trade in Services" (GATS) requires member nations to comply with the following basic rules: all member nations equally enjoy Most-Favored-Nation (MFN) treatment; enterprises of other member nations can enjoy equal treatment and market access in one member nation's territory with its domestic enterprises. GATS includes the general agreement, annex and the schedules of commitments. Schedules of commitments is a sort of document which shows the obligations stimulated in the GATS about market access and national treatment that one WTO member nation will fulfill, or that the obligations that one WTO member nation hopes to be exempted from. When a WTO member nation makes a commitment, it has set legally the standards of market access and national treatment in its schedule of commitments, and will no longer introduce any other measures which will limit the market access and national treatment in trade in education services.

Keywords: GATS, Horizontal commitments, Specific commitments

1. The market access and national treatment of education services within the framework of GATS

The basic principles of WTO cover all of the WTO agreements, constituting the foundation of the multilateral trading system. These principles are: 1. Trade without discrimination; 2. Freer trade: gradually, through negotiation; 3. Predictability: through binding and transparency; 4. Promoting fair competition. The principle of trade without discrimination includes most-favoured-nation treatment (MFN) and national treatment. As an important part of WTO trade in services, international trade in education services, of course, has to comply with the above principles.

AS an important treaty of the World Trade Organization, GATS includes the general agreement, annex and the schedules of specific commitments. Just like in other sectors of trade in services, when WTO member nations are having negotiations about trade in education services, they should make specific commitments in the aspects of market access and national treatment in different sectors of education services, and list them in the schedules of commitments. A specific commitment in education services is an undertaking to provide market access and national treatment for the service activities in education. When making a commitment a WTO member nation binds the specified level of market access and national treatment and undertakes not to impose any new measures that would restrict the market access or the operation of the service in education. Specific commitments thus are a guarantee to the education services or the suppliers of education services of other WTO member nations that the conditions of entry and operation in the market will not be changed to their disadvantage.

Market access in education services means that within the four modes of supply of education services, WTO member nations open their education markets to other member nations, give them favorable treatments which are no less favorable than those clearly defined in the schedules of commitments, and do not take any other restrictive measures. National treatment means that within the sectors of education services that have made commitments, and under the conditions and qualifications which have been committed, one WTO member nation give other member nations the treatments which are no less favorable than the treatments enjoyed by its domestic education services or suppliers of education services.

Schedules of commitments is a sort of document which shows the obligations stimulated in the GATS about market access and national treatment that one WTO member nation will fulfill, or that the obligations that one WTO member nation hopes to be exempted from. When a WTO member nation makes a commitment, it has set legally the standards of market access and national treatment in its schedule of commitments, and will no longer introduce any other measures which will limit the market access and national treatment in trade in education services.

2. The main content of commitments in education services

As has been mentioned before, World Trade Organization divides services into 12 sectors: 1. Business Services; 2. Communication Services; 3. Construction And Related Engineering Services; 4. Distribution Services; 5. Educational Services; 6. Environmental Services; 7. Financial Services; 8. Health Related And Social Services; 9. Tourism And Travel Related Services; 10. Recreational, Cultural and Sporting Services; 11. Transport Services; 12. Other Services Not included Elsewhere. Education services is the fifth of the 12 sectors, and is sub-divided into primary education service, secondary education service, higher education services, adult education service and other education service.

The related provisions of GATS on market access and national treatment are the legal basis on which WTO member nations can make specific commitments in education services. Therefore, the schedules of commitments of individual countries cover the commitments on market access and national treatment with respect to each of the four modes of supply of trade in education services: these are cross-border supply; consumption abroad; commercial presence; and presence of natural persons. That means for each of the four modes of supply of trade in education services, every WTO member nation should list out one by one in its schedule of commitments the restrictive measures it will take on the education services coming from other member nations.

The core part of schedules of commitments in education services is the four modes of supply of trade in education services, as well as the basic requirements of GATS on market access, national treatment and possible additional commitments. "With respect to the four modes of supply of education services, there are three basic ways of making commitments. First, 'no limitations'. That means a WTO member nation has committed not to impose any restrictive measures on the market access and national treatment of foreign suppliers of education services. Second, 'unbound'. That means a WTO member nation retains its control over trade in education services and doesn't assume any obligations, nor makes any commitments. It just acts according to its wishes. Third, 'limitations'. That means a WTO member nation has listed out the details of limitations on market access and national treatment in education services." (Wu, 2004) And with respect to each of the four modes of supply of education services, a WTO member nation has also made specific commitments on market access, national treatment.

WTO requires each member nation to make its own schedule of commitments in education services, and to explain its limitations on market access and national treatment as well as other limitations. In the schedules of commitments, commitments are split into two sections: First, "horizontal" commitments, which set limitations on all of the sectors included in the schedule, especially the two modes of supply of education services--commercial presence and the presence of natural persons. Second, specific commitments apply to a particular sector or subsector of education services. Therefore, horizontal commitments are the basic commitments which apply to all sectors of education services. And specific commitments are further commitments based on the horizontal commitments with respect to specific sectors of education services. They are also the clarification of the specific commitments made with respect to the fore-mentioned four modes of supply of education services. GATS use affirmative way to make commitments. Therefore, only the commitments which are listed in the schedules of commitments need to be carried out. In the sectors of education services with respect to which a WTO member nation has not made any commitments, this member nation can decide independently whether to impose any limitations or not.

If a WTO member nation wishes to take back something it has given in past negotiations, it can modify or withdraw commitments in schedules. But commitments can only be withdrawn or modified after the WTO member nation has reached an agreement of compensatory adjustments with affected member nations, and no withdrawals or modifications may be made until three years after entry into force of the Agreement. In the event that the negotiations do not lead to agreement, any affected WTO member nation which believes it has a right to compensation may take the matter to arbitration.

3. General introduction of the commitments made by various WTO member nations in education services

At present, 44 WTO member nations have made commitments on education services. Among them, 32 nations have made commitments on higher education services, and adult education services; 30 nations have made commitments on primary education services; 35 nations have made commitments on secondary education services; 32 nations have made commitments on adult education services; and 20 nations have made commitments on other education services.

Among the thirty-two WTO members that have made commitments on higher education services, seventeen nations have made full commitments on national treatment. There are thirteen nations, which have made commitments on national treatment for Mode 1 (Cross-border supply), Mode 2 (Consumption abroad), and Mode 3 (Commercial presence). Two nations have made full commitments on market access. Eight nations have made partial commitments on market access. Thirteen nations have made commitments on market access for Mode 1, Mode 2, and Mode 3. Only three nations have made full commitments for Mode 4 (Presence of natural persons).

Among the thirty nations that have made commitments on primary education services, seventeen nations have made full commitments on national treatment for Mode 1, Mode 2, and Mode 3, and six have made full commitments on national

treatment for Mode 4. Eight nations have made full commitments on market access for Mode 1, Mode 2, and mode 3. Only nation has made partial commitments on market access and national treatment for Mode 4.

Among the thirty-five nations that have made commitments on secondary education services, nineteen nations have made full commitments on national treatment for Mode 1, Mode 2, and Mode 3. Five nations have made full commitments on national treatment for Mode 4. Two nations have made partial commitments on national treatment for Mode 4. Twelve nations have made full commitments on market access for Mode 1, Mode 2, and Mode 3. Two nations have made partial commitments on market access for Mode 4.

Among the thirty-two nations that have made commitments on adult education services, twenty-five nations have made full commitments on national treatment for Mode 1, Mode 2 and Mode 3. Eighteen nations have made full commitments on market access.

Among the 20 nations that have made commitments on other education services, eleven nations have made full commitments on national treatment for Mode 1, Mode 2 and Mode 3. Ten nations have made full commitments on market access for Mode 1, Mode 2 and Mode 3.

In the five sectors of education services, developed countries have made more commitments. And primary and secondary education services have received more limitations than higher education services, adult education services and other education services. WTO member nations have imposed more limitations on the market access of education services than on national treatment. With respect to the four modes of supply of education services, mode 2 (consumption abroad) has got the most commitments, and mode 4 (presence of natural persons) has got the most limitations.

4. The impact of WTO members' commitments in education services

WTO members' commitments in education services upon their entry into WTO will have a major impact on their domestic education services. While facing many challenges, each WTO member's domestic education service industry has also gained a rare opportunity to expand the absorption and introduction of foreign educational resources, and to speed up its development. Under the rules of WTO, foreign suppliers of education services are allowed to enter into every member nation's education market, and each member nation's education service institutions can also go out into the international education market to participate in the competition. Comprehensive and scientific analysis of the impact of WTO members' commitments in education services will help us seize the opportunity and make the initiative. Judging from the commitments in education services made by WTO member nations, we can see that the main impact is on the four modes of supply of education services—"Cross-border Supply, Consumption Abroad, Commercial Presence and Presence of Natural Persons".

4.1 Cross-border supply

With respect to cross-border supply, many education materials from foreign suppliers of education

services will enter every WTO member nation's domestic education market, including various types of teaching books, audio-video teaching and learning materials, teaching equipment and computer teaching software. This will have a strong impact on every WTO member nation's textbook publishing industry, audio-video publishing industry, teaching equipment manufacturing enterprises and the software industry. They will have to face the direct competition from foreign education services.

4.2 Consumption abroad

With respect to consumption abroad, foreign suppliers of education services will strengthen their contention for each WTO member nation's education market, trying to attract more students to their countries to receive education services. On one hand, massive domestic students' studying abroad has made each WTO member nation, especially developing nations, suffer from loss of talents and outflow of capital and has had a great impact on its domestic education services. On the other hand, each WTO member nation's suppliers of education services can also enter into international education market to participate in the competition and recruit overseas students.

4.3 Commercial presence

With respect to commercial presence, on market access, foreign suppliers of education services can establish joint schools with each WTO member nation's counter-part or wholly-owned schools. They can set up joint schools with one WTO member nation's education service institutions either through introduction of foreign educational resources or in the form of capital investment. With the rapid development of Global economy, the demand for education is increasing steadily. A lot of foreign suppliers of education services have entered WTO member nations' domestic education services market, trying to seize the education market. These institutions are very competitive in terms of software and hardware. And because of their international background, they are very attractive to the students in the age of economic globalization. Each WTO member nation's suppliers of education services will have to face the tough competition and challenge from foreign education service institutions.

4.4 Presence of natural person

With respect to presence of natural person, foreign individuals can enter into each WTO member nation as a natural person to provide education services. And this will not have a serious impact on each WTO member's domestic education services. These foreign individuals will help each WTO member train a large number of high-level professionals, and will play a positive and facilitating role in improving the quality of each WTO member's education services. In the future, there will be a substantial increase in the international flow of individuals among the suppliers of education services of around the world. And the exchange between each WTO member nation's education service institutions and foreign education service institutions will also increase, so each WTO member's education service institutions will become more and more internationalized. On one hand, this will help each WTO member nation's education service institutions employ more talented personnels. On the other hand, the present employees of each WTO member nation's education service institutions will have to face a higher demand on their personal qualities.

End:

Since joining the WTO, through participating in international competition and the strengthening of international cooperation, all member nations have accelerated the pace of development in economy and foreign trade, promoting the internationalization of educational development. The positive effects of entry into WTO have gradually emerged. Commitments on education services means that each WTO member nation's education services will enter the global market, get a broader space and a new market environment for development, and obtain an opportunity to participate in the competition of globalization in education services. Meanwhile other member nations' education services will make their entry into each member nation's own domestic market, bring about tough competition. Each member nation's education management authorities and education service suppliers should actively face the new situation arising from the commitments on education services strengthen the study and research of WTO rules and actively formulate its related rules.

Modern trade in education services is an important part of trade in services within the framework of WTO, and a newly-emerging and knowledge-based business. The rise of education services has a direct relationship with the in-depth development of the knowledge-based moder economy. Since 1990s, with the unprecedented development and wide application of modern science and technology leaded by information technology, knowledge-based economy has appeared. Modern education had played an increasingly prominent role in the society. Education services are becoming a new business. Western nations have already regarded education services as an industry. They have considered it a very important thing to enter into the markets of education services of developing nations. Many WTO member nations have attached great importance to the use of WTO rules and free trade policies with the purpose of developing their higher education and achieve their own goals and interests.

The invitation of Chinese universities and other suppliers of education services, can foreign individuals enter into China as a natural person to provide education services. And this will not have a serious impact on China's domestic education services. These foreign individuals will help China train a large number of high-level professionals, and will play a positive and facilitating role in improving the quality of China's education services, thus help China develop education services. In the future, there will be a substantial increase in the international flow of individuals among the suppliers of education services of both China and foreign countries. And the exchange between Chinese education service institutions and foreign education service institutions will also increase, so Chinese education service institutions will become more and more internationalized. On one hand, this will help Chinese education service institutions employ more talented personnels. On the other hand, the present employees of Chinese education service institutions will have to face a higher demand on their personal qualities.

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Sociological Research of the Career Education

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The research is financed by the project of the Qufu Normal University Scientific Research Fund (No. XJ200810). (Sponsoring information)

Abstract

In 1970s, the US career education achieved significant development and produced extensive and deep influences under the supports of the public. As viewed from the sociology, the production and development of the career education is induced by the deep social factors. The opening integrated career system supported by the school, the community and the enterprise is the effective measure to solve the problems such as social equity and the continually ascending unemployment rate.

Keywords: Career education, Social equity, Equal opportunity

1. Introduction

The career education is the education taking the occupational education and labor education as the core, and it was first put forward by the director-general of American Education Agency, Sydney Maran in Jan of 1971 when he delivered a speech in the National Association of Secondary School Principals Convention of Houston. Maran thought that the American society was in the new change stage, and the change of the society decided the education was not for the permanent occupation, and people would change the occupation time after time, and sometimes the span among occupational conversions was very large, and these conversions required people to learn many sorts of new knowledge and skills in order to adapt the requirements of the survival in the changeable society. Maran's education concept won many responses and supports, which raised a dynamic education reform movement in US. This reform produced impressive influences in America. Chinese scholars introduced and studied this reform from two layers such as the education history and the occupational education. For example, when Mr. Wang Tianyi introduced the thoughts of "permanent education" in the book of "Foreign Education History", he said "under the theoretical influence of permanent education, in 1971, the director-general of American Education Agency, Maran put forward the theory of "career education", and it is a sort of education opinion taking the occupation and labor as the core, and it requires combining the common school education with occupational education in the implementation, and implementing this sort of education form into all grades from elementary school, middle school and even colleges (Wang, 1993, P.98)". When Professor Wu Shiyong introduced the education reform in 1970-1980 in his book of "Foreign Education History Tutorial", he simply introduced the American career education and summarized that "the career education is the reflection of people's anxiety-ridden senses on the education system when the social unemployment rate in US is higher (Wu, 1999, P.632)". Mr. Liu Yibing introduced the production background, concept and implementation mode of the career education in the article of "American Career Education Movement" in the fourth volume of "Foreign Education Trends" of 1988. Mr. Ma Jixiong introduced the career education in the book of "Post-war US Education Research". In the book of "Restless Hundred Years", Professor Lu Youquan also simply introduced the career education. The introduction and explanation about the career education on the layer of the occupational education were in various journals of occupational education, and most of these contents are repeated with the study of the education history. Whether the introduction of the education history or the occupational education all produced the active influences in Chinese education academy, but the career education was still not emphasized enough in China, and the elementary school, the middle school even the whole society don't emphasized the career education enough. With the further development of Chinese economy, many social problems such as educational opportunity equity and ascending unemployment rate also occurred. Therefore, it is very important to analyze and survey the career education of US from the view of sociology.

2. Career education: the education approach to solve the social problems by US

On the surface, the career education is an educational phenomenon, but it is not single educational problem in fact. It was the complex reflection that the deep conflicts in US society were difficult to be harmonized, and it was a sort of test and exploration of the education when other solutions were not effective.

2.1 *The social background of the career education*

In Jan of 1964, US president Johnson alleged that “fight the poor of US unconditionally” in the State Message. A half year later, he persuaded the congress to pass the economic opportunities proposed law supports his idea. After that, he put forward the idea of “great society” and the administration political program. Johnson emphasized that the education was the key to fight the poor and realize the “great society”. First, though the ex-president Kennedy’s economic policy stimulated the growth of the US economy, but the unemployment rate still remained high and not fallen, especially in the depressed region induced by the decline of traditional industrial departments and the structured unemployment influenced by the science and technology revolution, the problem were more serious. That made the Johnson administration introduced the human resource development and utilization to realize the target of sufficient employment through many structured measures such as education, occupational training and developing the undeveloped regions. Second, the Johnson administration also wanted to realize the selection promises through the measure of anti-poor, implement the social equity and opportunity equity to clam down electorates’ dissatisfactions and bring the Chartism into the channel of governmental control. Third, “fight the poor” also wanted to make the poor people who depended on the help of the government obtain the work again through the educational measures, and reduce the burdens of the federal government.

On the surface, the economic opportunity proposed law didn’t involve the education, but its most contents were constituted surrounding the education. The first aspect was the children and youth education plan. In the plan, the government should carry through the pre-school education for the children from 3 years old to 6 years old, should implement the free tutorship for the senior high school students in poor family to enhance their proportions of students entering schools of a higher grade, and should offer temporary works for about 140 thousands youths to make them pay the college tuition fees by the federal capitals. The second aspect was the occupational training and the re-training plan. In the plan, the government should establish the occupational training camp which could offer two year’s occupation training and basic skill training for the youth employments from 16 years old to 21 years old, and appoint them to engage in the work of natural resource protection. And the government should appoint the youth volunteers in the US Volunteer Corps to the poor regions, madhouse, school and Indian reservation to serve from poor people and minority, and the central government authorized the state governments and local governments to organize the youth unemployment as the street youth team and make them serve for local communities and reduce the juvenile crime rate. The third aspect was the community action plan. The congress was authorized to appropriate funds of 945 millions dollars to implement the economic opportunity proposed law in the first year (Liu, 2002, P.240-241). After that, in 1964-1965, the national education outlay had achieved record-breaking 39 billion dollars, but there were still many Americans could not support their children to obtain sufficient educational opportunities. In April of 1968, the “Elementary and Second Education Act” was passed, and the limitation that the large amount assistance to the elementary and middle education funds by the federal administration was broken, and the federal administration could largely develop and popularized the education through the financial funds to make children in the poor families and minority families obtain the educational opportunities and break away from the poor situations.

However, the favorable desires didn’t equal the beautiful reality, and the education was not the catholicon to cure various social illnesses. Above reform measures certainly could reduce the unequal opportunities such as the sex, the race and the age, and offer the opportunities with higher social status and well treatment for all citizens. But the administration still seriously ignored the fact, i.e., in the influences of these many complex social factors, the equity of the opportunities didn’t equal the equity of the competitive results. In the capitalistic US with drastic competition, the single opportunity equity based on individual ability only would induce the polarization in fact. Based on above factors, as the approach to solve he social problems in US, the “career education” started.

2.2 *The career education is the measure to realize the social equity*

In the middle of 1960s, because of the impact of the postwar science and technology revolution, the quick development of the industrial society and the raise of the negro movement, many problems such as the poverty, the structured unemployment, the racialism, unequal rights and opportunities, especial for the high employment existing in the US society became into the social focus after the economic crisis in the twenties and thirties. People had not treated it simply from the economic view, but surveyed it from many social views such as race equity, social equity, education opportunity equity, education right and poverty. People had not treated the material fortune or natural wisdom and physique as the main reason of the income, and they thought that the normal development of individual talents and skills as the necessary factors to obtain the success. Therefore, in the face of so many social problems, especially in the face of the problem of the high unemployment rate, people begun to reconsider the traditional education and the

occupational education. The public of US, especial the Negro society and the representatives from the Negro society, the minority and the middle and lower society, and their supporters appealed that the education should eliminate the social inequity and the opportunity inequity.

By force of the social pressure, the US administration adopted many measures such as increasing the national educational outlay and strengthening the educational legislation to extend the opportunity that the youths accepted the education, help the child in the low-income and minority families to obtain better education and walk out the poverty and eliminate the obstacles in the individual and social developments. However, above sorts of endeavors didn't obtain anticipated effects. In the book of "The Theory of Education Opportunity from 1960-1975", Church wrote that "the poor children and some minority children can not use same establishments like the children in the prerogative group... in 1960s, the education must explain that why the equal opportunities can not induce equal results (Qu, 1990, P.440)". To change the "equality of opportunities" to the "equality of results", the administration implemented multiple reforms, and the career education proposed by Maran was the educational reform exploitation in the common education domain to realize the equal results and "make all children obtain various employment opportunities".

The theoretical hypothesis of the career education is that the responsibility of the school should offer the skills, motives and opportunities to detect and discover various careers for students. The career education is not a sort of subject, and not the new name of the occupational education. And it is a sort of education concept traversing all subjects and domains. The basic meanings of the career education includes following aspects. First, every class teacher in various-level education should emphasize the career meaning of the essential contents in the proper place. Second, put forward the occupational skill training to enter into the occupational world again successfully. Third, set up the comprehensive career development plan including the active cooperation and participation of school personnel and non-school personnel. Fourth, offer many opportunities such as work observation, work experience and part work for students and peoples in the public schools, and offer consultation services about the character and the demand of the occupational community for school officers. Fifth, admit and utilize the mutual relationships among families, communities and occupational leagues. In the "Direction Handbook", US Federal Education Agency alleged that "the so-called career education is to unify various social values in the labor into the individual structure of personality value, and make the labor become into the labor shared and enjoyed by everyone. The intention of the public education and the endeavors of all members in the region or the community would help everyone to realize these social values in the living (Liang, 1986, P.458)".

American Federal Education Agency treated the career education as the important measure and approach to help every one in the living to realize above social values, but this measure was not efficient in one day, and it needed to pass a systematical education process with grading. In this process, it made every student possess the target of self development and made him find out his own position in the social labor and living. Therefore, US educational experts divided 23,000 social occupations into 15 career groups, i.e. the business and office, the sale promotion and retail, the communication and press medium, the building industry, the manufacturing, the traffic and transportation, the agricultural business and natural resource, the navigation, the environmental protection, the public utility, the sanitation, the tour amusement, the private service, the arts, the humanism consumption and domestic economy. We could see that these "career groups" contained all industries in the social life. And this sort of career education ran through the whole education plan from the kindergarten to the college, and it faced all students, and it also included the adult and successive education to make them be familiar with various careers and grasp or select the ability of the career (Fuller, 1979, P. 44). In addition, the career education also required all establishments in the schools should face all students. So, the exponentials of the career education wanted to not only obtain students' successes or better careers to show the result equity of the education through the implementation of the career education accruing to the students' individual differences, but also make students fully enjoy the educational resources and realize the social equity in the educational process. However, based on the US social reality then, the result was only exponentials' own wishful thinking.

3. Career education: the integrated education supported by the school, the family and the community

The career education is not a sort of concrete subject, and not the name of certain occupational education. Like the comprehensive technological education concept of former Soviet Union, it is a sort of free education (liberal education). Though the career education has its own target, but the implementation of the target should draw support from other subjects. And the every subject established in the school should integrate with the concept of the career education. Teachers and school should utilize all conditions and establishments in the school and out the school to make students obtain their favorite occupational trainings. In the practical teaching process, the abstract knowledge should associate with the practical works, and the relationship between the common education and the occupational education should be treated correctly. The educational practice leaded by the concept is a macro system engineering which can not be completed only depending on the school, and it must be implemented by the communal participations of the family, community and other industries. To better implement the career education, effectively harmonize the relation among the school, the family and the community and confirm their own responsibility and obligations, the US administration

successively issued “the Elementary and Middle School Education Law”, “the Career Education Act”, and the “Vocational Education Act”. After that, various states also successively issued local laws and regulations about the career education. The issuances of the laws and regulations offered the possibility to favorably implement the career education for the federal government, and offered legal references for large amount funds of the career education. These laws and regulations also definitely confirmed the various responsibilities and obligations of the schools, families and communities to implement the career education. Under the legal guidance and restriction, the American Federal Education Agency set about to develop the career education mode based on the schools, the employments, the families and the communities.

The career education based on school is the main form of the career education, and it is mainly limited in the stage from the kindergarten to the senior high school, and the development of the career education needs the participations from various parties in the society which should establish extensive cooperation plans with the school, and the target of the career education is to make all students to learn the updating education course, contact various occupations, ensure every student obtain the education combining the academic course with the occupation preparation, and obtain employment or keep on enter a higher school when he graduates or dropped out. The education mode based on the employer is the learning mode to offer the high school students from 13 years old to 18 years old for the occupation training, and it makes students obtain knowledge skills to replace the traditional course teaching in virtue of the actual employment offered by the public or private enterprisers, and students can obtain corresponding credit hours through completing the courses offered by the enterprisers, and the school brings the credit hours into the total grade. The education mode based on family and community is the education system taking the family community as the center, and it offers career consultation, career direction and work arrangement and relative education course information. The career education based on dwelling district mainly assist with the village poor denizens lacking in education and occupation selections or the families in the bad social situation, and this education mode calls together these denizens and makes them to obtain employments or further education opportunities. Both former modes face the school students, and later two modes mainly face the society. So we can see that the implementation of US career education is to lead various education modes including the basic education, the higher education, the occupational education, the adult education and the national education by the idea of the career education. The career education is the complex “integrated” system facing not only students but also the social unemployment, and it possesses the characteristics such as comprehension, cooperation and work-study.

4. Career education: an opening social system

The open system theory thought that “the organization is the sustainable system to adjust its survival through the input and the output between it with the environment (Martin, 2005, P.154)”. As viewed from the open system theory, the career education is not only the “integrated” system with participants including schools, families and communities, but an open social system. This system includes the inputs from the social environment such as the social values, beliefs, anticipated targets, technical skills, knowledge experiences, capitals and equipments, the process of the career education including the teaching process, the information exchange and the energy conversion process, the outputs of the “integrated” system to the society which are mainly embodied in the contributions that the individual with certain career ability do for the society. This process can be denoted by the Figure 1.

As viewed from the open system theory, the “integrated” system of the US career education possesses some characteristics of the opening system organization. First, it is a dynamic cycle system, because the career education process is composed by cycle systems one by one and the big cycle system includes small cycle systems such as the time cycle, the school year cycle, the week cycle, the day cycle, and the course hour cycle. Second, the career education is a balanced system which can be adjusted by it. The career education should keep a sort of balance with the environment. When the surrounding environment acts on the system, it will certainly react. To sustain this sort of balance status, the career education system sometimes will pay out biggish costs such as adjusting the education policy, modifying the education contents, even re-modifying the intention and the target of the education. Third, the career education has the information input and feedback system. The career education system can exactly judge the “products” from it and feed back to relative departments or the subsystem in time for the further adjustment and perfection.

Of course, the US career education still has problems. In fact, like other things, it still has its deficiencies and limitations, for example, it overemphasizes the knowledge with material gains, which threatens the free education. And someone censured that in the recessionary economy of US would be further destroyed when it enhanced youths’ interests for the outdated works. But many American educationists thought it would be able to lighten some urgent social, economic and educational problems, and it would deeply influence the youths’ self-realization. Therefore, the US society didn’t stop the career education because of the deficiencies or the comments in the career education. In 1994, the US Congress passed the “the Opportunity Law from School to Work” to further drive the implementation of the career education, and the law required when the schools offered the common education for students, they should impart students concrete career skills to ensure them favorably arrive in the “work world”.

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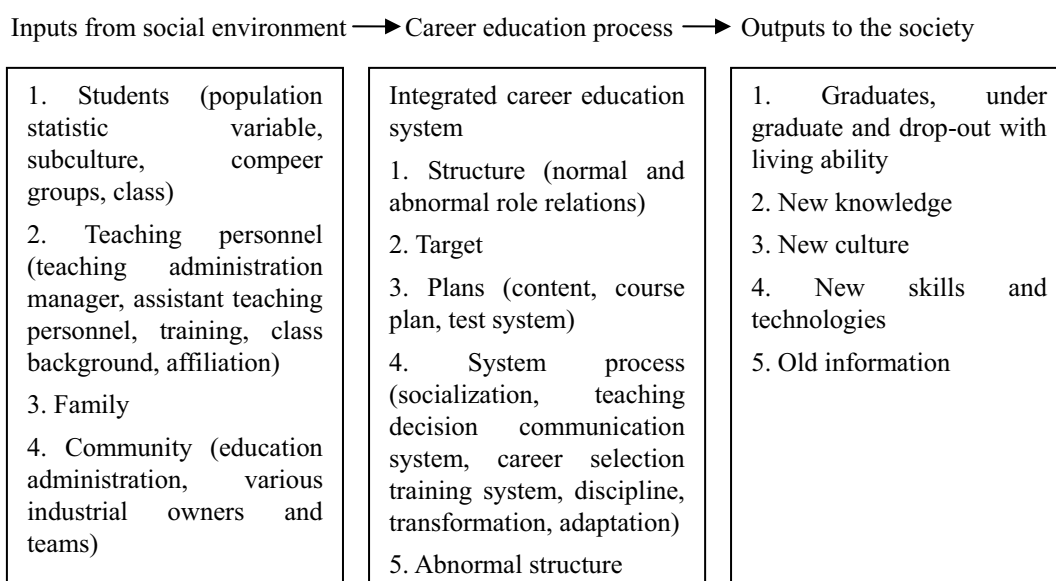


Figure 1. Career Education: Integrated System Supported by Family and Community



A Comparison of the Use of Strategic Thinking Skills of Aspiring School Leaders in Hong Kong, Malaysia, Shanghai, and the United States: An Exploratory Study

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Abstract

Cognition is the way we use mental skills to acquire knowledge, manipulate ideas, and process new information and beliefs. The Strategic Thinking Questionnaire (STQ), which measures three such skills – systems thinking – reframing – reflection, was used to collect data from students preparing for school leadership roles at four universities in the United States (USA), Malaysia, Hong Kong, and Shanghai. It was thought that the use of these skills might vary from country to country because of western and eastern cultural norms. Based on self-reported data from 328 educators preparing for school leadership roles we concluded that the use of strategic thinking skills were found in all locations but the variance in their use is more a function of age of respondents, and gender rather than location. These findings have implications for training, professional development, and selection of aspiring leaders.

Keywords: Strategic thinking, Reflection, Systems thinking, Reframing, School leadership preparation, Thinking habits

1. Introduction

The ability to interpret and make meaning of discreet and seemingly unrelated events is a hallmark of today's successful leader. This ability should help leaders think strategically by understanding, identifying, predicting, responding, and adapting to opportunities and challenges confronting them. The need for school leaders to think strategically has gone unchallenged as the world reacts to the effects of globalization, which are creating a profound challenge for all organizational leaders. In 2006, Pisapia noted that leaders who find themselves in such messy, chaotic, complex environments fail because they are trained in and rely upon a linear thinking mindset that does not work in situations characterized by ambiguity and complexity. They are unable to identify critical societal and institutional forces

influencing their environment and thus do not connect their organizations to the current major themes associated with success. Their concept of change is also linear; therefore, they overuse quantifiable parameters in the change process and seek to rationally plan their way to success. By failing to consider that their organization is dependent upon the actions and views of other organizations and individuals; they do not connect with significant forces on their critical paths of success. Schreyogg and Noss (2000) and Weick and Quinn (1999) support the claim that there is an over reliance on linearity which does not fit with today's realities of 'fast and furious' change. This environmental change requires leaders who can add strategic thinking capabilities to their repertoire of the more common analytical capabilities long taught in our management schools.

Strategic thinkers work from a mental model of the complete system. This strategic mindset incorporates an understanding of both the external and internal context of the organization. Henry Mintzberg (1994, p. 10) sees strategic thinking as a synthesizing process utilizing intuition and creativity whose outcome is "an integrated perspective of the enterprise." From this integrated perspective, strategic thinking challenges existing assumptions and action alternatives, potentially leading to new and more correct ones.

Strategic thinking is creative, critical, and analytical although accomplishing all types of thinking simultaneously is difficult, because of the requirement to suspend critical judgment. When applied correctly, strategic thinking enables the leader to (a) recognize interdependencies, interrelationships and patterns, and (b) make consequential decisions using both powers of analysis and intuition. Chilcoat (1995) and Pisapia, Reyes-Guerra and Coukos-Semmel (2005), for example, suggest that effective leaders demonstrate more complex mental skills than ineffective leaders. Leithwood and Steinbach (1992) believe that efforts to improve the effectiveness of education may be more productive if more consideration was given to improving the quality of thinking and problem solving abilities of administrative and teachers rather than simply focusing on actions or behaviors.

Cognition is the way thinking occurs. Mental or cognitive skills enable the acquisition of knowledge by manipulating ideas and processing new information and beliefs in our minds. Information, memory, reasoning, application of schemas and biases, making attributions and thinking-through a problem are examples of cognitive skills. Some people take *mental shortcuts*, acting on what we expect to see.

2. The Literature

The literature identifies many cognitive skills such as: chunking (Agor, 1988; Newell & Rosenbloom, 1981; Simon, 1957, 1999), cognitive reduction (Simon, 1957), cognitive heuristics (Stanwick, 1996), cognitive maps/schemas (March & Simon, 1958; Simon 1957; Stanwick, 1996), mental imagery (Anthony, Bennet, Maddox, & Wheatley, 1993; Stanwick, 1996), creativity (Depree, 1989). These shortcuts are useful when making quick decisions such as in single loop learning and problem solving to react to circumstances based on taken for granted values, goals, frameworks. The emphasis is on techniques and making the organization more efficient by detecting and correcting error (Usher & Bryant 1989).

At other times, the outcomes being sought are strategic and the need is to learn to see past the façade or assumptions of an issue to examine the underlying situation to understand the psychology and systemic issues present in the situation. The emphasis is on techniques that make the organization more efficient by detecting and correcting error. These times call for other mental tools such as: mental models and schemas (Riedel, Morath, & McGonigle, 2000; Senge, 1990; Weick, 1995;), critical thinking (Baron, 1994; Cohen, Thompson, Adelman, Bresnick, Shastri, & Riedel, 2000; Halpren, 1996; Riedel et al., 2000), pattern recognition (Cohen et al.2000; Simon, 1957, 1995), reframing (Bolman & Deal, 1994; Morgan, 1986), reflection (Argyris & Schön, 1978, 1996; Dewey 1933; Schön, 1983), and systems thinking (Senge, 1990). One way to do this is to become a master of asking powerful questions.

Considering that, this listing is not exhaustive, some have argued (e.g., Perkins, 1995) there may be too many strategies for leaders to remember, consider, select, and apply. However, regardless of the architecture presumed to underlie human cognition, the fact is that leaders must retrieve, activate, and/or recreate knowledge to influence actions and perceptions of followers. As Pisapia (2006) suggested a strategic agile mindset is indispensable for modern leaders. Looking for a more parsimonious set of skills, Pisapia and Reyes-Guerra built on the earlier work of Argyris, Schön, (1978) and Senge's (1990) work to identifying components of strategic thinking. They identified three cognitive skills (systems thinking, reframing and reflection) that enable leaders to think strategically and theorized that they were potential distinguishers between successful and less successful leaders. Thus, they are important skills Universities should teach and aspiring leader should learn.

3. The Strategic Thinking Skills

We begin by defining the three strategic thinking skills that appear to be related to leader success (Pisapia, Reyes-Guerra & Coukos-Semmel, 2005; Pisapia, Reyes-Guerra & Yasin 2006). These three skills assist leaders in (a) reframing situations so they become clearer and more understandable; (b) reflecting and developing theories of practice which guide actions;

and, (c) thinking in more holistic ways. They also aid leaders in seeing events and problems in terms of concepts, which are useful ways of thinking effectively about problems.

Fluency in multiple frames is a basic skill for postmodern leaders. It is critical for them to make their dominant frames explicit and to widen their frame repertoire. Pang and Pisapia (2006) suggest that leaders must frame and place all situations in context. Framing is a cognitive process that helps individuals gather and organize information and create knowledge. It involves sorting and interpreting the meaning of new information, events, and experiences. Framing imposes provides a language for analysis of behavior in which aspects of situations are interpreted through multiple lenses. Typically, individuals reach for frames when trying to understand new, complicated events and how communications, goals, and initiatives could be perceived. However, the manner in which a leader frames a situation is crucial to his or her understanding and public reasoning.

Reframing is a conscious effort by leaders to switch attention across multiple perspectives in order to generate new insights and options for actions. The goal is to produce usable knowledge by rotating through appropriate conceptual models for the activities and events observed. This process can overcome Bolman and Deal's (1991) assertion that using singular frames filter out some things and allow others things to pass through quickly. "The ability to reframe experiences enriches and broadens a leader's repertoire and serves as a powerful antidote to self entrapment" (pg 4). Reframing a problem involves a conscious effort to size up a situation using multiple lenses. Bolman and Deal assert that:

Managers who master the ability to reframe report a liberating sense of choice and power. They are able to develop unique alternatives and novel ideas about what their organization needs. They are able to tune in to people and events around them and less often startled by organizational perversity, and they learn to anticipate the turbulent twists and turns of organizational life. The result is managerial freedom – and more productive, humane organizations. (p. 17)

Reframing in this study refers to leaders' ability to switch attention across multiple perspectives, frames, mental models, and paradigms in order to generate new insights and options for actions. It enables one to sort through problems and opportunities, to see problems in ways that allow them to map out different strategies, and identify trends before others see them. Someone with this ability would be able to recognize when information is presented from only one perspective. They would also demonstrate a willingness to seek different viewpoints on complex problems, ask those around them what they think is changing, and discuss solutions with critics and challengers as well as supporters.

Reflection is a cognitive skill that involves careful consideration of any belief or practice that promotes understanding of situations and then applies the newly gained knowledge to these situations. It relies on subjecting evidence, perceptions, and experience to critical scrutiny, but suspending critical judgment, in order to make sense and meaning of situations prior to weaving the thinking into a theory of practice. By reflecting on both successes and failures, leaders begin to unpack the assumptions and values that lie beneath rules, regulations, and skills in work and everyday life. This constant effort of reevaluation and interpretation is an integral part of how leaders make sense of situations. Even though the leader is without all the information needed, the use of reflection will offer the best possible options for action and prediction. Senge (1990) uses the three types of reflection when he describes professional practice based on reflective thinking in terms of levels. Senge says,

The first level is technical reflection, which is concerned with examining the efficiency and the effectiveness of means to achieve certain ends. The second level, practical reflection, involves examining not only the means but also the ends, questioning the assumptions and the actual outcomes. The third level is critical reflection, which considers the moral and ethical issues of the social compassion and justice along with the means and the ends, encompassing the first two levels. (p.2)

Of the three types, critical reflection is the most necessary for transforming oneself and ones organizations. As Mezirow (1990, pp. 12-13) points out, 'We become critically reflective by challenging the established definition of a problem being addressed, perhaps by finding a new metaphor that reorients problem-solving efforts in a more effective way.

Argyris and Schön (1978) have a similar way of describing reflective thought. They differentiate between single and double loop learning. They describe single-loop learning as a reaction to circumstances based on taken for granted values, goals, frameworks, and to a significant extent, strategies are taken for granted. They point out that, in single loop learning, reflection is focused on making the organization more efficient and the detection and correction of error. The emphasis is on techniques and making them more efficient (Usher and Bryant 1989). In single loop learning, the assumptions governing a situation are not questioned. If reflection occurs in this situation, it is simply to make the organization more efficient. They just look for another strategy to achieve its present objectives.

Transformative learning is accomplished through double loop learning which is applied when *coping* will not be sufficient to gain organizational fitness. It is used to change the organization's mindset; its core set of principles, beliefs, and norms. Double loop learning, which is *deeper* than *single loop* learning, emerges when members review new

environmental challenges and critique current organizational assumptions and ways of doing business to determine if new responses and new basic assumptions need to be embraced to gain organizational fitness.

Reflection, in this study, refers to leaders' ability to weave logical and rational thinking together with experiential thinking through perceptions, experience, and information to make judgments as to what has happened and then creates intuitive principles that guide future actions. In reflection, one uses perceptions, experience, and information to make judgments as to what has happened in the past and is happening in the present to help guide their future actions. Someone with this ability would be able to understand the past, present, and perhaps the future by recognizing why certain choices worked and others did not. They would demonstrate a willingness to question their assumptions and test whether their behaviors actually result in desired outcomes. It enables one to use perceptions, experiences, and knowledge to understand situations, how to think about them and inform action.

Systems' thinking requires that the leader understands that he or she is part of a feedback process, not standing apart from one. This understanding represents 'a profound shift in awareness' that there is connectivity between members of organizations that influences the way a system works. The perspective gained from looking at feedback in this way 'suggests that everyone shares responsibility for problems generated by a system' (Senge 1990, p.78).. This feedback perspective becomes especially significant when leading organizations. Organizations are always involved in skills that determine their output and direction. Senge (1990: p. 87) recommends that in order to understand a balancing feedback process the systems thinker must 'start at the gap – the discrepancy between what is desired and what exists... then look at the actions being taken to correct the gap'. The leader must then translate the understanding into action. Senge (1990: p. 114) emphasizes that the 'bottom line of systems thinking is leverage – seeing where actions and changes in structures can lead to significant, enduring improvements'.

Systems thinking in this study refer to leaders' ability to see systems holistically by understanding the properties, forces, patterns, and interrelationships that shape the behaviors of the systems which provide options for actions. This definition requires that leaders think holistically, defining the entire problem by extracting patterns in the information one collects before breaking the problem into parts. This capability enables someone to understand how facts relate to each other. It also enables them to seek the cause of a demand for products or services that their organization produces before taking action to meet the demand and seek feedback to help individuals and the organization self correct.

4. Purpose

This paper reports an exploration into the use of foundational thinking skills - systems thinking, reframing, and reflection –needed for strategic thinking – by educators preparing for department chair, assistant principal and principal roles in the USA, Hong Kong, Malaysia, and Shanghai. The study's purpose was limited to answering the following two questions:

- (1) Do students preparing for leadership roles in the USA, Hong Kong, Malaysia, and Shanghai use strategic thinking skills differently?
- (2) How do contextual variables of location, age, and gender affect the use of strategic thinking skills?

5. Methods

The examination of the cognitive aspects of leadership development has largely gone unnoticed in the research on leadership. Thus, creating a vacuum in an area of leadership identification and development that has both been recognized over 70 years ago in seminal works regarding reflection (Dewey, 1933, Argyris & Schön, 1978) and brought to the forefront over 10 years ago concerning reframing (Morgan, 1986; Bolman & Deal, 1991) and during the last 35 years concerning systems thinking (Bertalanffy, 1968; Senge, 1990). Hence, we conceived of this data collection as non-experimental and exploratory since modest research has been conducted on these variables.

6. Sample

For this study, a purposeful sample of 328 English-speaking students studying at The Chinese University of Hong Kong, University of Malaya, China Executive Leadership Academy, and Florida Atlantic University was drawn for analysis. The University of Malaya provided two subsamples; one from Kuala Lumpur (n=52) and the other from Sarawak on the island of Borneo (n=59). Table 1 presents the demographic data for the participants in the study by site.

[Table 1 about here]

As seen in Table 1, Hong Kong (HK) provided 31% of the sample. All other sites produced from 16 to 20% of the sample. Females composed 59% of the total sample. Their prevalence was apparent in the USA and Shanghai samples. Males were more prevalent in the Borneo sample.

The Shanghai students were the youngest and still in the process of acquiring their bachelors degree in education. The USA sample was younger than the HK and Malaysian samples. Eighty four percent of the USA sample fell into the 20-44 age groupings. Ninety eight percent of the HK and Borneo samples fell in the 35- 54-age groupings. One hundred percent of the Kuala Lumpur (KL) sample fell in the same age categories.

7. Instrumentation

The Strategic Leadership Questionnaire: STQ© v4 (Pisapia & Reyes-Guerra 2008) was used to collect the data for this study. Version4 is six pages long and consists of forty-eight Likert type questions. The STQ provides an assessment of three skills – systems thinking, reflection - reframing - thought to be important to useful in self-assessment and for development in classes and/or seminars. The STQ© asks respondents how often they use the skills when confronted with problems. It is only available in a self-format since it is felt that only the test taker can describe how often they employ the skills. Typically, participants return the instrument directly to the researchers or seminar facilitator. The STQ takes approximately fifteen or twenty minutes to complete and is capable of being either self or computer scored.

The original STQ© developers (Pisapia, Reyes-Guerra, & Coukos-Semmel (2005) reviewed the literature and then defined the three cognitive skills. Using the definitions as guides, they wrote statements describing skills required to think in systems, reframing, and reflection terms. A panel of five experts knowledgeable about strategic thinking reviewed the resulting 180 items. They sorted the statements into the three categories. In an iterative fashion, the statements were modified or discarded following lengthy discussions and repeated feedback sessions between the panel and researchers. Items on the STQ are cast on a five-point Likert scale. A higher value represents greater use of a cognitive skill, as noted below:

1= Almost Never uses

2 = Rarely uses

3 = Sometimes uses

4 = Frequently uses

5= Almost Always uses

Following each administration (4 now) of the STQ, the items were subject to empirical analyses followed by discussions conducted in an iterative fashion until the statements were representative of the strategic thinking construct. Ongoing analysis and refinements in the instrument continue, with a database involving 3,000 respondents. Table 2 presents the means, standard deviations and Cronbach Alpha's for the STQ Version3 and Version4.

[Table 2 about here]

In STQv3, the rank order of skill usage is systems thinking (3.55), reframing (3.45), and reflecting (3.48). Based on the mean scores, it was expected that systems thinking would be the skill most frequently used, followed by reframing. Internal reliabilities of Version3 were assessed through the standardized Cronbach's Alpha. A .70 value generally considered to indicate a sufficient reliability by classical psychometric authorities (Nunnally, 1978; Peterson, 1994). Reliability statistics for the STQv3 (based on approximately 643- ratings by a multi-sector sample of managers in business and education) were computed. Internal reliabilities ranged between .71 and .77 for the subscales and .89 for the total scale. Other studies have found similar reliabilities. For instance, Pisapia, Reyes-Guerra & Coukos-Semmel (2005) reported reliabilities ranging from .77-.83 on subscales and .91 for the scale.

As seen on Table 2, internal reliabilities (Cronbach Alphas) on the STQv4 are higher than Version3 on all scales except reflecting. This may be explained by in difference in number of items on the scale from v3 to v4. They range between .74 and .87 for the subscales and .93 for the scale meeting the .70 standard. Additionally, the rank order of the means on the subscales reveal that the systems thinking is the cognitive skill most frequently used as expected from the version3 and earlier administrations. However, the reflecting skills (3.66) surpassed reframing (3.43) as the second most used skill. Thus, the rank ordering of means among the v4 sub scales is exactly the same v3 subscales except that they were used more often by this sample.

The STQ was originally developed from an interpretation of the literature on strategic thinking as being composed of systems thinking, reframing and reflection. The literature portrayed reframing as part of reflection. The researchers believed that reframing was an important skill in its own right. Hence, it was originally extracted and tested as a unique variable from reflection in order to give it emphasis. The skills embodied in systems thinking, reframing and reflection reveal the participants ability to think flexibly, conceptually and strategically. The interpretation of these dimensions provides participants with a deeper understanding of their own mental processing skills. However, in daily use, the three cognitive skills overlap considerably; our experience is that they are best taught singularly. Theoretically, the STQ©v4 measured the participant's capability to think strategically. It included 17 items from systems thinking, 14 from reframing, and 14 reflection items. The STQv3 when subjected to factor analyses produced one predictive factor – the overall strategic thinking score (Pisapia, Reyes-Guerra, & Yasin 2006).

Version4 was subjected to a principle axis factoring method with iterative communality estimation and oblimin with Kaiser Normalization rotation. The two factors (systems thinking and reflection) with Eigenvalues greater than 1.0 reported in Table 3 accounted for 52 percent of the variance. Values less than the .10 threshold were suppressed and not reported on the table. One might argue that the difference may not be in level or variance on the factors derived with the

complete data set, rather, that the factors themselves are different across cultural groups. With these data, the point may be a good one, but not enough subjects were available to consider cross-cultural factor agreement though separate factor analyses.

[Table 3 about here]

By factoring the 48 questions on the STQ©v4, two interpretable factors that are consistent with the definitions of systems thinking and reflection were obtained. This result is inconsistent with the hypothesized three subscales of the STQ but consistent with the literature on the subject. The two factors (Systems Thinking and Reflection) will be the guiding framework for continued research and teaching of strategic thinking skills until empirical analyses confirms the reframing subscale.

8. Data Collection

The STQv4 was administered in different ways in each of the locations. The USA English version4 was used in the USA and Borneo data collections. In KL and Shanghai, the English version was translated into Malay and Mandarin. Local researchers translated the STQ and then a colleague retranslated it back to English. They shared their English translations with the USA developers and through an iterative process; the translated versions came closer to the USA version4. In Hong Kong, the local researcher presented the English version4 in hard copy but answered questions from students concerning the meaning of certain English words. The HK sample was considered English literate but not all were proficient which could have impacted the HK results.

9. Results and Discussion

Two research questions guided the data collection and analyses.

Research Question 1: Do students preparing for leadership roles in the USA, Hong Kong, Malaysia, and Shanghai use strategic thinking skills differently?

Research Question 2: Do contextual variables of age, gender affect the use of strategic thinking skills?

The data are displayed and analyzed with descriptive statistics and multiple univariate analyses of variance. An Alpha level of 0.05 was set for all statistical tests. Eta² was used to investigate effect sizes.

9.1 Use of Strategic Thinking Skills

The use of strategic thinking skills among students preparing for school leadership roles was investigated by comparing the means for participants at each location. As seen on Table 4, the rank order use of strategic thinking skills is Borneo, USA, Kuala Lumpur, Hong Kong, and Shanghai.

[Table 4 about here]

The two highest scoring locations (Borneo and USA) both administered the English Version4 of the STQ. Participants at these locations were dissimilar on age and gender variables. Borneo participants were overrepresented by males (73%) and the USA participants were overrepresented by females (86%). While males in Borneo and females in the USA represent a greater proportion of those preparing for leadership roles, both groups were overrepresented in each sample. The USA sample was younger than the Borneo sample but all participants were in graduate programs. Eighty four percent of the USA sample fell into the 20-44 age groupings. Ninety eight percent of the Borneo samples fell in the 35-54-age groupings.

In KL, the STQ was translated and administered in Malay. The results were consistently at the middle of the rank order of means. There was a more even distribution of males (54%) and females (46%) than in the USA and Borneo locations. On the age variable, ninety percent of respondents were in the 45-54 age group compared to the sample mean of forty two percent.

In Shanghai, the STQ was translated into Mandarin and the match with the English version achieved high fidelity. However, the results from this location were consistently low in comparison to the other locations. The participants at this sites were mostly female (88%) and all fell in the 20-25 age group.

Table 5 presents the relationship between location and strategic thinking and reflection. The means for the criterion variables found in Table 5 were obtained by summing the items comprising the empirical factor for each of the two scales. As can be seen on the table the relationship between locations (country) and the two criterion variables were significant, however the effect sizes were .03 for systems thinking and .037 for reflecting indicating a small effect.

[Table 5 about here]

A pairwise comparison of the means between location and the criterion variables was conducted to understand the significance of this finding. As seen on Table 6, the Shanghai sample used both reflection and systems thinking skills significantly lower than other locations in the sample. The major distinguishing characteristics of the Shanghai

respondents were age and gender. Eighty eight percent were female, and one hundred percent of them fell in the 20-25 age category.

[Table 6 about here]

Also noted on Table 6, there were no significant differences between Borneo, KL, and the USA on either scale. However, the USA and Borneo usage of reflection and systems thinking skills usage was significantly greater than Shanghai and HK. The USA and Borneo respondents used systems thinking significantly greater than Shanghai and HK.

Besides a significant difference with Shanghai on both scales, HK produced significantly, lower usage rates compared to Borneo on reflection and Borneo and the USA on the systems thinking scale.

The data from the respondents in two Asian cities differed from the data presented by the respondents in the two Malaysian cities as well as the United States. These significant differences could represent a cultural difference, differences in administration of the STQ, sample size and characteristic differences. To explore an explanation an examination of the influence of age and gender individually and combined on the results for each location.

9.2 The Effect of Contextual Variables

The second research question asked if age and gender affect the use of strategic thinking skills. The results on these variables were examined individually, and then their interactions were explored.

9.3 Gender

The possible impact of gender on systems thinking and reflection usage scores was analyzed by comparing the differences between male and female respondents. Women totaled fifty-nine percent of the sample. (N=193 versus N=135). The univariate analysis of variance displayed on Table 7 indicates that there were no significant differences in the means of systems thinking and reflecting attributed to gender.

[Table 7 about here]

As a comparison of the female and male means on Table 8 indicate that although males reported higher mean scores on reflection and systems thinking usage, there were no significant differences found between the two groups. Thus, the STQv⁴ seems to be free of gender bias.

[Table 8 about here]

9.4 Age

The possible impact of age on strategic thinking skills was tested by comparing the differences among the five age categories – 20-25, 26-34, 35-44, and 45-54. A univariate analysis of variance was conducted. As can be seen on the Table 9, the relationship between age and the two criterion variables was significant and the effect sizes were .151 for systems thinking and .109 for reflecting indicating a moderate effect.

[Table 9 about here]

A comparison of the means between location and the criterion variables was conducted to understand the finding. As seen on Table 10, the age group 20-25 used both reflection and systems thinking skills significantly less than other age categories in the sample. No other significant differences were present in the data. Furthermore, both reflection and systems thinking means rise as age rises.

[Table 10 about here]

The lowest use of strategic thinking skills was reported significantly less by respondents in the age category 20-25. Reflection (M=3.34) and systems thinking (M=3.25) rose incrementally from age category 20-25 to age category 45-54 for reflection (M=3.99) and systems thinking (M=3.84).

In this study, two samples presented respondents in the 20-25 age category. The 51 Shanghai respondents (100% of sample) fell into the 20-25 age category. They reported using reflection (M=3.08; SD .488), and systems thinking (M=3.01; SD=.406) skills. The USA, on the other hand, presented thirty-nine percent (39%) of its 64 respondents in the 20-25 age category. These respondents reported using reflection (M=3.86; SD=.517) and systems thinking (M= 3.75; SD= .487). No other site presented respondents in the 20-25 category.

9.5 Moderation Effects

The interactions among location, age, and gender were then explored to determine their effects on usage of systems thinking and reflecting. The interaction of location, gender, age and systems thinking and reflecting produced no significant effects. (See Table 11)

[Table 11 about here]

9.6 Summary of Findings

These analyses indicate that:

- (1) Location explains approximately 4% of the variance in reflection and 3% of the variance in systems thinking. Examination of the means for each location indicates that Borneo used systems thinking and reflecting skills significantly more than Shanghai and HK. The USA used systems thinking skills significantly more than Shanghai and reflecting significantly more than HK and Shanghai. HK used system thinking significantly more than Shanghai. KL used systems thinking and reflection significantly more than Shanghai. Shanghai used systems thinking and reflecting skills significantly less than all other locations.
- (2) Gender produced no significant effects with the use of systems thinking and reflecting skills.
- (3) Age explains approximately 11% of the variance in reflection and 15% of the variance in systems thinking. Respondents in the age category 20-25 reported using systems thinking and reflecting skills significantly less than all other age categories. No other age category produced significant inter-category effects. The means for both the use of systems thinking and reflecting skills rose from a low use for category 20-25 to higher use for age category 45-54.
- (4) The combinations of location, age and gender produced no significant interactions.

10. Conclusions and Implications

Three conclusions were drawn from the study.

- (1) The improvements in the STQ Version4 have been noteworthy. The reliabilities are stronger than earlier versions. The two subscales (systems thinking and reflection) enable the instrument to be used for predictive studies, and provides a sound factor foundation to continue to validate the reflection subscale. On the results side, we were able to generate firmer confidence in the results found in earlier studies.

This is the first study that directly compared the use of strategic thinking skills as measured by the STQ across different locations. As seen in the previous paragraphs, there were some differences across the different locations. The Borneo and USA samples used the strategic thinking skills to a greater degree than HK and Shanghai but similarly to the KL site. These differences raised several questions that should be addressed in future studies. Were the differences due to the composition of the sample such as Shanghai and the USA? The way the STQ was administered? The Chinese culture compared to the Malay and USA cultures?

- (2) One might tend to argue that the difference may not be in level or variance on the factors derived with the complete data set, rather, that the factors themselves are different across cultural groups. With these data, the point may be a good one, but not enough subjects were available to consider cross-cultural factor agreement though separate factor analyses. Our interpretation is that the sample design did not allow comparisons of like samples. Therefore the results seem to be attributed to survey administration and sample make-up not cultural issues.

- (3) These data present a potential age bias. Reflection and systems thinking skill usage rose incrementally for each location, as one gets older. (This finding does not apply to Shanghai, which presented all of its 51 respondents into the 20-25 age category and thus could not be analyzed). Rather than an age bias, this 20-25 age category could be a proxy for experience and/or education, which are likely moderators of thinking skills. Is the difference in use of strategic thinking skills due to experience that comes from age or from preparation and degree acquisition? We did not parcel out the age relationship in this way but it would be interesting to do so in another study. What we do see is as age raises so do the use of strategic thinking skills. Our interpretation is that age is a proxy for experience that is gained from work and life and experience that is gained from education. The use of strategic thinking skills most likely is affected by both type of experience; and a practical experience that is supported with a firm educational foundation is probably the best of all worlds. Therefore teaching of these skills in entry college programs as well as throughout the early career years is recommended. Universities should make a significant effort to emphasize strategic thinking as part of their curriculum for students preparing for school leadership positions.

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Table 1. The Demographics of Participants in this Study

			Location									
	Sample		USA		HK		KL		Shanghai		Borneo	
Gender	N	%*	N	%*	N	%*	N	%*	N	%*	N	%*
Male	135	41	9	14	49	48	28	54	6	12	43	73
Female	193	59	55	86	53	52	24	46	45	88	16	27
AGE												
20-25	76	23	25	39	0	0	0	0	51	100	0	0
26-34	61	18.6	23	36	26	26	0	0	0	0	12	20
35-44	138	42.1	14	22	47	46	47	90	0	0	30	59
45-54	53	16.2	2	3	29	28	5	10	0	0	17	29
N	328	100	64	20	102	31	52	16	51	16	59	18

* = percentages may not add to 100 due to rounding of numbers.

Table 2. Means, Standard Deviations and Reliability Coefficients of the Subscales of the Strategic Leadership Questionnaire: Version3, 2007 and Version4, 2008.

Dimension	Version3					Version4				
	M	SD	N	Alpha	#items	M	SD	N	Alpha	#Items
Systems Thinking	3.55	.318	643	.713	12	3.67	.486	330	.870	17
Reframing	3.45	.286	643	.777	12	3.43	.433	330	.818	17
Reflecting	3.48	.281	643	.752	12	3.66	.416	330	.742	14
Strategic Thinking	3.50	.247	643	.891	36	3.59	.411	330	.928	48

Table 3. Factor Structure (Factor Loadings) for the STQv4. (n=328)

Item #	Factors		Item
	Systems Thinking	Reflecting	
			Stem: <u>When facing difficult problems, How often do you:</u>
4	.738	.169	Ask those around you what they think is changing?
6	.594		Try to find a common goal when two or more parties are in conflict?
44	.544	-.167	Think about how different parts of the organization influence the way things are done?
24	.523		Try to identify external environmental forces which affect your work?
13	.429	-.138	Engage in discussions with those who hold a different world view?
47	.397	-.131	Define the entire problem before breaking it down into parts?
17	.370	-.242	Consider the results of past actions in similar situations?
3	.321	-.183	Try to extract patterns in the information available?
31		-.792	Frame the problems you face in ways that allow you to understand them?
29		-.667	Look at actions being taken to correct the discrepancy between what is desired and what exists?
20		-.642	Ask "WHY" questions to develop an understanding of problems?
33	.206	-.558	Use different points of view to map out different strategies?
26	.170	-.525	Try to understand how the people in the situation are connected to each other?
32	.244	-.501	Look for fundamental long-term corrective measures?

Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Rotation converged in 17 iterations. Values less than the .10 threshold were suppressed

Table 4. Comparison of Means by Location

	Reflection					Systems Thinking				
Location	M	SD	MN	MX	N	M	SD	MN	MX	N
USA	3.85	.584	2.50	4.83	64	3.85	.463	2.75	4.75	64
HK	3.70	.507	2.33	4.83	102	3.53	.467	1.75	4.75	102
KL	3.78	.540	1.17	4.83	52	3.66	.504	1.50	4.63	52
Shanghai	3.09	.488	1.83	4.00	51	3.01	.406	2.13	3.88	51
Borneo	4.00	.648	1.93	5.00	59	3.90	.500	2.25	4.75	59
Total	3.70	.616	1.17	5.00	328	3.60	.551	1.50	4.75	328

Table 5. Test between location and systems thinking and reflecting.

Source	Criterion Variable	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared	Noncent. Parameter	Observed Power(a)
Location	Systems Thinking	2.035	3	.678	3.155	.025	.030	9.466	.729
Location	Reflecting	3.434	3	1.145	3.844	.010	.037	11.532	.819

A Computed using Alpha = .05

Table 6. Comparison of Means for Location and Reflection and Systems Thinking Skill

Location	Reflection				Systems Thinking			
	Location	MD ¹	SE	p	Location	MD	SE	p
USA								
	HK	.145	.088	1.000	HK	.324*	.075	.000
	KL	.067	.103	1.000	KL	.192	.088	.288
	Shanghai	.764*	.104	.000	Shanghai	.864*	.088	.000
	Borneo	-.117	.100	1.000	Borneo	-.049	.085	1.000
HK								
	USA	.145	.088	1.000	USA	-.324*	.075	.000
	KL	-.078	.094	1.000	KL	-.132	.080	1.000
	Shanghai	.619*	.095	.000	Shanghai	.522*	.081	.000
	Borneo	-.262*	.100	.040	Borneo	-.373*	.077	.000
KL								
	USA	.067	.103	1.000	USA	-.192	.088	.288
	HK	-.078	.094	1.000	HK	.132	.080	1.000
	Shanghai	.697*	.109	.000	Shanghai	.522*	.093	.000
	Borneo	-.184	.105	.809	Borneo	-.241	.089	.072
Shanghai								
	USA	.764*	.104	.000	USA	-.846*	.088	.000
	HK	.619*	.095	.000	HK	-.522*	.081	.000
	KL	.697*	.109	.000	KL	-.654*	.093	.000
	Borneo	-.881*	.106	.000	Borneo	-.895*	.090	.000
Borneo								
	USA	-.117	.100	1.000	USA	.049	.085	1.000
	HK	-.262*	.100	.040	HK	.373*	.077	.000
	KL	-.184	.105	.809	KL	.241	.089	.072
	Shanghai	-.881*	.106	.000	Shanghai	.895*	.090	.000

Based on estimated marginal means

1 = mean difference

*The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni

Table 7. Test between Gender, Systems Thinking and Reflecting

Source	Criterion Variable	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared	Noncent. Parameter	Observed Power(a)
Gender	Systems Thinking	.669	1	.669	3.114	.079	.010	3.114	.421
Gender	Reflecting	.276	1	.276	.926	.337	.003	.926	.276

A Computed using Alpha = .05

Table 8. Comparison of Means for Gender, Reflection, and Systems Thinking Skills

Gender	Reflection						Systems Thinking					
	Gender	M	SD	MD ¹	SE	p	Gender	M	SD	MD	SE	p
Male		3.77	.609					3.64	.564			
	Female			.133	.069	.053	Female			.075	.062	.227
Female		3.64	.615					3.57	.541			
	Male			-.133	.069	.053	Male			-.075	.062	.227

¹ = Mean Difference

Based on estimated marginal means

Table 9. Test between Age, Systems Thinking and Reflecting

Source	Criterion Variable	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared	Noncent. Parameter	Observed Power(a)
Age	Systems Thinking	11.666	4	2.916	13.570	.000	.151	54.278	1.000
Age	Reflecting	11.131	4	2.783	9.345	.000	.109	37.378	11.131

a Computed using Alpha = .05

Table 10. Comparison of Means for Age, Reflection, and Systems Thinking Skills

Age	Reflection						Systems Thinking					
	AGE	M	SD	MD ¹	SE	P ^a	AGE	M	SD	MD	SE	P ^a
20-25		3.34	.615					3.25	.556			
	26-34			-.392*	.100	.001	26-34			-.390*	.089	.000
	35-44			-.422*	.083	.000	35-44			-.430*	.074	.000
	45-54			-.651*	.104	.000	45-54			-.586*	.092	.000
26-34		3.73	.601					3.64	.520			
	20-25			.392*	.100	.001	20-25			.390*	.089	.000
	35-44			-.030	.089	1.000	35-44			-.040	.079	1.000
	45-54			-.258	.109	.110	45-54			-.196	.097	.263
35-44		3.76	.566					3.68	.502			
	20-25			.422*	.083	.000	20-25			.430*	.074	.000
	26-34			.030	.089	1.000	26-34			.040	.079	1.000
	45-54			-.228	.094	.092	45-54			-.156	.083	.371
45-54		3.99	.538					3.84	.485			
	20-25			.651*	.104	.000	20-25			.586*	.092	.000
	26-34			.258	.109	.110	26-34			.196	.097	.263
	35-44			.228	.094	.092	35-44			.156	.083	.371

¹ = Mean Difference

Based on estimated marginal means

a Adjustment for multiple comparisons: Bonferroni.

Table 11. Moderation effects between Age (A), Gender (G) and Location (L) in regard to Systems Thinking and Reflecting

Source	Criterion Variable	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared	Noncent. Parameter	Observed Power(a)
L*G	Systems Thinking	.522	3	.174	.809	.490	.008	2.427	.224
L*G	Reflecting	1.186	3	.395	1.328	.265	.013	3.984	1.186
L*A	Systems Thinking	.542	5	.108	.504	.773	.008	2.520	.187
L*A	Reflecting	2.329	5	.466	1.565	.170	.025	7.823	.545
G*A	Systems Thinking	.633	4	.158	.737	.567	.010	2.947	.237
G*A	Reflecting	1.800	4	.450	1.511	.199	.019	6.043	.466
L*G*A	Systems Thinking	.534	3	.178	.828	.480	.008	2.483	.229
L*G*A	Reflecting	.555	3	.185	.621	.602	.006	1.863	.179

A Computed using Alpha = .05



Policies for Teachers towards Errors in College English Writing

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Abstract

Errors made by language learners in learning a language are regarded as failure of competence. Linguists believe that errors are committed when the learner makes use of the learning strategies. By analyzing the learner's errors, we can better understand his inter-language and his learning process. It's necessary to understand the roots of errors before they are eliminated. Students' misuse in vocabulary and grammar demonstrates that teachers should pay more attention to the reinforcement of knowledge delivered to the students. Only in this way will students' abilities be improved effectively.

Keywords: Errors, College English writing, Language learning

1. Introduction

In the 1950s and early 1960s, the prevailing technique used in the study of errors of L2 learners had been Contrastive Analysis(CA). The rationale for CA lies within behaviorism and the belief that learning is a question of habit formation (Johnson 2001). The behaviorists believed that old habits would have some effects on the learning process of a new habit, which is known in psychology as transfer. In the case of language learning, it is believed that the learner's first language affects his or her L2 learning, either facilitating the learning process when the two languages share common aspects or hindering it when there are differences. CA as applied to L2 teaching is pedagogically-oriented, with the aim to discover and predict learning problems and difficulties.

With the birth of psycholinguistics and the shift of focus in language learning from being teacher-centered to learner-centered, the application of Error Analysis (EA) has been developed. According to S.P. Corder (1981:16), EA, as a scientific technique based on psycholinguistics, is a type of bilingual comparison; a comparison between learners' inter-language and the target language. Brown (1987: 169) argues that 'the study of the speech of learners is largely the study of the errors of learners', because 'correct items yield little information about the L1 of the learner'. Error Analysis (EA) is based on the assumptions that errors made by L2 learners can be predicted, observed, analyzed, classified and described (Brown 1987).

2. Brief review of theories about errors

A clear distinction has to be made between what errors are on the one hand and what mistakes are on the other hand. The error versus mistake distinction was introduced into modern debates by Corder(1967), who first advocated the importance of errors in language learning process. In identifying errors, it is necessary to draw a distinction between those errors which are the products of chance circumstances, and those which reveal the learner's underlying knowledge of the process of language learning, because they are random and non-systematic, and they are induced by many factors, whereas the latter are errors of competence or errors, which are worth studying and analyzing, because they reveal the learner's knowledge of the target language, or his transitional competence. Dulay et al (1982:139) use the term 'error' to refer to any deviation from a selected norm of language performance, no matter what the characteristics or causes of the deviation might be. James (1998) uses the neutral term deviance(s) for all ways of being wrong as a foreign language learner and divides deviances into four types: slips, mistakes, errors and solecisms. According to James (1998), slips can quickly be detected and self-corrected by their author unaided. Mistakes can only be corrected by their author if their deviance is pointed out to him or her. Errors cannot be self-corrected until further relevant (to that error) input (implicit or explicit) has been provided and converted into intake by the learner. Solecisms are breaches of the rules of correctness as laid down by purists and usually taught in schools. In this paper, the term 'error' is used to refer to the deviation or unsuccessful language which the learner produces and fails to correct automatically. In this sense, what we call errors include what James calls mistakes, errors and solecisms.

2.1 The relationship between learning and teaching

According to behaviorism, 'learning is a relatively permanent change in a behavioral tendency and is the result of

reinforced practice (Kimble & Garnezy 1963:133). As we all know, human beings differ greatly from animals in learning, especially in language learning which is unique to human beings. According to psychologists, cognitive learning (the acquisition and organization of meaning) is exclusively a human activity. It is a process of getting to know the outside world through understanding and deduction.

Teaching can be defined as 'activities which are intended to bring about learning' and 'teaching cannot be defined apart from learning' (Brown 1987:7). The task of teaching is to guide and facilitate learning, to provide conditions for the learner to learn and to speed up the process of learning. Just as J.S. Bruner (1966:44) says, 'learning something with the aid of an instructor should, if instruction is effective, be less dangerous or risky or painful than learning on one's own'. Therefore, a qualified language teacher is supposed to understand how language learning takes place, how the learner learns and develops and what strategies are adopted by the learner, and to be capable of using this appreciation to coordinate knowledge with skill. The language teacher's understanding of his task determines his teaching style, approach, methodology and ultimately the success or failure of his teaching.

2.2 Classification of errors

According to James (1998), errors are classified by reference to three criteria: modality, medium and level. Modality refers to whether the learner's behavior is receptive or productive. Medium indicates whether the language produced or received is spoken or written. Taking modality and medium together, we are able to specify which of the 'four skills' the learner is operating at the time of the error: speaking, writing, listening or reading. In addition to this, we should also specify on what level of language the learner is operating at the time he or she makes the error. There are three levels of language: the levels of substance, text and discourse.

1) Substance errors: A misspelling (MS) is a substance level production error. There are other sorts of substance errors besides MSs that involve writing. They are referred to as mechanical errors (James 1998), including punctuation errors, typographic errors, dyslexic errors and confusables.

2) Text errors: According to James, the concept of text does not have to be restricted to grammar above the sentence, as once was customary in linguistics. Text is used in a much broader sense to designate any instance of language that results from applying the rules of encoding and of lexico-grammar (1998: 142). As Widdowson puts it: 'Texts can come in all shapes and sizes: they can correspond in extent with any linguistic unit: letter, sound, word, sentence, combination of sentences (1975:164).

3) Lexical errors: Lexis has been sharply differentiated from grammar. Grammar is said to be organized in 'closed' systems, to be systematic and regular. Lexis appertains to 'all the particular facts about language... those which cannot be generalized into rules' (Leech 1981:179).

2.3 The significance of error analysis

Reflecting learning process will show us that error analysis is of great significance. First of all, making errors shows the process in which learners are trying to perform the target language when they are learning. Learners are trying to learn English by receiving a lot of input, which is processed immediately and some knowledge is intaken and internalized, cumulating in their brains, later they attempt to express them either by speech or writing. When they try to convey what they have just learned, they can inevitably make errors in the course of output. According to Ellis (1985), error evaluation is necessary only if the purpose of the Error Analysis is pedagogic, because errors provide information which could be used to sequence items for teaching or to devise remedial lessons. L2 learners will benefit a great deal from overt correction of errors if it is constructive and meaningful.

3. Recommended policies for teachers to have towards error

In certain areas of English the learner possesses construction rules. But these rules give rise to errors of one kind or another, due to some kind of limitation in them. College English teachers should make it clear that the restricted generalizations employed by the learner are not of equal status, considering their error-causing potentialities. Those which are more productive of errors call for more attention and time and a more rewarding practice is to tackle the error-prone restricted generalizations instead of the mere correction of actual errors. As Corder (1967) claims, the 'input' in terms of learning the L2 system is not what is available for going in but what the learner takes in through his over-generalized rules. Therefore, before the correction of actual errors, special efforts from the teacher are demanded in establishing for the learner the limitation of rule generalization. In this way, correction of actual errors will have effect and will be rewarding.

Some basic grammatical items, such as English tense, should be reviewed, not through the teacher's explanation, but through error-based remedial program. Each assignment should be more target-oriented instead of blind practice, which is less efficient and more time-consuming.

3.1 More attention to CE writing

In both L1 and L2 learning, reading and writing do not develop simultaneously, with students' writing ability being too

far behind their reading ability. As a result, it tends to hinder their overall development. To solve this problem, great attention should be paid to the use of the core words. The fact that a large number of errors result from the misuse of words from the same class, and from the mismatch of words proves that competence is as important as knowledge, or that the learner's procedural knowledge is not enough. To improve their performance, students need more opportunities to practice and teachers should offer more systematic and target-oriented teaching in writing. Students' errors on lexical level are various and do not seem entirely rule-based, therefore it is difficult for teachers to carry out correction aimed at eradicating lexical errors effectively. The use of one word may be a problem for one student, but a piece of cake for another student. It is rare that all learners produce the same error in the same context of use. So to find out the rule requires further, deep study. At the moment, we may say the study of errors on lexical level enables us to predict the possible errors some learners might commit in a specific context, which will bring the teaching of reading more closely connected with the teaching of writing and will ultimately help to improve the teaching of CE writing.

3.2 Encouragement of learners' self-discovery and self-correction

It is very important to offer students as many opportunities as possible to discover and correct errors. By doing so, we do not by any means imply that we will avoid adopting other ways of correcting errors, such as partner correction, group correction, the whole class correction and so on. The most important point is to encourage learners themselves to self-discover and self-correct errors that they have. The problem is that sometimes learners find it very hard to discover their own errors. In this case, hints and guides are needed from teachers in order to make error correction more affective and efficient (Makino 1993: 338).

It is clear that detailed cues lead to a higher ratio of self-correction. This technique of error correction has two advantages: one is that teacher's cues give students a chance to reflect on their writing and to pay more attention to the structural forms they have written; the other is that students can activate their linguistic competence in correcting their own errors. They also improve their linguistic creativity through self-correction. Therefore, we can reach the conclusion that self-correction is highly effective with grammatical (especially, morphological) errors.

3.3 Knowledge reinforcement

According to James (1998), consistency is a means to tell. Then most of the deviances are errors, which are committed repeatedly in different contexts and with different items, for example, the third person singular of the English simple present tense. But James (1998) also claims the deviances will be regarded as mistakes if the learner could have self-corrected, with or without prompting. Accordingly, a large number of deviances should be classified as mistakes which are normally excluded from study, because the students have no difficulties identifying and correcting the deviance once the sentences are picked out. This phenomenon happens more often on grammatical level than on lexical level. As we are more concerned with the practice of EA, rather than just theories, the problem may be regarded as a clue to how to make students improve their competence and be consistent in applying rules, as well as an indication that although students have learned rules in some areas of the language, they are limited in application or they merely understand the rules, there is still some work to be done for both teachers and students, before they can master the rules and put them in practice.

4. Conclusion

English, as the most popular foreign language in China, is one of the core subjects in the present six-year secondary education and is a compulsory subject for the first and second year university students. College students in China attach great importance to their improvement of communication skills in English. Unfortunately, due to various reasons, the situation is not so encouraging despite teachers and students' persistent efforts. For college English teachers, writing means extended working hours spent in correcting students errors. For students writing is boring because they can hardly see any improvement in their ability. In this paper, by reviewing research on error analysis, consulting James' model of error classification, the author explains the possible roots of the errors, offers some suggestions to enhance both the task of English writing and college English teaching in China.

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Roles of Modern Information Technology in Graduate Training

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Abstract

Introduction of information technology into the education field has greatly enriched teaching content and forms, and facilitated transformation of teaching mode, teaching approaches and training concepts. Especially for training of graduates, its introduction seems extraordinarily prominent. In this paper, the authors will analyze and discuss positive roles of information technology in graduate training.

Keywords: Information technology, Graduate training

Graduate training is the highest level in higher education, and assumes the task of training and offering advanced professionals for the society. Masters and doctors from graduate education are not only students in their general meanings, but are important scientific research power. Therefore, graduate education should adapt to social development needs of high technology, integration and informationization, and enable graduates to possess innovative capacity and making required to adapt to development of modern society and modern scientific and technical revolution. When rapid development of information and communications technology poses austere challenges, it also creates extremely advantageous conditions for training that innovative capacity and making of students, creating excellent internal and external environment.

1. Information technology facilitating changes of innovative concepts of graduates training

On September 8th, 2002, the former Chinese President Jiang Zemin made profound discussion on how to conduct educational innovation in the 100th anniversary of Beijing Normal University. He pointed out, "Educational innovation should be based upon full use of modern scientific and technical means, so as to vigorously improve modernized level of education". Talents required by the information society, should not only concentrate on capacity of storing and exploring knowledge, but mostly on capacity of analyzing and resolving practical issues, on capacity of thinking, analyzing, judging, manifesting and innovating, and on actually operating capacity of resolving problems. This is a sort of innovative talents. Therefore, innovation is the soul of the informationized society, and the objective requirement of modern information technology. In an era of information, information technology changes quickly, and new technologies are continually produced, developed, dropped behind and eliminated. Each moment, new technologies are being renewed with a speed many times that of traditional technologies. Non-innovation means being abandoned, and means impossibility to adapt to requirements of the development of the new era. Thereby, the innovative concept in the information era is comprehensively and deeply influencing Chinese higher education, especially graduate education.

Popularization and application of modern educational technology has realized multi-dimension of teaching and study environment, realized features of students' independent and individualized learning, realized diversified education, and has brought into form the open learner-centered educational mode. This sort of educational mode further improves learners' learning positivity in that, at the time when they receive education, their innovation in knowledge, learning approach, thought and consciousness, and scientific and research capacity is also realized. So their innovative capacity

is comprehensively cultivated.

2. Information technology enriching teaching content and changing teaching approaches

All the following phenomena and facts obstruct training of graduates' innovative capacity, including obsolete teaching content but rigid teaching approach; too much focus on knowledge transmission but ignorance on cultivation of capacity; impossibility of supplement of new views, new content, new ideas and new approaches into teaching materials and teaching content which reflect scientific advancement, and social development; insufficient teaching resources, few opportunities of experiments and practices, as well as poor manipulative ability. Continual blending of information technology and other disciplines generate a large quantity of new interdisciplines, which come forth intermittently as a new teaching content in the higher education. Meanwhile, this sort of blending results in the fact that, other traditional disciplines are based on information technology, and their content and forms are comprehensively updated. Under such a circumstance, information technology enables graduates to swim in a sea of new concepts, new matters and new knowledge, to make analysis and judgment based on the establishment of new thoughts, and to realize their advantage development in the genuine meaning.

Application of information technology has quickened speed of knowledge renewal, and has created new teaching environment. Use of network and multi-media can build a learning environment and tool with abundant information, and strong interaction and reflection, which is helpful for students to conduct independent exploration, experiment and creation, and to shape and develop thought with critique and creativeness.

Improvement of information technology and application of medium technology are much more indicated in the fact that, in practical teaching, teachers apply media for courseware to carry a variety of information, such as comprehensive ability to process words, figures, pictures, flashes, audios, and three-dimension flashes, reflection of objective things with lifelike images, display of fundamental knowledge, key points and difficulties in teaching. Also, such teaching media advantages as PowerPoint, projection, movie, TV, recording, video, and diorama are used to perfect innovative research on teaching approaches in the information technology environment and to provide convenience for enriching and presenting innovation of teaching approaches.

Modern teaching may take several forms to present teaching information. Especially multimedia teaching system has aggrandized new dimensions and directions for teaching and learning, and has generated processing and transmitting modes of teaching information with multicenters, multi-orientations, and wholeness. This helps to improve teaching results and cultivate creative thought. Teaching information resources are without conflict, but with infinite shareability, so learners can apply any online resources intensively or separately. Development and application of resources are not restrained in terms of time and space.

3. Information technology renovating teaching manners of teachers and broadening learning manners of graduates

Chinese traditional teaching is centered with teachers, which emphasizes "Imparting knowledge". However, it seldom pays attention to "Developing ability", which leads to the fact that, creativity and divergent thinking have not deserved their expected status and development space. Information technology will make possible extensive educational interaction and teaching that benefits all, and will realize independent and free choice of students in their learning. With acceleration of informationization progress of education, traditional teaching mode has been greatly impinged, and will get more unlikely to adapt to development of the modern society.

Due to popularization of modern media, all sorts of advanced teaching facilities are introduced into universities, which offer much convenience for front-line teachers, such as courseware making room, electronic lesson preparation room, electronic reading room, digital projection room, multimedia language lab, and multimedia network room, etc.. Teaching modes and approaches, as well as teaching means, all take their own forms in the environment of unfolding information technology. Teachers apply information technology into teaching of all disciplines, conduct redesign of teaching, and update their teaching modes increasingly.

Classroom teaching of innovative learning requires teachers to penetrate affective education into all aspects of teaching when imparting knowledge. Teachers should break through limitations of pure concentration on imparting knowledge and developing intelligence, and put onto a crucial position training of students' active study emotion and creative consciousness, so as to enable students to possess active enthusiasm of study and creativeness. Application of modern information media can collect information about students' study in time, so teachers may give them individual tutorials, adjust and control teaching. And teachers can unfold explorative learning, interactive learning, and independent learning, so as to enable students to learn enjoyably and actively, and to be the predominant part.

Interaction between teachers and students can be activated. Teaching is the leading, and learning is the principal part. Interaction between teachers and students, open classroom with cooperative exploration, and active and harmonious atmosphere all indicate transition of teachers from traditional knowledge instructors to promoters of student development. In cooperation, students may develop their creative thought, improve their practical innovative skills and

foster their cooperative spirit.

4. Information technology intensifying study independence of graduates

In the process of study, compared with postgraduates, graduates are more independent. Therefore, training study independence of graduates seems more significant for improving their training quality. Graduate study includes two phases, namely, course study and thesis writing, which have their own particular emphasis. Course study is the primary aspect in mastering basic theories and systematical special knowledge of their majors, and is a significant phase for laying foundations for the following thesis preparation and forthcoming practical job. And it is one of standards for measuring training quality. Thesis writing is a scientific research participated by graduates in person under supervision of their supervisors, and is the primary aspect in training their independent scientific research, and in improving their ability to analyze and resolve practical issues. It is also a comprehensive standard for measuring training quality. In the process of study and scientific research, a great many graduates acquire new knowledge to satisfy their study and scientific research requirements and to promote their own development and perfection in virtue of certain means and approaches without others' teaching and tutorship.

In the information society, information means success, because those with more information will stand at the frontier of scientific and technical development, and may possibly make a hit. However, mastery of advanced information technology is precondition for timely and accurate acquisition of information. As a means of acquiring information, information technology has seemed more and more significant in the study of graduates. Modern scientific intelligence is characterized in large quantities, rapid growth, extensive intercross and perfect secrecy, etc.. In order to rapidly and effectively retrieve and browse relative information, and to screen out useful information therefrom, one should master a variety of capabilities including advanced information technology, such as, capability to read academic works and scientific journals, to retrieve database and search for information on the Internet, to proficiently use various reference books, and to look up references, etc.. These capabilities are decisive in display of graduates' independence and are influential in their study profundity and scope.

5. Information technology promoting improvement of skills in supervisors and administrative personnel

By means of mastering information technology and modern educational technology, supervisors of graduates can, on one hand, change traditional teaching approaches, cultivate students' information morality, and set up an independent study environment. At the time when imparting knowledge, they also lay emphasis on sensitivity of information and on activities of information analysis and assessment, and lead students to learning how to analyze, summarize and make use of information. In the process of information generation, exchange and transmission, they inspire students' innovative consciousness and enlighten their innovative intelligence. On the other hand, supervisors should learn to use new thought and technology to make judgment on students' thinking, cognition, and capacity in an era of information.

Administrative personnel in charge of graduate education should also focus on mastering of information technology and skills. The forthcoming graduate education need enlarge its openness to the entire society and the world, make public all useful information resources, realize high shareability of educational resources, and offer the latest, fastest and most comprehensive information for talent training with the latest technology and means. This requires administrative personnel to possess abundant morality and knowledge about modern information technology, and to familiarize themselves with the latest information technology and means.

In conclusion, modern information technology has profound impact upon Chinese graduate education, and plays a positive part. How to more scientifically and rationally apply it into graduate training so as to facilitate development of their innovative education, this requires graduate educational staff to make further exploration.

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Gastronomy: An Opportunity for Malaysian Culinary Educators

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Abstract

The word 'gastronomy' might sound peculiar for most people and even amongst 'culinarians'. Gastronomy is an understanding of various social, cultures, historical components, literature, philosophy, economic status, religion and others, in which food is the core subject. Meanwhile, gastronomy products refer to food and beverages as well as food-related activities of one's culture and heritage. Looking at the diversity of gastronomy and its development in the world today, there will be a promising need for well-prepared, dedicated chefs, administrators and managers in all areas including hotels, foodservice, food manufactures, catering, food media as well as other hospitality and tourism-related fields. This paper conceptualizes the relevancy of gastronomy in Malaysian culinary education.

Keywords: Gastronomy, Malaysia, Culinary Educator

1. Introduction

It is not wrong to say that the word 'gastronomy' has not been widely used and understood by most people in this country. This word in fact is still anomalous among 'culinarians' or foodservice personnel despite of their close association to the field of culinary. In that sense, it is therefore important to popularize and explain the definition of this word to Malaysian 'culinarians' as well as the public. In other words, the ways in which gastronomy relates to the local public, industry, education and training need to be explored.

Etymologically, gastronomy is derived from the Greek word ‘gastros’ which means stomach, and ‘nomos’ which refers to knowledge or regulation. In actual fact, this term relates to food knowledge. Most dictionaries define gastronomy in terms of the art and science of good / delicate eating. This focuses on art and science, which translate in a particular sense as, skill and knowledge that neatly connect with the origins of the term. Gillespie (2000) looked at this term into two aspects which are practice and study. On the practical aspect, he refers gastronomy to the application of advice and guidance as well as the exercise of skills and knowledge, which together might be regarded as constituting an art of living. He contended that practical gastronomy has got something to do with the technique and standard involved in the conversion of raw produce into aesthetic, nationally, regionally and culturally-specific edible product. He further stated that the study of gastronomy is the understanding of the scope of production and preparation of food and drink as well as how, where, when and why they are consumed. It involves the philosophies, belief and values influencing gastronomic practices. This, in other words, relates to the social, cultural and historical aspect of food and eating, encompassing the study of cuisines, restaurants and dining, food and beverages, as well as tourism and gastronomy writing.

Despite of many other explanations and clarifications given to this term by several scholars (Santich, 1996, Long, 1998; Fileds, 2002; du Rand, Heat and Alberts, 2003), the definition drawn by Jean Anthelme Brillat-Savarin (1755-1826) was considered as the most relevant and appropriate. Directly quoted from Santich (2004, 2007), Savarin described that gastronomy does not specifically refer to the method by which food and beverage is produced, material component of food and beverages or even meal or cooking, but instead it covers the broader scope beyond simply what we eat (types of food) and in what form (implicating technology and method of cooking) to also include how we eat (hand, fork or chopstick), where we it (at the table, on the floor, standing or seated), when we eat (times/ period of eating the food), why we eat (motives disconnected with hunger) as well as with whom we eat (family or social networks).

According to Santich (2007), this broader meaning is gradually accepted. She summed up the term by stating that;

“Gastronomy not only relates to the production and preparation of food and drink and how, where, when, why people eats but more diversify. Gastronomy now entails an understanding of the various social, cultures, historical components, literature, philosophy, economic, religion and others with food as central axis”

Santich’s in fact proposed an extensive multidisciplinary model for gastronomy study, drawing upon the natural and social sciences as well as the humanities which can be seen in figure 1. Despite a broad multidisciplinary and interdisciplinary approach of gastronomy study, this paper will not further elaborate on the disciplines, but instead it will only concentrate on the relationship between this term with the tourism, hospitality and culinary industry.

2. Gastronomy in Tourism, Hospitality and Culinary and Foodservice Industry

In the last three decades, people only associate tourism with travelling for pleasure and considers it as an industry (Kay, 2003), while some perceive it as merely providing services related to leisure and recreation (Michelitsch, 2001). Hunt and Layne (1991) acknowledged that those perceptions were mostly accepted until the late 70’s. However, they were gradually changed in the mid 80’s when people start looking at this industry in a broader realm. They described tourism as the activity of people taking trips away from home and the industry which has developed in response to this activity. Tourism is also viewed as a temporary movement of people to destinations away from their normal residential for leisure or recreation (Hankinson, 2005).

According to the World Tourism Organization (WTO, 1998), tourism comprises the activities of people travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited. Baker (1995) and Leiper (2003) summarized tourism as an activity that involves staying at a hotel or resort (accommodation), shopping or mountain climbing (recreational and leisure), cruising (transportation), as well as attending meetings and conferences (business). Hall (2003) and Kay (2003) elaborated that tourism activity encompasses of various sectors such as accommodation, leisure, recreation, sports, culture, transportation, business as well as including food and beverages.

Goeldner and Ritchie (2006) asserted tourism as the process, activity and outcome arising from the relationships and interactions among tourists, tourism suppliers, host governments, communities and surrounding environments. In recent years, tourism activities also involve travelling to areas of natural or ecological interest for the purpose of observing wildlife and learning about the environment as wild life ecotourism (Cho, 1998), appreciating the deep time of landscapes as geo-tourism (Hose, 2005), as well as traveling through legacy as heritage tourism and contemporary recreation as transport tourism (Hall, 2005). In sum, all these types of tourism activities produced different kinds of experiences (Long, 2004).

Besides the above notion, Goeldner and Ritchie (2006) stated that food and beverages cannot be ignored by tourists, and some in fact consider them as one of the most important elements when they are on the travelling mood. Richards (2002) contended that besides experiencing various tourism activities, tourists without a doubt will encounter various types of food and beverages in the visited country. In other words, during the period of vacation, tourists will also

experience and consume varieties of food and beverages, as well as learn the food culture and heritage of that particular country. They also consider all these food and beverages as well as food-related activities as part of gastronomy products (Santich, 1996; Hall and Mitchell, 2005).

According to Pine and Gilmore (1999), the basis of the economy now is slightly shifting from the delivering services to staging experiences. Food and beverage, besides accommodation and other tourism activities, are considered as one of the most important elements in the tourism and hospitality industry today. The various types of food and beverages are also viewed as an integral component of a travel experience. In other words, the quality of the basic elements of the tourism products will increasingly be experienced by tourists, and these include food and beverages, food culture practices and food heritage.

This is because food and beverages structure the tourists' day and a large proportion of tourists experiences are spent either consuming food and drink or deciding what and where to eat. Good food promotion and campaigns without a doubt is an important element in promoting popular holiday destinations and influencing tourists' destination choices (Gursoy and McCleary, 2004). In fact, many commentators contended that it is crucial for the tourism marketers to develop or to find ways to add value to make the tourists' eating experience lasting and memorable (Fields, 2002; du Rand, Heat and Alberts, 2003; Sampaio, 1985).

Long (2004) used the term 'gastronomic tourism' to express the idea of experiencing food and beverages (wine) and other cultures related to them. Wolf (2002) argued that gastronomic tourism encourages the pursuit of travel in the quest for the enjoyment of prepared food, drinks and other related food activities; resulting in a great memorable gastronomic experience. This statement clearly suggests that gastronomic products not only focus on food but also beverages that reflect one's culture and heritage. This supports the earlier work by Finkelstein (1989) and Mennel, Murcott and Van Otterloo (1992), which noted that culinary and dining experiences when one is on holiday is often relived and retold to a wider non-traveling audience. These experiences have the power to modify eating and drinking habits, tastes as well as imbue the tourists' cultural experiences of the peoples of the new locations and countries being visited (Johns and Clarke, 2001; Johns and Kivela, 2001).

Kivela and Crotts (2006) explained that seasoned tourists attach great value to the gastronomic and culinary experience of the countries being visited, and that these go hand in hand with the social and cultural attractions being experienced. In fact, they argue that gastronomic products play a pivotal role in marketing some tourism destinations. Some travel organizations regularly offer gourmet or culinary holidays, with Italy and France leading the rank as top destinations as well as countries in Asia (Intrepid Travel, 2004). Kivela and Crotts (2006) reported that holiday with cooking and wine appreciation feature regularly in destinations like Tuscany and Provence in Europe, Melbourne and the Sydney Napa Valley in Australia as well as the Sonoma Valley in California. These places in fact have become premier food and wine tourism destinations.

Kivela and Chu (2001) noted that tourists not only dine out in the search of new tastes in the choice of food and beverages, but at the same time are also on the lookout for new gastronomic experiences when visiting a country. In relation to this statement, the Intrepid Travel Agency (2004) reported that tourism and holiday operators from Australia, the United States, many Europe and Asian countries like China, India, Thailand, Malaysia, Vietnam and Japan now offer gastronomy tour packages, which combine shopping with side-trips to sample the indigenous food and beverages (wine) available. This tour agency recognizes Asian countries for its delicious cuisines, and travelers on their trips make the most of this aspect while exploring these countries' traditional tourism offerings.

Scarpato (2002) noted that gastronomy satisfies all conventional ingredients that make up a cultural tourism product. It is an additional factor that is over and above the traditional ingredients that make up a holiday - sun, sea and sand. He added that gastronomy can add value to the traditional tourism experience; especially for those who yearn for more and are constantly searching for new products and experiences.

The development of gastronomic experiences is strongly evident in the appearance of restaurants that offer a total package comprising of food, entertainment and atmosphere. In some European countries, notably France and Italy, gastronomy is also considered as a principal resource. In a study of visitor and non-visitor images of Mediterranean destinations, Italy was found to score significantly higher on 'appealing local food (cuisine) than Turkey, Egypt or Greece' (Baloglu and McCleary, 1999). Boyne, Williams and Hall (2002) as well as Jones and Jenkins (2002) demonstrated how food has been used as a vehicle to reposition Scotland and Wales. Both have developed similar marketing programs: 'A Taste of Scotland' and 'A Taste of Wales'. The Taste of Scotland initiative created a marketing scheme in which participating establishments would agree to provide dishes which were either 'traditional or using recognizably Scottish produce, to provide the visitor with a meal of Scottish food' (Hughes, 1995). Hughes argued that the Taste of Scotland scheme constructed a food heritage for Scotland, which could then be used as an important marketing tool. Similar schemes are evident in other areas as well. In the Alto Minho region of Portugal, for example, a recipe book was produced by the regional tourist board to give visitors the opportunity to 'carry away with (them) an enduring memory of the tastes and pleasures of dining in the lands of Minho' (Sampaio, 1985).

Gastronomy is also becoming the driving force behind the revival of tourism for destinations that are struggling for one reason or another. For example, Croatia faced a Herculean task in rebuilding its tourism industry after the civil war that broke up Yugoslavia from the year 1990 to 1995. To this day, an integral part of its rebuilding program strongly features local foods, regional cuisines, wine-making and food customs. Similar examples can be drawn from countries such as Vietnam and Kampuchea (now known as Cambodia). It seems that when dining out at a destination, tourists in effect consume “ingredients” that satisfy their feelings and enhance their cultural experiences (Fields, 2002).

For whatever reason, the above notion explicitly signifies that gastronomy is not only relevant to the tourism, hospitality and culinary industry, but also to the study of gastronomy which is significantly important or extremely relevant particularly among the culinary educators.

3. Gastronomy and Malaysian Culinary Education

Based on informal discussions with experts from various sub-sectors of the food industry like chefs, hotel managers, catering managers, food manufacturers and educators, Malaysian foodservice and culinary world is believed to be more complicated and complex with broader perspectives. The need for well-prepared and dedicated administrators and managers in all areas including hotels, foodservice, and food manufactures, catering and media is growing stronger. Career as a chef will not only function as it always should be, but instead they will be well-accepted in all realms of food and other related hospitality and tourism field. They further contended that this particular career will be more challenging in the near future, and chefs with business skills and food technology will be the most sought after candidates to fill positions in various job markets. This is particularly true as the diverse field of gastronomy offers related career opportunities such as Research and Development personnel in food processing plant and even as specialists in the area of food marketing, food writing, human resource and food connoisseur.

From the above statement, it is therefore extremely essential for today’s chef to have an array of skills and to be knowledgeable in the area of food science, food technology, food consumption and application which are classified under the field of gastronomy in responding to the industry needs. Besides that, the ability to think analytically and critically in any given situations or problems is another quality that a future professional ‘culinarian’ should possess in order to be competent in the challenging industry situation. Graduates with all these excellent traits without a doubt could be the future professionals and leaders in related industries such as hospitality, manufactures, education, media and tourism.

Looking at the diversity of gastronomy field and its opportunities, there is no reason why institutions or culinary educators should not introduce various useful programs, as such learning could benefit the industry and the graduates as well. Moreover, culinary is a small part of gastronomy, and in order to meet the future challenges, the culinary educators should go for a broader scope of gastronomy. In this case, several universities in the USA, Italy, France and Australia such as Boston University Metropolitan College, the University of Bologna and University of Adelaide have taken a bold initiative in introducing programs and courses in gastronomy. In pursuing this promising pace and development, Universiti Teknologi MARA (UiTM), through the Faculty of Hotel and Tourism Management, has also taken huge strides by introducing its own Master in Gastronomy Management. UiTM’s efforts and decisions are proven to be timely in respond to the industry needs, and at the same time will definitely help the students to obtain better career prospects in the future.

Nonetheless, the development of gastronomy study in Malaysia is still a long way to go. Thus, all the institutions or culinary educators in Malaysia are urged to offer or introduce gastronomical programs and courses which can be valuable for culinary students and the industry as well. Educators must also strengthen their relationship with the industry to ensure that the benefits to both students and industry from the educational process can be maximized. Failure to develop such a commonality of approach leads to the question “*Why should institutions introduce new programs if the industry itself does not want the graduates?*”

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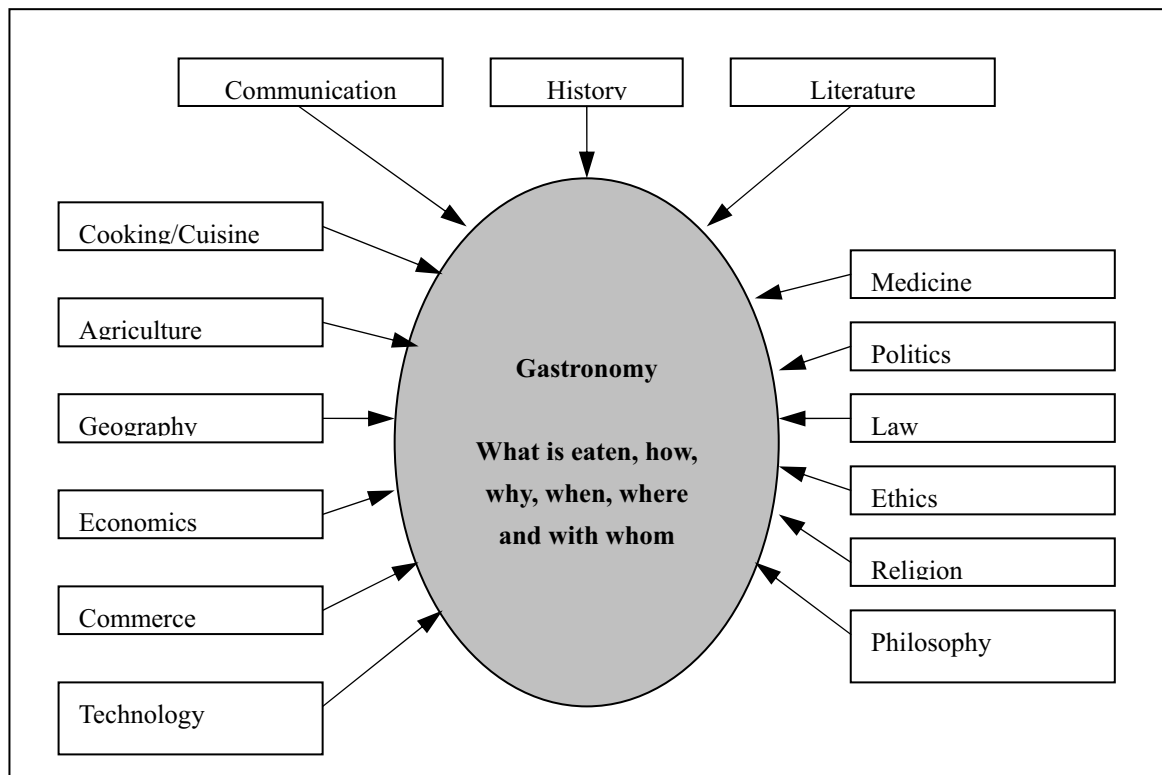


Figure 1. Multidisciplinary Model for the study of Gastronomy (Santich, 2007)



The Characteristics and Enlightening of NCATE

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Abstract

Accreditation system of teacher education institutions is an important ensuring mechanism for teacher's profession. American accreditation system of teacher education institutions refers to an assessment system that the National Council for Accreditation of Teacher Education (NCATE) with the institution's application, making regular evaluation of the teacher education institutions according to the accreditation standards formulated by the National Council for Accreditation of Teacher Education, which abbreviates NCATE accreditation. NCATE is the first appraisal institution of national teacher education, which constantly improves the training quality of American teachers by being comprehensively appraised. It has been exerting great influence on the development of teacher education in America. And the effects are as following: convenient for students' mobility among schools and the teachers' transference to other states; encouraging competition among teacher education institution and academic mobility; leading to the regular internal assessment in teacher education institutions and promoting the professional level of pre-service education; and helping establish a quality assurance system for teacher education. The paper introduces the characteristics of NCATE and draws out enlightening points and reference for our institution accreditation of teacher education

Keywords: NCATE, America, Teacher Education Institutions

Having good accreditation system of teacher education institutions can insure education quality pre-post and provide a good base for special development for teachers. Building a system of teacher education institutions with Chinese characteristics is an important and hot issue in the field of teacher education. America with relatively perfect teacher education mechanism has formed a more mature and perfect system of institution accreditation of teacher education, we should learn and refer the good measures that play an important influence on normalizing the institution and improving the specialization of teacher education.

1. General description of NCATE

NCATE is first one specialized accreditation institution of national teacher education supported by the United States Department of Education and the Council of Higher Education Accreditation, and it is the most senior and authentic academic accreditation institution. NCATE was built in 1951 under the help of American Association of Colleges for Teacher Education, National Association of State Directors of Teacher Education and Certification, Council of Chief State School Officers, National School Boards Association, National School Boards Association. NCATE has replaced American Association of Colleges for Teacher Education (AACET) and has engaged in accreditation work of national teacher education institutions since 1954. And appraising the school level of national institutions of teacher education is its mayor function. For 50 years, NCATE has played a vital role in teacher education development in American history, the number of teacher education institutions applying for accreditation has been adding, specially developing fast in recently several years. Only 32 teacher education institutions were candidate or pre-candidates of NCATE, 478 teacher education institutions got accredited in 1995. About 670 teacher education institutions have joined accreditation system of NCATE by 2003, and 526 teacher education institutions got accredited. In addition, 110 teacher education institutions have become formal candidate or pre-candidate of NCATE.

NCATE is a non-government and non-profit specialized organization. It is supported, composed and managed by 35

national specialized organizations. These educational specialized organizations come from following four kinds of organizations: teacher education, teachers, state and local policymakers, professional associations. NCATE adapts accreditation standards every five years and forms a relatively perfect accreditation system of teacher education in terms of the development of social and economy, which plays important influence on the development of American teacher education: making students move freely between schools and teachers have class in another state; encouraging teacher education institutions to compete and enlarging academic freedom; promoting regularly teacher education institutions interior assessment and unceasingly improving specialized level of teachers. The main function of NCATE is to make comprehensively appraisal of education content, specialty arrangement, curricular regulation, teacher qualification, management condition, student status, school condition, and so on. The goal of NCATE is to improve the quality of teacher education, guide teacher education institutions to transformation. And NCATE is sure every student to be patient to study under the instruction of teachers, so NCATE pay attention to three core assignments: the first one is performance accountability of pre-post; the second one is improvement of pre-post; the third one is to provide leadership of teacher education.

2. The contents and characteristics of accreditation standards of NCATE

Because accreditation standards of NCATE have the function of guide, restriction, regulation, accreditation standards of NCATE were adjusted and supplemented in 2000, so we find the great change of education practice of teachers. The revision of accreditation standards is opened under the background of building education system in the 21st century, reflecting the feature of contemporaneity and foresightedness for specialized demand of teacher education. Every unit criteria of NCAIE is made up of three parts: Proper language expression; Three-grade description contained in basic content of the criteria, which is acceptable, unacceptable, target; Explanation of criteria. Its concrete contents and characteristic is as following:

2.1 Knowledge, skill and disposition of professional teacher candidates.

NCATE require teachers must to be equipped with deep and large specialty knowledge to help all students of twelve-year study, here “all students” means needing all kinds of special education, or the students with the different race, cultural, language, religion, gender, region as well as socio-economic background. The guideline of professional teachers is that the study of students is the goal of teaching, the accreditation of NCATE stresses importance of the goal, which requires teacher candidates to teach efficiently by using special knowledge and skill, at the same time, the other staff of school should support the study of students.

Accreditation standards of NCATE says that teacher candidates should be qualified with knowledge, skill and disposition, and teachers who are going to work in school must be equipped with necessary subject content, pedagogy, specialty knowledge skill and characteristic what students learn. Teacher candidates can analyze and evaluate the study of students, which shows teacher candidates must accord with the criteria of and teacher education institutions, which is based on teaching study now, every element is important to help students to study, which should be showed in the concept frame of teacher education institutions, and become one great part of accreditation system. The data of accreditation system should be used for reflecting the study situation of teacher candidates in specialty knowledge, teaching method and specialty moral.

2.2 Assessment system and unit evaluation.

Teacher education institutions should also a assessment system so as to collect and analyze the qualification of applicants, the performance of teacher candidates, graduates and the data of it, as a result that we can assess and improve the teacher education institutions and cultivating plan. NCATE has made appraisal performance standards for teachers and educational institutions, also compiled the subjects of the standard as a supplement. Accreditation standards of NCATE for student learning evaluation focus teacher candidates who achieve the monitoring the above objective, appraisal is carried according to real behavior of the students in critical thinking, solving problems, and performance skills.

Accreditation standards of NCATE says that teacher education institutions should have one kind of appraisal system or related appraisal plan, involving 5 aspects: To be able to monitor performance and result of teacher candidates, operation of organization; Implementing appraisal in many ways; Performance appraisal should pass through the process of teachers candidate from to enrollment to graduation; Fair, accurate and continuous appraisement is occurred in every link of the whole training process; Performance appraisal from enrollment to graduation can indicate whether teacher candidates can become qualified teachers. NCATE also stipulates that the whole appraisal process must be based on the data, regularly collect, analysis and the summarizing data, and further analyses the reform of teacher education institutions by systematically using the data so that we can encourage teacher candidates and staff to reflect and improve.

2.3 Field experience and clinical practice

In recent years, an important part of teacher education, Professional Development Schools (PDS) of American teachers

have been gradually established as a system, and accreditation standards of NCATE also adopt the concept of PDS. NCATE specially formulated and has issued the PDS standard in 2001, which implies America pay great attention to teaching practice. Regarding field experience and clinical practice as a separate standard in accreditation standards of NCATE, which suggests that practice activity is an essential part of teacher education. Teacher education and schools should together involve field experience and clinical practice so as to ensure develop and use the necessary knowledge that students learn.

Accreditation standards of NCATE says that teacher institutions should get touch with school, together design , carry and appraise concept frame and item of appraisal institution, participate in the activity of specialty development and the education item for teacher candidates and students, communicate specialty knowledge and resource so as to support the study of teacher candidates. At the same time, teacher institutions and schools should involve in field experience and clinical practice. In teaching activity, teacher candidates should observe the activity of themselves and other candidates. Teacher candidates take part in school activity with teachers, family, students, university or college managers, so that the teaching quality can be improved. Teacher candidates should develop and use specialty knowledge in order to back up the study of students who come from different background of folk-custom, race, language, gender and social economy.

2.4 Diversity

Teacher education institutions design, implement and evaluate the subject and experience of teacher candidates, so that they can acquire and use the knowledge, skill and characteristic that is helpful to study for students. These experiences include the cooperation with college teachers, middle school teachers, primary school teachers and student group with diversity. The content of appraisal includes the diversity what teacher candidates perform and use. The goal is to require teachers to be equipped with diverse culture and global view. So it is responsible for teacher candidates to provide chance to know the diversity and equity in teaching process. Subject, practice and teaching activity can help candidates to realize the importance of culture for education, and providing meaningful study experience and ability for student development.

Accreditation standards of NCATE says that teacher education institutions should prove teaching level of teacher candidates and make appraisal for them; subject and teaching practice should focus the importance of diversity; teacher candidates should know the class manner , school manner and different study way o f students, so that they can adjust teaching way and make students study well; Teachers should be equipped with diversity knowledge and skill in teaching and teacher education institutions can try to maintain and strengthen the diversity of teacher faculty; teacher candidates who come from different race, nation and gender should work together well and enter into student groups with diversity background; finally teacher candidates can accept feedback advice from colleague so that make themselves reflect better.

2.5 Faculty qualification, performance and development

Teacher education should try to make good progress in academe, teaching service, teaching practice and related training item, appraising teachers, reinforcing cooperation with colleague, primary and middle school. Performance and development of teachers are appraised by teacher education institutions. Teacher education institutions play an important role on cultivating specialty teachers with high quality, which can help teach candidates to develop teaching tactic with diversity and help students go study. The academe vigor of teachers can help teacher candidates to set up the stage of professional development, because they know the standard of vocation, state and institution, so that teacher candidates can meet the standards.

Accreditation standards of NCATE says that the faculty of professional education should have the doctor degree or be experts; The elementary and middle schools teachers should have the teacher qualifications; Clinical teachers from higher education to have contemporary professional experiences, the teachers should set the best practice example for us; The teachers should know well the discipline content; Teaching should reflect the concept frame of teacher education institutions; They should appraise the study of teacher candidates, as well as result performance; Using many kinds of teaching strategy; The teachers should encourage teacher candidates to develop the ability of thought and solving questions; At the same time, teachers should serve institute, university, elementary and middle schools, even community; Teacher education institutions should regularly and comprehensively appraise professional teachers of teaching, academic, achievement, service, cooperated communication and leadership ability.

2.6 Institution management and resource.

The teacher educational institutions in order to enable the teacher candidates to meet the standards of specialty, state and university, should provide the best management, funds budget, teachers, teaching facility, as well as resources which including many kinds of information technology. Therefore, teacher education institutions play a key leading role in management, supervising curriculum arrangement of teacher education, instruction and resource. The key element of system is the development and implement of evaluation, including data collected regarding the performance of teacher

candidates go ensure teacher candidate to meet the standard of the state. Institution and staff should create active work circumstance to improve intelligence activity, even teaching activity and academe activity. Policy and assignment can make the staff engage in teaching, academy and service actively and efficiently.

Accreditation standards of NCATE say that the teacher educational institutions should have sufficient teaching, scientific research, appraisal and consultative time and manage the training plan effectively. The specialized team should participate in design, implement and appraising teacher education institutions and their training plans. The key part of the system is to evaluate the development and implement of system, which including collecting the data of performance of teacher candidates to guarantee them to meet the criteria. The organization should have sufficient campus facility and help teacher candidates to meet the demand. At the same time, these facilities can help teachers and students to utilize the information technique in the teaching process. The organization also should provide the sufficient people and rich resource to ensure candidates to meet the standards of vocation, state and institution, information technology resources among them for teachers and institution is necessary. The library, curriculum resource and electronic information resource can be used by teachers and students.

3. Enlightening Points and Reference for Our Institution Accreditation of Teacher Education.

Nowadays, the specialization of teacher education is the trend of international teacher education, but perfecting the accreditation system of teacher education institution is the important condition of the specialization of teacher education. The system of teacher education is consummated in America, and having a mature and perfect system of teacher education, many measures play an important role on regulating teacher education institution and improving the specialization of teacher education, which is worth learning and absorbing.

3.1 Improving the specialization level of teachers.

Accreditation standards of NCATE is set down on the base of special criteria of teaching and teacher qualification, and put forward strict demand for teaching development of normal students, reforming the interior evaluation of schools and teaching condition, and so on. The normal students are equipped with basic qualification, such as teaching skill, subject knowledge and education theory. Nowadays, teacher education develops fast in quality and quantity with the development of higher education. And it can meet for higher requirement of teachers from basic education instead of the demand for basic education teachers in number, the demand has changed from quantity to quality. The era of specialization of teacher education is coming, so it is necessary to establish specialized criteria of teacher education, make assessment of normal university and comprehensive universities in teaching condition, subject setup, teachers, the quality of graduates, and so on. Encouraging teacher education institutions improves the cultivating plan, enhances the specialized level and ensures the quality of teachers.

3.2 Stressing the status and role of practice in teacher education.

One important reason of teacher education reform is that theory and practice of teacher education is separated seriously, because the separation does not guarantee the actual effect and the quality of teacher education, even does not meet the demand of the national education reform. In recent years, much research about teacher education in America has proved the importance of practice in teacher education. Not only experienced teachers, but also new teachers have viewed practice activity as the most important and effective factor in teacher education. However, looking from our country's teacher education, the teaching practice has not been obtained the powerfully protected in pre-post training stage and its function has not been displayed. So it is necessary to carry field experience or clinical practice.

3.3 Encouraging fair competition between teacher education institutions by exterior appraisal.

The transformation of teacher education system means the structure of division labor within teacher education of all levels is being established. The higher normal colleges and non-normal universities invest resource in teacher education connecting with accreditation and supervision of teacher education institutions. Under this situation, our country also must establish and perfect accreditation system of teacher education institutions, carry out regular inspection in all normal colleges and non-normal universities that shoulder teacher education duty. And ranking teaching level of teacher education institutions is similar to we rank classification of the similar medical institutions. With a result, ultimate accreditation result can regulate resource invested in teacher education by government so as to encourage teacher education institutions of all levels to compete fairly.

3.4 Reinforcing interior appraisal system of teacher education institutions

Teacher education institutions should have perfect evaluation system to provide obvious evidence of teaching ability of graduate, therefore teacher education institutions must have consummate appraisal system, including enrollment, process and graduation appraisal, the perfect appraisal system will pass through the whole education process, including enrollment, process and graduation evaluation, and the perfect appraisal system will pass through the whole education process, only this skill and disposition of teachers be can disclosed in a measurable way. Accreditation standards of NCATE pay attention to the goal supervision of teacher candidates, and evaluation is carried according to critical

thought, the ability to solve the problems and performance so as to get accurate evaluation. In our country, establishing interior appraisal system of teacher education institution can teacher be clear about the education goal and accurately grasp curriculum setup, teaching quality, teaching practice and management level of teaching and adapt to the different demand from the diversity society.

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A Study of Metaphor and its Application in Language Learning and Teaching

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Abstract

Metaphor is more a vehicle of cognizing the world than purely a rhetorical device. This paper first gives a brief review of traditional metaphor and modern metaphor in the West and then devotes a large space to elaborate on reasons for emergence of metaphor, characteristics of metaphor, working mechanism of metaphor, and then proposes suggestions on its application in language learning and teaching.

Keywords: Metaphor, Working mechanism, Language learning and teaching

1. Introduction

A study of metaphor is an infant branch of linguistic study and has held tremendous allure to scholars ever since the ancient times. Naturally a great diversity of views have come into being, mainly falling into two schools, namely traditional metaphor and modern metaphor, which interpret metaphor in the line of rhetorics and cognition respectively.

Traditional metaphor or a study of metaphor in the line of rhetorics can be traced back to scholars from Aristotle to Richards. In his famous works *Poetics*, Aristotle gives his definition of metaphor: "Metaphor consists in giving the thing a name that belongs to something else; the transference being either from genus to species, or from species to genus, or from species to species, or on grounds of analogy" (Lan, 2005). Richards (1936) in his book "The Philosophy of Rhetoric proposes Interaction Theory" asserts that the essence of metaphor lies in an Interaction between a metaphorical expression and the context in which it is used. The Interaction Theory arises from a correct observation in that as for a conventional metaphor which links a source domain and a target domain, speaking about the source domain alone may bring to mind the target domain.

The echoing voice of pro-traditional-metaphor scholars holds that metaphor is merely a rhetoric phenomenon, a transference from one word to another, and a device to enhance forcefulness and ornate ness of expressions, thus only those talented linguistic masters or writers can well manipulate and it is hardly out of the question for us average people to well use.

Studies of metaphor have taken on an absolutely new look ever since 1980s, evidenced by *Metaphors We Live by* collaborated by Lakoff and Johnson (1980), which has rocked to the core studies of metaphor in linguistic field, attributing to their interpretation of metaphor system in the line of cognition named modern metaphor and proposes that metaphor is a matter of thought and action rather than a device of poetic imagination and the rhetoric flourish. Kovecses (1986) presents a demonstration that emotions such as anger, pride and love are conceptualized structure in everyday language. All these studies illustrate the cognitive idea of metaphor, i.e. metaphor mediates human understanding and world view (Lan, 2005).

This paper, in retrospection of literature review of metaphor studies in the West, devotes a large space to give an elaborate account of image schema and working mechanism of metaphor and particularly application of working

mechanism of metaphor and image schema to translation of metaphors in both Chinese and English. Finally I arrive at the conclusion that if we language learners can well grasp working mechanism of metaphor, translation of metaphors can take good care of themselves. In the conclusion part, I propose some suggestions on teaching translation of metaphors.

2. Working Mechanism of Metaphor

In the mechanism, there are five elements, namely, metaphor producer, metaphor receiver, source domain, target domain and context.

2.1 Metaphor producer and receiver

They are the participants or subject in communication who possesses cognitive ability and well know the context the metaphor is in, background information, cultural factors and cognitive models, which altogether structure the ground on which a metaphor can stand. The subject play an indispensable role in the working process, for their cognitive abilities, wide stretch of imagination and reasoning power make their metaphorical mindset possible, therefore they can come up with more novel metaphors to enrich metaphorical expressions. Besides, their cognitive can well equip them with good judgment to recognize the metaphorical meaning of words, sentences or whatever.

As we all know, one or some features of the target domain can, more often than not, not be straightly projected onto the source domain, in which process will definitely requires involvement of the subject, for without whose involvement similarity between two things that are not of the same kind, nor bear any relationship to each other can not be created when put together. Their roles become still greater when talking of metaphor can create similarities, for similarities between source domain and target domain, are created by human beings in the process of exploring the world and those similarities will remain unknown to us without such metaphorical expressions, therefore emphasis on subjective initiatives can never be undermined in deciphering a metaphor which goes well with what cognitive linguistics holds.

2.2 Interaction between source domain (A) and target domain (B)

Mapping process: It can be imagined as a process of projecting features of the target domain onto the source domain, in which process context plays an essential part, for it can on the one hand provide relevant background knowledge and on the other hand can help to eliminate irrelevant features. Mapping results, Features of source domain will in return interact with that of the target domain, which determines formation of the focus information. Cognitive subject, under influence of interaction between A and B, will naturally activate relevant information and process it; meanwhile checking processing irrelevant information to ensure processing efficiency. By dint of subject's activating mechanism and checking mechanism, one or more features of A and B after mapping and interaction, will find their equivalent feature in each other, thus metaphorical meaning is acquired.

When an metaphor is formed, it may have several metaphorical meanings because of multiple equivalent features in the source domain and target domain. For example, in the sentence, he is a mule only stubbornness can be projected onto him, though a mule has several traits and other traits like long ears, feeding on grass, are eliminated due to cognitive power of the subject. Metaphorical meaning will for certain change if we replace mule with fish, because another mapping process is established. In the new process, two traits of the fish slipperiness and a big capacity are projected onto him in spite of its other traits.

Still another example:

1) Ta yi jie hun shi nian, ru jin que hong xing chu qiang.

2) Hang zhou jing guan zhi yi: Hong xing chu qiang

We can read between the lines different implicatures from the above two sentences. The first sentence is obviously a metaphor which means she has extramarital affairs with another man. while the second sentence means what it is literally written. In conclusion, establishment of an image depends heavily on interaction between source domain and target domain, either of which changes will definitely lead to change of the other.

2.3 Context

Self-evidently, context is of great importance to recognizing and decoding metaphors. Moreover, there exists too a interaction between context and subject, for which reason comes from many scholars the proposition that metaphors should be approached from perspectives of pragmatics, for no linguistic elements can stand being isolated from the context. Here are the examples to illustrate importance of context of a metaphor. Bartsch once gave the following the example:

Mary has a teapot and she loves it so much that whoever touches it she will immediately warn him to watch out. One day, when she finished using the bike borrowed from her friend, Mary just put it in the corner without care, which was caught by her friend and he shouted at her "this bike is my teapot." We can see clearly from the above example that Mary's care and love to her teapot are undiminishingly projected to that of her friend towards his bike. Outsiders will

become completely at a loss when overhearing the sentence that my bike is my teapot. In saying he is a fish, what exactly do we intend to convey when saying he is a fish. We intend to get across his unreliability or his great capacity for liquor; completely subject to the context it is used. When he is drinking it can be interpreted as his great capacity to hold liquor, otherwise, as his unreliability. Context can directly affect degree of the metaphorical meaning.

In conclusion, working mechanism of a metaphor is a cognitive mechanism which is based on interaction between the five elements producer and receiver, source domain, target domain and context.

3. Characteristics of Metaphor

For all its characteristics, I just want to single out among them three to dwell on. They are namely universality, systematic character and power of enriching semantic meaning.

3.1 Universality

Metaphor is not simply confined to linguistics, but also has entered into and become spotlight of fields of philosophy cognitive science, artificial intelligence, psychology, sociology and education. Metaphor has attracted tremendous attention from philosophers, which is evidenced by Kant's elaboration on conceptual metaphor from the angle of cognition and pointing out that our language is full of conceptualized expressions indirectly deriving from metaphorization. In 1960, German philosopher Blumenberg also pointed out with emphasis that most of the reasoning of human beings is metaphorical because of abstract and scientific account can be possible.

Metaphor proliferates too in natural science. For instance, in physics, we come to know what electricity is in terms of understanding the intangible water we are familiar with, hence expressions of flow of electricity, pressure of electricity, obstacle of electricity, to name just a few.

Metaphor, used in our daily thinking and acting is an omnipresent principle of human languages and makes abstraction possible, therefore it is a must to think in metaphor. Lackoff and Johnson's investigation showed even higher frequency of use of metaphor--70% of expressions in language derive from metaphorical concepts. Ortony (1929) held: all languages are of metaphorical quality.

3.2 systematic character of metaphor

Different conceptual metaphors do not work independently, as Lackoff and Johnson (1980) put it, metaphorical entailments can characterize a coherent system of metaphorical concepts and a corresponding coherent system of metaphorical expressions for those concepts. For instance, in English there are three metaphors related to time, namely,

Time is money

How do you spend your time these days?

That flat tire cost me an hour.

Time is a limited resource

You don't use your time profitably.

You are running out of time.

Time is a valuable commodity.

I don't have the time to give you.

Thank you for your time.

(Lakoff & Johnson, 1980)

Knowledge of what money, limited resources and valuable commodity are in mind, these metaphors can facilitate our understanding of the abstract concept time. The three metaphors well agree with each other and mingle into a harmonious whole, for money is in modern society a limited resource while a limited resource is a commodity. In other words time is money entails time is a limited resource, while the latter entails time is a valuable commodity.

3.3 Power of enriching semantic meaning

Metaphor, in linguistic system, is to endow with a word new meaning and extension of meaning, and a bridge of the known and the unknown. Metaphor makes one semantic domain map onto another. (Lakoff & Turner, 1989) Cognitive semantics holds acquisition of new lexical meaning is by no means groundless and is grounded on the cognitive structuring which makes different meanings of one word relate to each other in a reasonable way. We can use a polysemy loud to illustrate Sweetser's stand. The word loud has following meanings (a) having great intensity of sound (b) producing great intensity of sound ; resounding (c)vehement or insistent :loud denunciations.(d)Tastelessly bright ; garish, flashy: a loud red automobile (e) obsessive in appearance or manner : Joe is a loud, vulgar person.(Macmillan contemporary dictionary)

The first two items are of minor difference and of its literal meaning, while the third item is somewhat different from its literal meaning yet still bears close relationship to sound. Item four and five bear no direct relationship to sound, but still stem from high-pitchingness and ear-catchingness of sound. In a word, metaphorization is the effective mechanism to make such connotation possible.

4. Metaphor in language learning and teaching

We have no time to exhaust all aspects of metaphor in language learning, and here we just single out one aspect of metaphor in language learning---using conceptual metaphor in extending lexicon.

The first area of using or applying conceptual metaphor is obviously vocabulary learning in general. Conceptual metaphors provide us with the possibility of seeing one thing in terms of another. This feature enables us to link the senses of a lexical item in one domain to its related metaphorical senses in another domain, thus extending the senses of the same word forms. For example the word *shaky* in the building domain can be used in the theory domain with the linking conceptual metaphor *theories are buildings*. Another example, the word *remote* in the distance domain can be used in the relationship domain with the linking conceptual metaphor *relationship is distance* and most importantly, a large number of words can be learned systematically in this way. In pedagogical practice, teaching of extending the meanings of lexical items can be conducted in the following way. To begin with, the teacher can give such an example: Jim and Lily are lovers while Jim abandoned Lily and fell love with another girl, so Lily felt wounded by Jim's betrayal and she had never been stabbed in the back like that before. She was badly hurt. In teaching sentences of such kind, the teacher can guide the students to find the two domains. For instance, the teacher can guide the students to find the two domains by asking questions like *can wounded be used on other occasions* and *what is the normal use of hurt*. Gradually the students would be guided to the physical domain of using the words *wounded* and *hurt*. The expected conceptual metaphor to be established is *negative emotions are physical pains*. Therefore, a mapping relation like the following can be established.

Negative emotions are physical pains. In this activity, students are guided to search for the different senses of the same word forms, to link one domain to another, and eventually to find the potential conceptual metaphors linking these two topic domains. In this way, students can easily memorize the meanings of a word.

It is well known to us that metaphor is the carrier of culture and reflects ways of cognizing the world, thus importance of culture teaching becomes greater.

Firstly teachers of the foreign language should conduct a systematic research on culture. Metaphor, among research of cultural field is an important part, through study of which complicated and various cultural phenomenon can be organized systematically and should also deepen understanding of culture and thinking pattern peculiar to the foreign language. The so called culture here refers to not only the concrete aspect including history, geography and social system, but also the abstract facet, say, life style, values, outlook of the world, belief, cultural heritage, philosophy, etc.

Secondly, learners of foreign language should make conscious efforts, adopt a positive attitude and systematic study method to learn culture and through channels of various kinds say movies, literary works so as to be fully immersed in the culture. Contents of teaching materials must be reformed in that more space should be offered to culture and it is much better if culture course can be excluded in the curriculum. Teaching method must be reformed in that activity of students should be dominated in class and the teacher's role is to select proper cultural materials and compare and contrast differences of culture in foreign language and mother tongue.

Thirdly, teachers of foreign language should well know new discoveries in study of metaphors and elaborate on theoretical basis behind linguistic phenomenon of various kinds and organize the bits and pieces of language phenomenon into a whole by dint of metaphor theories.

The last but not the least, I sincerely suggest field of foreign language teaching can pool wisdom to compile a dictionary devoted to studies of relationships of among cognitive linguistic theories, metaphor study, culture and thinking patterns.

5. Conclusion

In conclusion, metaphor is an avenue of cognizing the world and has penetrated every nook and corner of our daily life, thus having immense impact on our thinking patterns. This paper gives a relatively detailed account of working mechanism of metaphor and image schema and proposes five techniques of translating metaphors before arriving at the conclusion that if working mechanism of metaphor and image schema can be well grasped, translation of metaphors can take good care of itself. Since metaphor is intimately related to people's ways of deciphering the world, therefore a study on relationships between thinking patterns and metaphors may throw light on translation of metaphors. The author would like to give some suggestions on teaching of metaphor translation. It is well known to us that metaphor is the carrier of culture and reflects ways of cognizing the world, thus importance of culture teaching becomes greater.

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Perceived Needs of Urban and Rural Mathematics Majors Teaching Science in Malaysian Secondary Schools

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Abstract

This study seeks to identify the needs of urban and rural science educators majoring in mathematics. In Malaysian secondary schools, due to a lack of qualified science teachers, the phenomenon of mathematics majors teaching science is common. Analysis of data revealed that the perceived needs with the highest overall rating were related to ICT (Internet, Communication and Technology), followed by the need for short professional development courses and the need for critical thinking skills. The lowest rated perceived needs were related to implementation of PEKA (Science Practical Work Assessment), the updating of content knowledge in the field of biology, and supervising laboratory assistants in preparing apparatus. The multivariate analysis of variance (MANOVA) found that there are differences among teachers' perceived needs related to science teaching and learning based on a school's location. All tests were conducted at the 0.05 level of significance.

Keywords: Perceived needs, Mathematics majors, Teaching science

1. Introduction

Mathematics majors teaching science in Malaysian secondary schools is a common occurrence due to a lack of qualified teachers in the field of science (Kamisah, Lilia & Subahan, 2006). The shortage of science teachers reached a high of 1395 vacancies in the year 2000 (Ministry of Education, Malaysia, 2000). As a result, teachers with various subject backgrounds are often required to teach science despite their lack of training in teaching science subject (Kamisah, Lilia & Subahan, 2006). This is problematic because these educators have limited knowledge of science content. Subahan et al. (2001) found that 60% to 68% of non-option physics teachers believed they needed to increase their understanding of physics content. A study by Berenson et al. (1991) found that 58% of the teachers felt unqualified to teach science

and only 8% would elect to teach science. Additionally, 37% of these teachers requested more in-service courses dealing with science content. According to Kofi (2007), a teacher who is competent and knowledgeable in his or her subject can teach it well and is more likely to establish a good rapport with students, create a democratic classroom climate, maintain an orderly and learning-focused environment, motivate learners, and provide co-operative interaction that can maximize learning. He further states that, to be competent and knowledgeable, the teacher must undergo comprehensive training and continue to learn throughout his or her teaching career.

A needs assessment study by Baird and Rowsey (1989) found that science teachers are most interested in student motivation, obtaining instructional materials, learning to use computers, and in updating their own personal knowledge in science content areas. Performing clerical tasks, writing lesson plans, assigning student grades, communicating with parents, or administering tests are the least pressing needs for science teachers. According to Baird and Rowsey (1989), the duties of science teachers include specifying learning objectives in content areas, skills in planning, managing and delivering science instruction, administering laboratory facilities and materials, ordering and maintaining supplies, testing and evaluation, and utilizing technologies. Kamariah and Rohani (1995) reported that the three most important items are creativity in teaching science, update knowledge in application of science, and technology and innovation in science teaching. They also report that teachers who lack experience need help in professional development. A recent study by Kofi (2007) found that teachers in South Africa needed professional development in the areas of teaching methods, classroom management, alternative ways to assess students, and preparation of lessons for effective teaching.

Most of the teachers relied on in-service programs to enhance their skills. However, many teachers expressed dissatisfaction with the development program and questioned its usefulness for the staff. In-service programs must be high quality in order for teachers to benefit from them (Baird & Rowsey, 1989). Effective professional development programs should be designed to help teachers build new understandings of teaching and learning through direct experiences that introduce new strategies, which help students learn in new ways (Lee, 2001). The development of in-service programs should be directed toward meeting the stated needs of teachers. According to Kofi (2007), staff development program are too general. In many cases, they may not take into consideration the local contexts and the needs of individual schools and educators. The needs of rural science teachers are not being met as those of their urban colleagues (Lyons, 2008). Those who teach science at the secondary school level are diverse and thus have very different needs (Kamisah, Lilia & Subahan, 2006). Lee (2004) further stated that the lack of motivation for staff development might be due to the fact that in-service programs are typically designed to cater to the masses in the district rather than appealing to the specific needs of teachers. Therefore, accurate data should be gathered and used in planning a successful program. A needs assessment is one means of determining areas in which teachers desire help (Rossett, 1997). Identification of these perceived needs could have implications for in-service programs provided for teachers. There is a limited literature concerning the perceived needs of mathematics majors who are teaching science. For this reason, the study discussed in this paper identified the perceived needs of science teachers whose primary subject area is mathematics.

2. Purpose of the study

The main purpose of this study was to determine the perceived needs of science teachers majoring in mathematics. Also, this study will try to determine if there is a significant difference in these perceived needs based on a school's location as the variable. Therefore, this study was an attempt to collect data to provide answers to the following specific questions:

- a) What are the most pressing needs of science teachers as perceived by secondary science teachers majoring in mathematics?
- b) What are the least pressing needs of science teachers as perceived by secondary science teachers majoring in mathematics?
- c) Is there a significant difference between the professional needs of science teachers who teach in urban schools and those who teach in rural schools?

3. Methodology

3.1 Population and Sample

The population of this study is educators teaching science at the secondary level. 198 mathematics majors who are teaching science subjects were randomly selected as respondents for this survey. Of these 198 teachers, 92 were from urban areas while 106 teachers came from rural areas. Additionally, 57 of the teachers were male and 141 were female.

3.2 Instrumentation

Zurub and Rubba (1983) developed the original *Science Teacher Inventory of Needs* (STIN) instrument from which this survey was formed. The STIN contains 76 items organized into 7 categories of science teachers' professional needs. These categories are: (a) specifying objectives for science instruction, (b) diagnosing and evaluating learners, (c)

planning science instruction (d) delivering science instruction, (e) managing science instruction (f) administering science instructional facilities and equipment, (g) improving personal competence as a science teacher.

Modifications to the STIN were made for this study; items were added that reflected the needs of science teachers in secondary schools in Malaysia. Item development took place in six steps. First, an existing perceived needs subscale was reviewed. Second, a thorough review and analysis of the needs literature was conducted. Third, in order to identify the needs of science teachers, a structured interview was conducted. Eight teachers were interviewed. The interview data were used to update and modify the instrument. Fourth, a panel of experts in the area of science teaching representing biology, chemistry and physics was asked to edit, combine, suggest, and eliminate items from initial pool of items. Fifth, comments and suggestions from the fourth stage were reviewed.

Finally, the items were field tested by having teachers and lecturers review the survey with respect to its readability, clarity, and ease of response. Instructions or items that were unclear were identified and suggestions for changes were incorporated. The final versions of the scale sent to participants contained 72 items. Each item is followed by a scale of selection: (1) Not needed, (2) Moderately needed, and (3) Greatly needed. The instrument for this study consists of two sections. Section I asks for demographic data about each respondent. The following demographic data was collected: race, gender, school location, teaching experience, academic qualification, subjects major/minor, professional qualification, subjects taught, years of teaching science, and in-service courses attended. Section II includes 72 items regarding the in-service needs of science teachers.

To establish validity, a construct was considered through factor analysis with principal component analysis as an extraction method and varimax as a rotation method. Through factor analysis, 8 factors were identified. These categories are: (a) managing and delivering science instruction (16 items), (b) diagnosing and evaluating students for science instruction (11 items), (c) knowledge and generic skills (14 items), (d) generic pedagogical knowledge and skills (7 items), (e) administering science instructional facilities and equipment (10 items), (f) planning science instruction (8 items), (g) integration of multimedia technology in science teaching (4 items), and (h) use of the English language in science teaching and learning (2 items). In order to determine reliability, Cronbach's alpha was calculated for each of the surveys. The managing and delivering science instruction scale had a reliability of 0.96; diagnosing and evaluating students for science instruction scale, 0.93; knowledge and generic skills scale, 0.95; generic pedagogical knowledge and skills scale, 0.95; administering science instructional facilities and equipment scale, 0.93; planning science instruction scale, 0.91; integration of multimedia technology in science teaching, 0.81; and use of English in teaching and learning science scale, 0.75. Ranking of means was used to determine the most pressing perceived needs of science teachers. Multivariate analysis of variance (MANOVA) was used to determine differences in perceived needs based on school location.

4. Results

Table 1 contains a demographic summary of teachers who responded. Of a total of 198 participants, 71.2% were female teachers and 28.8% were male teachers. Additionally, 40% were between the ages of 31 and 40 and only 1% were above the age of 50. In terms of ethnicity, Malays were the highest respondents with 70.7%. In terms of school location, 46.5% were from urban schools and 53.5% were from rural schools. In terms of subject-specific experience, 24% of respondents had experience teaching physics, and 39% had experience teaching science at the lower secondary school level. However, only 7% had experience teaching biology. In terms of total years of experience, 19% had 0 to 3 years of teaching experience in science, and 53% had more than 12 years of experience in teaching science. Finally, 55% of the participants have undergraduate degrees in education.

To determine needs items, a mean score for each need was computed from all responses. Table 2 provided an analysis of the perceived needs of science teachers, as ranked on the basis of the mean. The top 10 perceived needs included: upgrading knowledge of ICT (2.55); enhancing professionalism through short courses (2.45); critical thinking skills (2.41); creativity in teaching science (2.40); English communication skills (2.39); various activities in science teaching (2.33); information on innovation in science instruction (2.32); motivation in learning science (2.29); selecting appropriate teaching strategies (2.27); and preparing various teaching materials (2.26). The most pressing needs were found in the knowledge and generic skills scale (items 61, 62, 63, and 71); planning science instruction scale (items 12, 14, and 21); integration of multimedia technology in science teaching (item 72), diagnosing and evaluating students for science instruction (item 9), and use of English in teaching and learning science scale (item 66).

In comparison to the 10 most preferred perceived needs for science teachers (Table 2), the 10 least preferred included (Table 3): planning science instruction outside of the class (1.96); doing a demonstration to understand a science concept (1.96); living organism in science teaching (1.95); updating the scientific skills in chemistry (1.95); updating the content knowledge of chemistry (1.95); updating the scientific skills in biology (1.90); management of budget for science teaching (1.89); updating the content knowledge of biology (1.89); implementation of PEKA (1.87), and supervising laboratory assistants in preparing apparatus (1.83). The least pressing needs were found primarily in

management and science instruction (item 29); administering science instructional facilities and equipment (items 36, 40, 49); diagnosing and evaluating students for science instruction (item 28); knowledge and skills in science subject (items 51, 53, 54, 56); and planning science instruction (item 17) scales.

Table 4 presents the mean and standard deviation of perceived needs by school location. Rural teachers had a higher mean score than urban teachers. A one way multivariate analysis (MANOVA) was conducted to determine the differences, if any, between the means of the two groups (urban and rural) with respect to the eight dependent variables listed above. The results of MANOVA are presented below (Table 5). Significant differences were found between the rural and urban groups on the dependent variables, Wilks' lambda = 0.917, $F(8,189) = 2.14$, $p < 0.05$. These results signify that there is a difference between rural and urban groups on any dependent variables.

Box's test equality of covariance matrices and Levene's test of equality of error variances were also conducted. These tests were used to determine whether the assumptions of the MANOVA were met. Box's M statistics is used to test the assumption of homogeneity of the variance-covariance matrices. If the F test for Box's test is significant, the homogeneity hypothesis is rejected, and it is concluded that there are differences in the matrices. Box's test of the equality of covariance matrices showed that Box's M=35.588, $F(36,124045.2) = 0.946$, $p > 0.05$ and was, therefore, not significant. This indicates that the covariance matrices of the dependent variables were not different across group, i.e., the scatter of the scores in the different tests did not differ significantly. Levene's test revealed that the variability for the variables 3, 6, and 8 (see Table 4) differed from the other variables because of the existence of more extreme scores. Gardner (2001) recommends the use of Pillai's trace because it is the most robust overall measure and is unaffected by violations of assumptions.

Table 6 presents a multivariate analysis of variance for location effect. The data show a significant main effect for the following: (a) managing and delivering science instruction, $F(1, 196) = 10.402$, $p < 0.05$; (b) diagnosing and evaluating students for science instruction, $F(1,196) = 12.296$, $p < 0.05$; (c) knowledge and generic skills, $F(1,196) = 10.472$, $p < 0.05$; (d) generic pedagogical knowledge and skills, $F(1,196) = 6.180$, $p < 0.05$; (e) administering science facilities and equipment, $F(1,196) = 4.853$, $p < 0.05$; (f) planning science instruction, $F(1,196) = 10.562$, $p < 0.05$; (g) use of the English language in teaching and learning, $F(1,196) = 7.857$, $p < 0.05$. There was no significant effect for integration of multimedia technology in science teaching, $F(1,196) = 1.978$, $p < 0.05$.

5. Discussion

Based upon the responses of these secondary school science teachers, the greatest need was for ICT. The high rankings of the technology-related needs provide evidence for the desirability of in-service programs in the area of technology. The need for integration of multimedia technology in science teaching is almost the same for rural and urban teachers. The high rankings of the integration of ICT in teaching and learning were expected since many teachers had not been formally trained to integrate technology into classroom instruction. According to McKenzie (1999), only 20% of teachers were well prepared to integrate technology into the classroom. A continued program of in-service training can provide teachers with the support they may need in technology usage (Wright, Rice & Hildreth, 2001). The ten highest-ranked needs, each to various degrees, point to the teachers' desire to improve their knowledge, professionalism, thinking skills, creativity, and communication skills. This result is supported by a study done by Kamariah and Rohani (1995). The low ranking of planning science instruction outside the class, doing a demonstration, updating content knowledge and scientific skills in chemistry and biology were expected since most of the teachers were experienced teachers. Evidence indicates differences between the needs of urban teachers and rural teachers for each dimension except the integration of multimedia technology in science teaching. Rural teachers' needs are greater than their urban counterparts. This may be due to their lack of exposure and experience and may also indicate that these educators are not acquiring relevant information and knowledge in their current in-service program.

6. Conclusion

The results of this study demonstrate the perceived needs of science teachers in Malaysian secondary schools whose primary subject area is mathematics. This assessment indicates an interest regarding the use of technology. In-service programs should focus on technology integration, professionalism through short courses, critical thinking, and creativity in teaching science, as well as communication skills in English. The findings from this study might have implications for science teachers majoring in mathematics. When planning in-service courses or programs, consideration should be given to areas of most pressing need. We should be sensitive to the different needs of the teachers as rural and urban teachers showed different needs. Providing the same program for teachers regardless of the school location may not meet the needs of all teachers. The findings of this study also provide direction for further research related to the perceived needs of science teachers, to the extent that current in-service courses are adequate to meet the needs of the teachers. Further research should also look into other teacher variables such as experience, gender and level of education.

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Table 1. Demographic Characteristics of Science Teachers

Variable	Category	N	Percent
Gender	Male	57	28.8
	Female	141	71.2
Age	21-30	52	26.3
	31-40	80	40.4
	41-50	64	32.3
	>50	2	1.0
Ethnicity	Malay	140	70.7
	Chinese	52	26.3
	Indian	5	2.5
	Others	1	0.5
Locations of Schools	Urban	92	46.5
	Rural	106	53.5
Highest academic qualification	SPM*	1	0.5
	STPM**	8	4.0
	Diploma	10	5.1
	Undergraduate Degree	59	29.8
	Undergraduate Degree in Education	109	55.1
	Masters Degree	4	2.0
	Masters Degree in Education	5	2.5
	Others	2	1.0
Science Subject Taught in school***	Physics	47	23.7
	Chemistry	21	10.6
	Biology	13	6.6
	Science (Lower)	77	38.9
Teaching Experience in Science	Science (Upper)	47	23.7
	0-3 years	38	19.2
	4-6 years	21	10.6
	7-9 years	22	11.1
	10-12 years	13	6.6
	>12 years	104	52.5

N=198, unless indicated otherwise, *equivalent to O level, **equivalent to A level, ***more than one subject taught

Table 2. Top 10 Ranking of Perceived Needs

Ranking	Item	Mean	S.D.
1	(72) upgrading knowledge of ICT	2.55	0.64
2	(71) enhancing professionalism through short courses	2.45	0.65
3	(63) critical thinking skills	2.41	0.68
4	(62) creativity in teaching science	2.40	0.68
5	(66) English communication skills	2.39	0.78
6	(21) various activities in science teaching	2.33	0.77
7	(61) information on innovation in science instruction	2.32	0.68
8	(14) motivation in learning science	2.29	0.81
9	(9) selecting appropriate teaching strategies	2.27	0.82
10	(12) preparing various teaching materials	2.26	0.79

Table 3. Bottom 10 Ranking of Perceived Needs

Ranking	Item	Mean	S.D.
63	(17) planning science instruction outside of the class	1.96	0.75
64	(29) doing a demonstration to understand a science concept	1.96	0.80
65	(49) living organism in science teaching	1.95	0.82
66	(54) updating the scientific skills in Chemistry	1.95	0.91
67	(51) updating the content knowledge of Chemistry	1.95	0.92
68	(56) updating the scientific skills in Biology	1.90	0.95
69	(36) management of budget for science teaching	1.89	0.86
70	(53) updating the content knowledge of Biology	1.89	0.94
71	(28) implementation of PEKA (Science Practical Work Assessment)	1.87	0.87
72	(40) supervising laboratory assistants in preparing apparatus	1.83	0.86

Table 4. Mean and Std Deviation of Perceived Needs by Location

Dimension	Location	Mean	Std Deviation
1) Managing and delivering science instruction	Urban	30.7391	11.08396
	Rural	35.5472	9.89192
2) Diagnosing and evaluating students for science instruction	Urban	21.2609	7.16504
	Rural	24.6321	6.36258
3) Knowledge and generic skills	Urban	29.6087	8.69250
	Rural	33.2075	6.94429
4) Generic pedagogical knowledge and skills	Urban	12.7391	5.47496
	Rural	14.6981	5.57745
5) Administering science instructional facilities and equipment	Urban	19.1848	6.42100
	Rural	21.1887	6.35177
6) Planning science instruction	Urban	16.3043	5.23038
	Rural	18.5094	4.31442
7) Integration of multimedia technology in science teaching	Urban	8.9891	2.51367
	Rural	9.4528	2.12528
8) Use of English language in science teaching and learning	Urban	4.2391	1.49262
	Rural	4.7925	1.28521

Table 5. Results of MANOVA

Effects	Value	F	Hypothesis df	Error df	Sig
Location Pillai's Trace	.083	2.135	8.000	189.000	.034
Wilks' Lambda	.917	2.135	8.000	189.000	.034
Hotelling's Trace	.090	2.135	8.000	189.000	.034
Roy's Largest Root	.090	2.135	8.000	189.000	.034

Table 6. MANOVA of Perceived Needs by School Location

Dependent Variable	SS	df	MS	F	p
Managing and delivering science Instruction	1138.583	1	1138.583	10.402	.001
Diagnosing and evaluating students for science instruction	559.756	1	559.756	12.296	.001
Knowledge and generic skills	637.906	1	637.906	10.472	.001
Generic pedagogical knowledge and skills	189.012	1	189.012	6.180	.014
Administering science instructional facilities and equipment	197.779	1	197.779	4.853	.029
Planning science instruction	239.486	1	239.486	10.562	.001
Integration of multimedia technology in science teaching	10.590	1	10.590	1.978	.161
Use of English language in science teaching and learning	15.079	1	15.079	7.857	.006



Theoretical Construction of Freedom and Pluralism Education in Pastoral Areas

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Abstract

At beginning of the article, author has a brief introduction of basic conditions in pastoral areas of Imperial Town, and interprets ethnic relations among Han, Tibetan, Mongolian, Yugur, Hui, Manchu and Tu mixed residence. After analysis of the internal and external factors that affect the specificity of pastoral education, author generalizes educational specificity in pastoral area: freedom and pluralism, furthermore, constructs freedom and pluralism education theory in pastoral areas and states significance of theoretical construction.

Keywords: Theoretical construction, Freedom and pluralism education, Pastoral areas

1. Brief Introduction of Basic Conditions in Pastoral Areas of Imperial Town and Relations among Mix-Lived Ethnic Groups.

1.1 Administrative Divisions and the Patterns of Livestock-Based Economy

Imperial Town, also known as Imperial Beach, known as Woer Duo in history, Yongchang King in Yuan dynasty built summer palace here, named Imperial Town. Imperial Town under the Sunan County, Gansu Province, is located in north eastern section of Qilian Mountains, Hexi Corridor. South to Menyuan County of Qinghai Province is adjacent to the north in Yongchang County, Wuwei City. Tianzhu county is in the east of Imperial Town, on the western border of it is Shandan horse-courtyard where horses trained for military supplies, about 95 kilometers east-west, north-south width of 92 kilometers, the total area of 3972 kilometers. (Shenlin Luo, 2006) Imperial Town under the jurisdiction of Huajian, Tibetan Township, Yang Xiang Tibetan Township, Horsecamp Township, Eastbeach Township and Northbeach Township, a total of 18 administrative villages.

Livestock is the economic pillars of Imperial Town for keeping fine wool, sheep, yak mainly and a combination of indigenous sheep, goats and cattle. In 5 animal husbandry-based rural townships has Eastbeach, Xiangyang, Horsecamp, Largelake Beach, Yingpan; Horsecamp Township of Jinzi Beach, Xicheng, Westwater Beach; Northbeach Township has Northpole, Beifeng etc. 9 villages, accounting for 50 percent of the total number of villages; mainly livestock, farming villages have Northbeach township of Northbay; Huajian township of Ningchang, Shuiguan, Changfang Village; Yangxiang township of Hedong, Hexi, Dongding Village and others, 7 villages, accounting for 38.9percent of the total number; agriculture mainly barley, wheat, oats for forage materials, planting some potato for food. Agriculture is the main villages have Eastbeach Township of Dongzhuang, Redflag village two administrative villages, accounting for 11percent; other industries such as tourism is mainly distributed in the Eastbeach township of Xiangyang Village, with tourist attractions; mining industry distribution Horsecamp township in Westwater Beach; Huajian township of Ningchang, Shuiguan, Changfang Village; Yangxiang township in Hedong, Hexi, Dongding Village has coal mines. The service sectors are mainly distributed in the Eastbeach township of Xiangyang Village and Northbeach township of Northpole and Beifeng village. Transportation in Eastbeach of Dongzhuang, Redflag village, in North Beach township of North Bay Village and Huajian township of Ningchang, Shuiguan, Changfang Village. Tourism, mining and service industries account for about 0.1 percent, the proportion of categories in Imperial Town economic patterns as shown:

Insert Figure 1 Here

1.2 Relations among Mix-Inhabited Ethnic Groups and exchange of Different Culture

In terms of historical documents, there are Quanrong, Qiang, Yuenshi, Hun, TongFan, Turk and Mogolian nationality lived in Imperial Town town in a course of Cunqiu, pre-Qin, Qinhan, Songyuan. From the end of Qing dynasty to the initial stage of Democratic Republic (1911-1949), Mogolian, Hui and Tibetan nationality lived there. In 1959, Yugur nationality moved here after having border adjustment between Gansu province and Qinghai province. By the end of

June, 2006, a population of minority groups inhabited in Imperial Town is as follows: Han(49.72 percent), Tibetan(27.45percent), Uigur(18.31percent), Hui(2.32percent), Tu(1.81percent), Mogonlian(0.36percent), Man(0.02percent). Propositions of minority population are as followings.

Insert Figure 2 Here

Ethnic relations in multi-ethnic country refer to formality, content, quality, status of interaction in development process for all ethnic groups. (Association of Hui Nationality in China, 2003) As for many nationalities live in pastoral areas of Imperial Town, the ethnic relations refers to a process of Han, Tibetan, Hui, Mongolian, Yugur, Tu and Manchu fully getting along, exchanging and developing in common. Analysis of this process, necessarily from form, content, quality, status of interaction of Han, Tibetan, Hui, Mongolian, Yugur, Tu and Manchu to start, operation of the variable indicators of languages, religions, customs and ethnic intermarriage and ethnic consciousness and so on will be used. The Section Five, Chapter I of the author's dissertation explores evolutionary stage of ideology hidden behind the ethnic relations, from a historical dimension, which can be divided into four stages: assimilation theory of stage (1949 years ago); pluralism stage (from early 1950s to late 1970s); diversified unity stage (from the end of the 1970s to end of the 20th century) and the Liberal Pluralism stage (after 21st century) and further explains the development of relations between China and the United States.

Combined with China's national conditions, the author expresses by formula (see Section Five of Chapter I) description of the mainstream culture and ethnic culture when they are in contact forms. In the west pastoral areas, exchange between the minority culture and the Chinese culture, on a voluntary and equal basis, has three possible results: The first possibility is that minority culture accepts and absorbs the Chinese culture, the development pattern for diversified culture; The second possibility is that ethnic minorities choose to maintain their own traditional culture and carry forward; A third possibility is inclusive of the former two, that is acceptable to the Han culture, while maintaining the ethnic traditional culture. The three possible outcomes will be fully respected. In Imperial Town, when Yugur culture and Han culture exchange, on different occasions, different cultural backgrounds may result in different results.

Insert Table 1 Here

There are three main types of occasion for Yugur culture and Han culture to meet, namely, the inter-marriage of Yugur and Han, the community and the pastoral School - Sunan No.2 Junior High School. Yugur and Han intermarriage in the family showed the first case, that is, Yugur and Han culture accept and absorb the culture each other, the formation of emphasis on "Chinese culture", "Yugur culture and Han culture pattern." Livestock income for the family's main economic sources, including holiday celebrations and life-style day-to-day, eating habits, dress both Yugur and the Han culture. In the use of everyday language, the elderly with many Yugur languages (eastern or western) communicate, young people communicate in Chinese. Communities in the Imperial City, when Yugur culture and Chinese culture met, there will be second or third case, organizing some activities, such as "Six-One Ethnic Festival", when the performance of all ethnic groups together for cultural programs. Normally, Yugur and Han have been together such as the Mid-Autumn Festival holiday. Nationality Autonomous Region has stressed that "Yugur culture", meanwhile, Yugur also shared the pattern of Han culture. Community surroundings are harmonious for coexistence of all ethnic groups. In Sunan No.2 School, previous campus culture of "examination-oriented education" to teach the national curriculum-based, teaching content are mainly Han culture mainstream culture, country courses are taught by the formation of the emphasis on "Chinese culture before construction of school-based curriculum." After construction of school-based curriculum pattern, two simultaneous blending of campus culture, a country course and school-based course are taught by the formation of the emphasis on "Han culture", "Yugur culture and Han culture" pattern; the other is the formation of school-based curriculum taught by the emphasis on "Yugur culture" "Yugur shared Han culture pattern." Cultural interaction of the two cultures is a prerequisite for compliance with the rule of equality. Liberal pluralism is able to achieve only on a basis of voluntariness and equality.

2. Specificity of Education in Pastoral Areas

Specificity of pastoral education determined by internal reforms in the education system is to be done to meet the unique needs of education in pastoral areas. The author in previous chapters already mentioned in the Imperial City, students after the study of Junior High School, Senior High School phase, and finally are able to enter university school, accounting for only 10percent of the total, how to find a way out for those students about 90percent of the total, is a bottleneck problem for pastoral education to solve.

2.1 Influencing Factors on Specificity of Education in Pastoral Areas

2.1.1 From the point of view within the pastoral educational system:

Prior to school-based curriculum, the implementation of national curriculum structure, teaching content, teaching methods, teaching language and so does not reflect the regional, ethnic character. Many students failed in the final examination, return home and become "cultural marginalized people." (Refer to those who can't adapt themselves to urban circumstances, meanwhile are abandoned by local culture circle), who are described kiddingly by local people,

“those who neither work so hard as whose fathers nor cook so deliciously as whose sisters-in-law, who are too short to be used as poles for propping against the door and too long to be used as sticks for making a fire.” Education loses its attractiveness to herdsmen, pastoral education in a very difficult situation. School-based curriculum construction is conducive to the sound development of the pastoral education. It lies in giving full play to pastoral teachers, students, school leaders’ community members in pastoral areas and relying on their own strength to find the goal of educational development, create various opportunities for the development of education, establishes pastoral circulation mechanism of self-education, and build a sustainable development of education in philosophy.

2.1.2 From the point of view outside the pastoral educational system

Insert Figure 3 Here.

The external factors that affect on the special nature of pastoral education, such as the uniqueness of the location of pastoral areas, livestock production and development patterns, linguistic pluralism, the concept of thought herdsmen, pastoralists's religious pluralism, these factors have a positive impact on pastoral education, meanwhile have an impact on the negative, thereby creating the specificity of education in pastoral areas.

2.2 Pastoral education specificity constitutes of cultural factor analysis

Insert Figure 4 Here

2.2.1 External cultural factors

2.2.1.1 International culture

Nowadays, most of the countries are multiethnic ones. With globalization of economy, population of cross-country immigration has an uprising jump remarkably. Development of race or ethnic groups in many countries lack of stability, some even have a conflict with social structure and economic development in local community, others also influence development of relationship among minority ethnic groups all over the world. Therefore, a higher concern for research on relationship among ethnic groups and issues related to has been showed by governments and academic circles in many countries. Under such circumstances, education reform in western pastoral areas of China based on relationship among different minority ethnic groups should draw lessons from experiences of dealing with different ethnic groups in other countries all over the world, and find a way-out to improve ethnic relations in China.

2.2.1.2 Internal Common Culture of mainly Han culture

The ideology of society, values, behaviors, lifestyles and production are determined by the main Han ethnic group. From National educational content to the main contents of the Han culture. Screening of National Education also depends on the system of rules of Han culture. Minority culture all the time is influenced by the Han culture. This influence through radio and television channels such as media, social media, social groups, or example national education policies to develop “two exempt and one subsidy” (To make education fair, China constantly make favorable policy for rural areas, west areas and poverty personals.) School of ethnic minorities enjoyed benefit, there will have a lot of preferential policies for education in pastoral areas. This effect has a spontaneous and organized; have positive, and has negative.

2.2.1.3 Internal cultural factors

Pastoral education is not only influenced by the development of relations between the world's peoples and their main impact of the Han culture, inhabited by various ethnic minorities in the cultural education will also affect each other. Yugur language such as the impact by popular Mongolian living in the eastern part of Sunan County, Yugur Altaic language use of the Mongolian tribe. Yugur diet and lifestyle clothing by Tibetan, songs and dances as well, the impact of deep impact on culture and education by the Han nationality. Imperial Town pastoral areas of the Tu language characters in half with the Mongolian language has the same or similar. Language is also an Altaic Mongolian language. After some historical research, speaking from the family sources, the Tu long-term development of our ancestors are in the process of absorption of the Tibetan, Han, Mongolian and other ethnic ingredients formed. Hui influenced by Han Chinese, the use of Chinese, while retaining their own custom of the ethnic and religious beliefs. Manchu language has its own language, but the long-term mixed with the Han, some ethnic characteristics, customs and habits, are watered down, disappeared. In short, in the Imperial Town, Tibetan, Mongolian, Yugur, Hui, Tu, Manchu, Han peoples of fraternal long-term exposure to a wide range of interactive elements in many of its cases,. Imperial Town special geographical environment, and animal husbandry production patterns as well as pastoralists’ ideas, concepts, language and religious beliefs common to pastoral areas have a profound impact on education, which has resulted in the specificity of education in pastoral areas.

2.3 Specificity of Pastoral Education: Freedom and Pluralism

The specificity of pastoral education in pastoral areas to be considered apart from all ethnic groups mix-lived of ethnic features, we must also consider the historical development of various ethnic characteristics and the uniqueness of

pastoral areas of the eco-geographical location. field spot of all ethnic groups not only learn from each other, communicate with each other, mutual absorption of the excellent culture of the characteristics and advantages, but also remain fairly stable ethnic characteristics, such as the ethnic cultural traditions, language, education system, educational content and knowledge of methods, resulting in a complex web of ethnic relations and ethnic culture characterized by diversity of education, namely, the diversity of pastoral education, embodied in the pastoral areas and cultural backgrounds, educational goals, educational system, educational content, teaching materials, teaching methods, teaching language, teachers team, as well as the flow of the diversity of graduates.

3. Theoretical Construction of Freedom and Pluralism Education in Pastoral Areas

3.1 *The Concept Interpretation of Freedom and pluralism Educational Theory in Pastoral Areas and Its Relations with Collective, Pluralistic Educational Theory in Pastoral Areas*

"Freedom and Pluralism educational theory in pastoral areas "was inspired by American sociologist Gordon's "Liberal pluralism" It emphasizes the pursuit of individual rights should not be subject to ethnic identity and other forms of influence, on a voluntary basis of equality to maintain a unified ethnic culture, taking into account the cultural characteristics of minority groups.

3.1.1 A Concept Statement of Freedom and Pluralism Educational Theory in pastoral areas

Combined with China's national conditions, takes into account the actual pastoral education. The author holds that freedom and pluralism education in pastoral areas is, in the background of pastoral community to explore the nature of inter-ethnic relations among various ethnic groups, Han, Tibetan, Mongolian, Yugur, Hui, Manchu, Tu, inhabited in Imperial Town, to expand and balance the development of educational opportunities, to tap the potential development of education in pastoral areas, and to enhance the capacity of educational development in pastoral areas, based on voluntariness and equality, to develop the pastoral education, through social general standards in pastoral areas, to narrow the gap of educational development between pastoral regions and other regions, as advocated by the education welfare policy, not only with reference to the disadvantaged status of pastoral economy and education development, but also should consider the actual performance of their own endogenous development in pastoral areas.

3.1.2 Relations between Freedom, Pluralism Education and Collective, Pluralism in Pastoral Areas

Difference between the Two: collective diverse pastoral education in pastoral areas to the right of education as the starting point, and identity as the pastoral nomads education an important factor in the results achieved to political power and economic benefits in accordance with a certain formula (the case of many preferential policies) for the distribution of educational outcomes in order to concern the development of exogenous characteristics; free multicultural pastoral education in pastoral areas is the starting point for the rights and responsibilities of education by combining the fruits of education was based on the development of education in pastoral areas. Efforts are to tap the potential development of education in pastoral areas, the adoption of universal standards for society to allocate educational outcomes.

Contact: Being an advanced stage of the multicultural education theory, liberal pluralistic educational theory in pastoral areas is set up on the collective pluralistic educational theory, the two are complementary relationship. Liberal pluralism originated in the theory of pluralism unity, which derived from diversified theory, resulted from the assimilation theory. The development of ethnic relations the first three stages are the starting point to comply with the principle of equality of the process of equality or equality of results. In the pursuit of equal rights, the use of means of pluralism based on the collective, that is, access to education to ethnic identity compensation. Liberal pluralism stage of development is to emphasize the efforts of individual ethnic groups in the development of ethnic education, the adoption of common standards to society to narrow the gap with other ethnic groups.

3.2 *The Basis of Theoretical Models of Freedom and Pluralism Education to build in Pastoral Areas: Equal Opportunity and Endogenous Development of Multi-Ethnic Culture in Pastoral Areas*

All nationalities in the common cultural background, inhabited in the Imperial Town include Tibetan, Mongolian, Hui, Yugur Tu, Manchu and Han, different peoples learn from others, absorb each other's outstanding culture, but also maintained a fairly stable characteristics of the ethnic, as well as their education system, content and teaching methods. Result in a complex web of ethnic relations and education in the diverse nature of ethnic culture. Pastoral areas of the unique geographical location, and shape the development of animal husbandry production, language diversity, the thought concept of herdsmen, pastoralists' religious diversity determines the specificity of education in pastoral areas. How to make rational use of the favorable factors in pastoral areas, such as the natural ecological environment and human environment and to avoid negative factors on a voluntary and equal basis, the development of potential education in pastoral areas, overall planning of education and human development, education and community

development, promoting liberal pluralistic harmony education for sustainable development in pastoral areas are the core problems of the pastoral school reform - school-based curriculum construction that needs to be considered.

3.3 *A Theoretical Model of Freedom and pluralism Education in Pastoral Areas*

Insert Figure 5 Here

In the double background of both the mainly Han culture in the national common culture and multi-ethnic culture in pastoral areas, pastoral education reflected in the specificity of two aspects, one for "pluralism"; second as "freedom." "Pluralism" has been expressed above, this will not repeat them. "Freedom" mainly refers to equal educational opportunities in of development in pastoral areas. A concrete manifestation of the provisions of the aims of education in pastoral areas, the establishment of the educational system, educational content screening, preparation of teaching materials, teaching methods, integration of teachers staff and the flow of the graduates etc., in the following parts, the author to SunanII school-based curriculum construction as an example, to elaborate connotation and denotation of the freedom and pluralism education theoretical model in pastoral areas.

3.3.1 Pastoral Education Goals

Sunan No.2 school-based curriculum materials to improve the overall quality of students, promote professional development of teachers, to win recognition of community support, to promote the comprehensive school reform for the overall objective. Their educational objectives in pastoral areas of freedom embodied in the pastoral areas to adapt to the unique natural ecological environment of the premise, from the ethnic cultural tradition, and give full play to SunanNo.2teachers, students, school leaders and the masses of the main pastoral areas, and to rely on its own strength, to find the goal of educational development, and create various opportunities for the development of education, the establishment of pastoral circulation mechanism of self-education, build a sustainable development of education in philosophy.

3.3.2 Pastoral Education system

The composition of School-based curriculum R & D is team of experts, students, local government agencies, educational institutions (such as Sunan County Education Bureau, Sunan County Yugur Cultural Research, Imperial Town of Education Administration Committee, etc.). Their freedom reflected in: a multi-level multi-disciplinary research team composition, especially the relevant government departments at all levels of policy-makers and the depth of participation of the implementers, school-based curriculum for the successful construction of the guarantee provided by the organization, taking full advantage of the local human resources for innovative, sustainable research.

3.3.3 Pastoral Education Content

School-based curriculum materials for students comprehensive quality education through livelihood education, environmental education and innovation in education so that students recognize the homeland, recognize the local ecological environment, enhance environmental awareness, and enhance social responsibility; for students to master basic life skills, the actual exercise capacity, civic awareness of Hometown Service. In view of this, school-based curriculum is the core of the concept of "people-oriented", emphasizing student-centered, research and development of students' creativity, improve their practical ability, which is to create dynamic endogenous pastoral areas. Animal husbandry skills grasped so as to achieve economic, social harmonious development in pastoral areas.

3.3.4 School-Based Curriculum Materials Planning, Teaching Methods and the Use of the Medium of Instruction

SunanNo.2school-based curriculum includes three volumes: Volume I, Recognizing our homeland (Trial version for the seventh grade), the second volume in the Protecting our homeland (Trial version for the eighth grade), the third volume to Building our homeland (Trial version for the ninth grade). In the teaching schedule, the seventh grade focuses on the comprehensive identification of the capacity of the eighth grade focus on a comprehensive analysis of the ability to focus on ninth grade, the ability to explore and practice. Accordingly, the teaching content of the logical framework is in accordance with the "Recognizing our homeland - Protecting our homeland - Building our homeland" as the idea of scheduling, teaching materials from the student's life experience to start. Design is closely linked with student life, and operational activities, to stimulate student interest in learning, so they were happy to participate in the learning process to, in order to keep the protection of homeland and building a homeland of their ability to work hard. School-based curriculum based on "learner-centered, activity-oriented, group cooperation, equal participation," the basic concept. Completion of interviews, questionnaires etc., school-based curriculum materials from point of view of the comprehensive planning, flexibility in the use of teaching methods and the use of teaching bilingual recommended, these three dimensions to enable teachers and students to add life experiences, feelings, ideas to the curriculum resources or in teaching process of dynamic generation, thereby increasing the acceptability and fun of school-based curriculum materials, and effective teaching in the interaction generated in the communication in advance.

3.3.5 Teachers Constitute

Teachers are basic conditional resources for the construction of school-based curriculum. Teachers in the course of school-based curriculum materials compiled and curriculum implementation play an important role. School-based curriculum concerns are integrated capabilities of students, and students are to rely on the quality of the development of strong professional teachers, so the building of teacher staff is essential. With the school-based curriculum materials to complete, the school will recruit local knowledge experts, ethnic elite, and animal husbandry production technical personnel, veterinary and wool traders etc., walked into the classroom, to develop students on the relevant professional skills, such as animal husbandry production knowledge. To take full advantage of existing resources in pastoral communities reflects the freedom of the school-based curriculum to build.

3.3.6 The Flow of Graduates

SunanNo.2 can be admitted to Senior high school and finally into the university students only 10 percent of the total, around 90 percent of the students have to come back to work for building homeland, the workplaces for those who go out working have traditional catering services, also have some house demolition, loading and unloading, road construction and so on. Construction of school-based curriculum is designed so that most students who can not enter higher school master basic life skills of modern livestock production and environmental protection knowledge, improve the pastoral areas of population structure, improve the quality of the population in pastoral areas, change the past passive situation, some people can grow into animal breeding experts, processors of animal products, livestock managers, veterinarians, ethnic singers, tourist attractions guide, eco-environmentalists and other industry experts, for the protection of ethnic traditional culture and contribution for the construction of a better homeland.

3.4 The Importance of Theory Building of Freedom and Pluralism Education in Pastoral Areas

3.4.1 To Carry out, in the Introduction from Abroad Theory, an Independent Study of the Theory Construction of Native Thought and a Positive Attempt to Explore Methods

The academic significance of liberal pluralism educational theory in pastoral areas of is that it is from the minority educational practice - school-based curriculum structure ethnographic field work to be abstracted and summarized, at the same time a profound analysis of the West to explore national social ideology behind the stage of ethnic relations of development theory, combined with China's national conditions, to study the practical case in pastoral areas, the development of a freedom and pluralism educational theory in pastoral areas, as an independent construction of the domestic local educational theory created the exhibition of new research ideas and methods.

3.4.2 To Promote ethnic Relations in the Further Integration of the Basis of Equality

Imperial pastoral areas are Tibetan, Mongolian, Yugur, Hui, Tu, Manchu and Han nationality inhabited places. Various ethnic groups has long been stuck with the traditional way of life, with meadows the border issue herdsman and farmers will be in trouble occasionally after drinking, but there has been no major conflicts and contradictions. In recent years, with further development of the economy, school education, animal husbandry, community and family education has become increasingly prominent manifestations of the ethnic group lies in the individual child in the home of the ethnic traditional culture, a little older, in the community of all ethnic groups feel multi-culture, school-age children in school to receive a single Han culture, distinction of the three are the causes of contradiction. Construction of school-based curriculum on the one hand, be able to protect the heritage of all ethnic groups in traditional culture, for the creation of employment opportunities for minority children, to enhance skills for the protection and construction of their own homeland; on the other hand, teachers and students of all ethnic groups improve pastoral masses equal participation and cooperation of dedicated, to enhance its degree of integration of ethnic relations.

3.4.3 To Solve the Bottleneck Problem in Pastoral Education, to Promote Economic, Social and Cultural Development by Education of the Western Pastoral Outreach and to Find New Thought-Line of inner Dynamism Development.

A long time, because of their geographical location in pastoral areas, livestock production patterns, pastoralists' ideas, concepts, language and religion constitute the specificity of education in pastoral areas, revealing the growing problem of its bottleneck. How to drive economic development with improving education level in pastoral areas, how to exert the main body of the local herdsman, and to rely on its own strength, to find educational, economic and social development of a new growth point, are of importance for developing pastoral education. School-based curriculum to build fully integrated human resources improves the utilization of local human resources, stresses the importance of endogenous human-centered development, the western pastoral outreach to seek for inner dynamism development.

3.4.4 To raise a practical and sustainable paradigm of school-based curriculum, which could be used for the local school-based curriculum construction in regions where share the similar economic and cultural patterns with the sample spots.

Construction of school-based curriculum strategies and channels are of varieties. School-based curriculum development based on restructuring of local economic patterns, which is in line with the people in ethnic minority areas of the natural,

social harmonious development. Adopting participant research paradigm in the construction of local curriculum, and respects the mastership of local people, multi-curriculum construction in pastoral school enhances local people's self-confidence, equips them with creativity and acting ability as well as ability to upgrade their subsistence by the cooperation between external specialists and local people. They will help the reform and development of education and local society by providing suggestion to the construction of curriculum based on their knowledge about the regions. The way to school-based curriculum is to build a snowball-type to become bigger and stronger, for the western pastoral areas to provide a sample example of the development of education and guide to practical action.

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Notes

Note 1. They are "Assimilation", "Pluralism", "Pluralistic Integration", "Freedom and Pluralism".

Table 1. Cultural Interaction between Ugur nationality and Han nationality

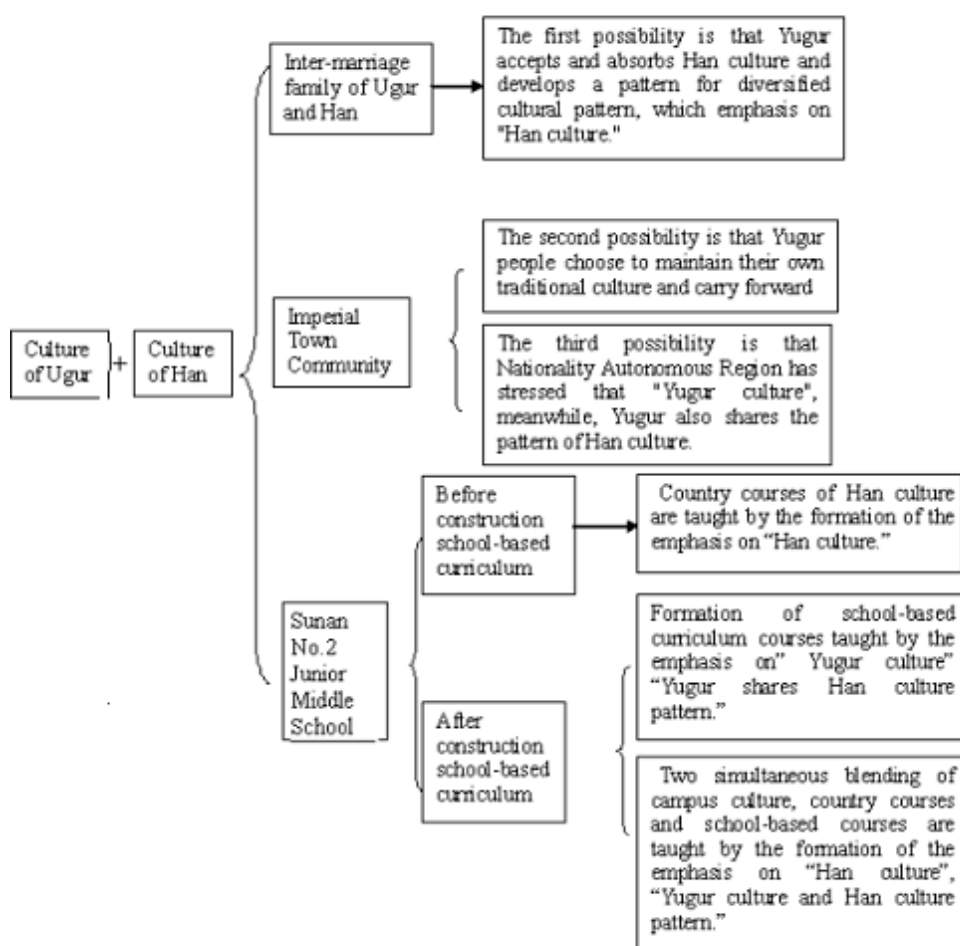




Figure 1. Proportion of Categories in Imperial Town Economic Patterns

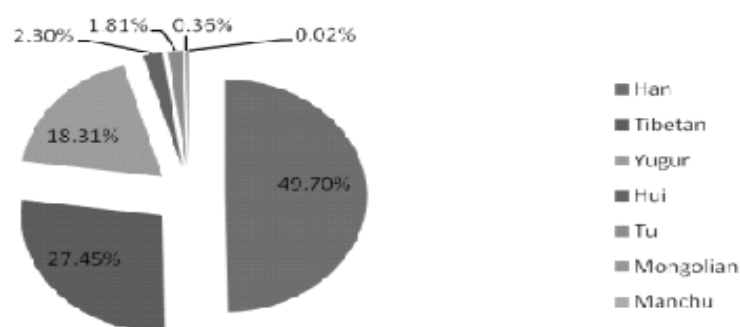


Figure 2. Statistical Demogram in Imperial Town



Figure3. The External Factors That Affect the Specificity of Pastoral Education

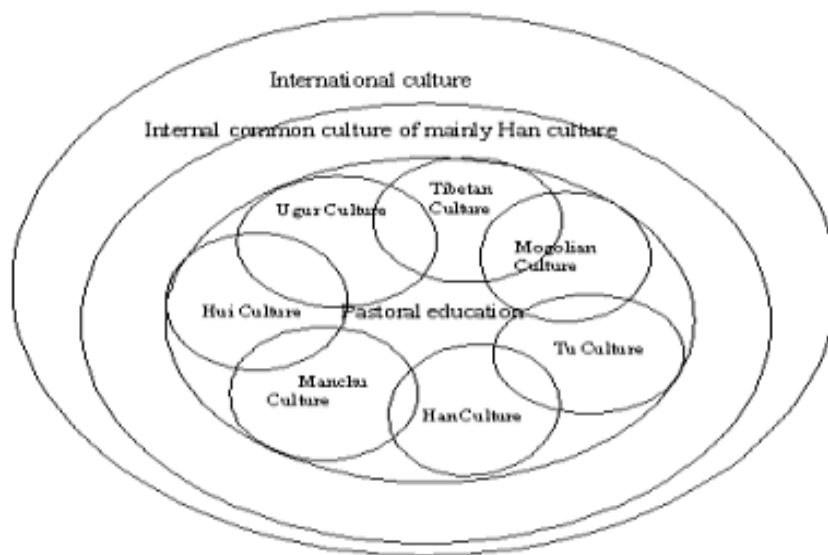


Figure4. Cultural Constitute Factor Analysis of Pastoral Education

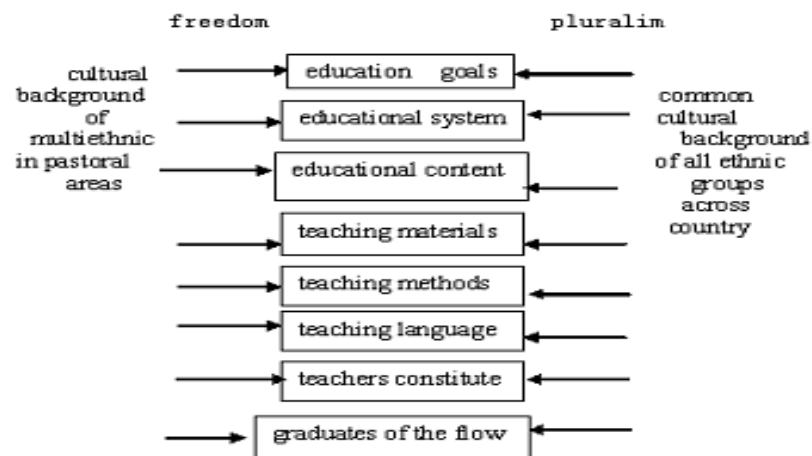


Figure5. Theoretical Construction of Freedom and Pluralism Education in pastoral areas



Stimulate Students' Interest by Genetics Exordium Teaching

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Abstract

Genetics is the important specialized course of bioscience and whether exordium is taught wonderfully or not plays the important and pivotal role. Well teaching exordium class may stimulate students' deep interest and intense desire for knowledge in this class. This text, according to teaching experience and taste, puts forward several teaching measures about genetics exordium class.

Keywords: Stimulate, Genetics exordium, Teaching

1. Introduction

Genetics is one of important biology basic courses, it is very important to many other subjects, and it develops quickly with the appearance of new knowledge and new technology. The molecular genetics field develops more quickly. However, many students are terrified by the sight of the subject because it is a specialized course with abstract and difficult knowledge. Well then, how to inspire the students' learning interests and make the students enter into genetics world full of confidence and enthusiasm? One good introductory class is the key for students to open the door of genetics. Exordium is the outset of one subject and also the reduction of one subject and the part that explains the whole text's major idea and contents and so on. Seen apparently, introductory class is easy to teach and students may understand it, so that the teachers will not pay attention to it and only repeat what the books say and mention lightly. However, in the course of teaching, the penman deeply realize the importance of well teaching introductory class, because whether the introductory class is taught wonderfully or not immediately concerns the students having leaning interests and intense desire for knowledge or not to this subject, and plays an important roll for the students well learning the subject or not. To the teachers, if the teaching contents of introductory class are abundant, with picturesque language, close to our real life and full of enthusiasm, he can firmly attract his students to his teaching and build good foundation for his future teaching work. To the students, the teaching value of introductory class mainly lets the students well prepare for the genetics.

Genetics is one of the important professional courses for the students who major in biology in the universities and colleges and has an important meaning for the students' leaning of further courses and employment. But most of the students do not attach importance to the leaning of introductory class and consider that the introductory class only teaches the professional history and developing direction and are not involved with the practical theoretical knowledge. Actually, the introductory class of one subject is very important and it not only teaches the students the main research contents of this subject, but also makes the students preliminary understand the twists and turns on the scientific development, so that it inspires the students' learning interest and the ideality of the students dedicating to science. Therefore, introductory class combines science, knowledge, interest and imparting knowledge and educating people in performance. Well teaching introductory class, the teachers not only have sound professional knowledge and but also have encyclopedical history of science knowledge and scientific philosophical thought. Thereby, how to well teach the introductory class of genetics deserves each genetics teacher to strive and explore. After many years' practice of genetics teaching, the penman considers that the introductory class is well taught from the flowing aspects.

1. Understand the having-studied courses and teach the students with students' having learned knowledge

Understanding the students' having learned knowledge and introducing the genetics knowledge on the basis of students' having learned knowledge, the teachers make the new knowledge and old knowledge well linking and fuse and also make the students more comfortable enter the learning of new knowledge. For example, the teachers simple retrospect the having learned types A, B and O system knowledge in physiology, and then introduce the decisive role of gene to blood type and the correlation between genes of deciding types A, B and O system and the genes of other blood types. For instance again, the students have learned that sickle cell anaemia is because one amino acid on the polypeptide chain forming hemoglobin is replaced by another different amino acid in nature, however what is the essential reason? It is as a result of genetic change. How the gene is changed? What is the difference of genetic phenotype in different

conditions (under the condition of enough oxygen and absence of oxygen)? By reviewing the old knowledge to introduce the new knowledge makes the students eliminate strange feeling and accordingly makes the students, to follow as a matter of course, have familiar feeling to the new knowledge which is to learn and at the same time full of the design for studying.

2. Elaborately design and inspire the students' learning interest

To the exordium of new subject, the teachers must elaborately design and consequently obtain reasonable teaching effect and lay the groundwork of the future teaching. To the teaching of introductory class of genetics, the teachers introduce it from the students' familiar genetic phenomena and make them deeply think about the nature and reason of these genetic phenomena and consequently inspire students' interest to genetics. For example the reason of hen's crow phenomena, the teachers may let the students to answer whether this phenomena is relevant to genetic substances; for instance the teachers may preliminary introduce the knowledge of gender self regulation of bee swarm and the bearing ability of female bees, so that the teachers guide the students to think about the inner reasons and give mouth to the relation between this phenomena and genetics; for example the relation between corm gender and gene also makes the students have interest to genetic reason. Where there id interest, there is momentum. It has an important meaning to express the born hidebound scientific knowledge through simple and interest measures and to give play to thinking initiative of the students to the subsequent learning of genetics.

Teaching language is the language that is used in the teaching courses by the teachers, and it is both the carrier of transferring knowledge and information and the model of forming and improving the students' language cultivation. The good teaching language not only accurately and clearly transfers the teaching information and makes the knowledge inpour into the students' heart like a delicate water fall, but also livens up classroom atmosphere and inspires the students' learning interest; on the contrary, old-fashioned, bald and dull language will make the students drowsy and lacking in interest and even the teachers themselves feel distasteful (Wu and Bai, 2007). The partial contents of genetics exordium are very abstract and difficult for students to understand, and at this time the teachers should use vivid language to help and school the students to apprehend and absorb the knowledge. When teaching the exordium, the teachers may put forward the doubt that accords with the students' psychology to arouse the students' interest. Through these vivid language boost up the cognition to genetic substance and produces the dense interest to genetics.

The students are the main body of learning and the teachers are the aid and promoter in the course of students learning. The reasonable measures sometimes gain the effect of getting twice the result with half the effort. Therefore, the teachers still introduce the measures of learning genetics in the exordium of genetics course and show clearly the approach of well learning the genetics for the students and make a fine start to their future teaching work.

3. Define the research subject and task of genetics

Any of the subjects has its own research subject and the premise of separate subject. Genetics is one abstract subject referring to life origin and biological evolution and is also the basic science closely integrating with practice and it directly guides medicine research and the breeding of vegetables, animals and microorganism. In the objects of the microorganism (bacilli, epiphyte and virus), vegetables, animals and human being, it researches their rule of heredity and variation. The task is to clarify biological genetics and variation phenomena and to guide the breeding of vegetables and animals and microorganism and to improve the medical standard. Defining the research target and task of genetics makes the students have a definite aim to learn genetics, so that the students may sort out my thoughts and be favorable for receiving the new course and forming their owns' learning measures.

4. Teach the developing history and inspire the students' learning passions and make the students gain revelation.

Genetics is one subject of researching the basic property and disciplinary of life and has the close relation with industrial and agricultural production and becomes the pervasive object of each subjects, so that thought is very active in this research field and all points and genres are always existing (H. Stubbe, 1981). Genetics history is one subject history of science history and is the history of researching the objective laws of inheritance and variance and changing biological properties by using discipline. In the international genetics convention held in Ontario in 1988, the chairman of the convention, Prof. R. H. Hayne s said that: "genetics is the throat and heart of nature history" (Wang, 1998). Looking back the evolvement of each theoretical hypothesis in the history of genetics history, the reasons are analyzed from thoughts and measures, which is very meaningful to train the scientific and technological qualities of the students.

G. Mendel, the Austria scientists, through pea cross experiment, published "vegetable cross experiment" and put forward the concept of genetic factor and discovered regularity of segregation and law of independent assortment in 1866. But then, till 1900, Mendel established the segregation principle and independent allocation method was rediscovered, so that the year of 1900 was ordered as the genetics naissance year and Mendel was honored as "the father of genetics" and genetics was more than one hundred year from naissance. The reason for Mendel discovering the two basic laws of genetics and having the ability to surpass predecessors and science was that he had splendid scientific

research ability and quality. Mendel's successful reason rested with him choosing the appropriate experiment materials and exercising statistics methods and simplifying the research problems; at the same time, in experiment, Mendel was serious in attitude and fertile in practicality. In order to assure the exact experiment result, Mendel carried through many times repeated tests almost eight years later and he also carefully observed and recorded the synoptic change and variance phenomena. He was talent experimenters (Yang and Zhu, 1995). There were many revelations from Mendel experiment.

In 1910, T. Morgan published the first gene localization thesis and discovered gene linkage exchange phenomena in 1911, paving the way for chromosome heredity theory. In the following 15 years, Morgan and his students H. J. Muller, A. H. Sturtevant and C. B. Bridges carried through sets of wonderful experiments, especially had the new thoughts combining the recombination value of linkage gene with the distance on the chromosome, which was the very splendid fruits for biology research. The work of each scientist in Morgan experiment was closely linked and relatively independent. Muller was adept at designing exact experiment; Bridges was splendid cytologist and very sensitive to subtle change of chromosome structure; the strong point of Sturtevant was mathematics and statistics; Morgan was the tutor and the academic leader of analyzing results, putting forward problems and confirming the main attack. The scientists who had complementary capability and consistent aims gathered together and formed "fist" and made great contribution to the development of genetics (Fu, 1987). Many years later, Sturtevant remembered that: "this collectivity was a whole and each person did his own experiment, however they each other quietly understood the research progress. Each research fruit was freely discussed and they were never caring for whom initially putting forward the new thought and design, hypothesis and explanation. What they were caring for was how to promote the work. They had too many work to do and thoughts to validate and technology to develop and establish. The experiment that was so harmony and stirring was not common at that time (Gao, 2002)." Morgan also originated publication and edited books and made the genetics research tend towards systematization, theorization and signification, which indicated that the research of genetics theory came into new stage. At the same time, Morgan attracted the talents and absorbed large numbers of excellent researchers who made great contribution to the development of genetics. Morgan considered that the scientists not merely compete with each other but also communicate with each other. Morgan was very modest and the 100-compatible thoughts and responsibilities of cultivating scientific talents advocated by him was still meaningful to the researchers who were engaged in biological science.

Many scientists had once considered the question: "why the person that discovered DNA double helix structure was F. Crick and J. D. Watson? One of them was struggling for writing doctoral dissertation and another was merely 25 old. Why R. Franklin who owned x-ray diffractions photo did not discover it, however Crick and Watson made a great coup after watching her photos? Why L. Pauling who had deeply studied the structure and barely illustrated protein helix structure was left behind in this competition?" Looking back the developing history of DNA double helix, the following aspects had the educational meaning: the benign quality and successful cooperation; informative news and occupying the important materials; correct thought and the methods of using science. PCR technology was designed according to the characteristics of DNA duplication and the quickly expanded special DNA sequence in the exterior and was widely used in all the fields of gene research, so that was honored revolutionary technological breakthroughs in the fields of molecular biology. The PCR technological principle was simple and why Mullis thought of it? K. B. Mullis who discovered PCR technology was a legendary figure in science history and deep mathematical foundations made Mullis's thought very sharp; self-education made him free of inherent thought pattern; the three aspects, such as making a showy display of one's abilities and daring to achieve his own thoughts and regardless of someone else evaluation, made Mullis bold enough to make his own work. The integration of the three aspects apparently answered the doubt of many people (Chen, 2002). Thus it can be seen, the scientists who made great contribution to the scientific development had their own special scientific thoughts and opinions. These thoughts were seen at the scientists' thought, understanding and cognition in his research field and his explanation to the creative work.

Through introducing these examples, they can school and inspire the students rising in great vigor and the glory of his country. The aspects that may enlighten and inspire the students, inspire their dense interest to genetics and even produce the beautiful wish of engaging in the genetics research, were their profound knowledge and insight and the spirits and noble qualities of bravely practicing, regularly thinking, dedicating to the humans.

5. Integrating with reality and emphasizing the application of genetics

The contents on the status and the developing foreground of genetics in the genetics exordium refer to hot topics and binding problem in the field of genetics research. Genetics is the basic science of life science and is closely related to the development of agriculture, forestry, animal husbandry, fishing, industry fermentation, medical care, pharmacy and national defenses and embodies the relation between theory and industrial practice. The national rice achieved the "three-line" matching in 1973; for the first time, indica hybrid rice was developed in the world and the transformed variety including corn, soybean, cole and potato were planted in large areas. At present, the research that transforms the human gene to pig made great contribution to cross species organ transplantation; the research to transgenic mice had

the important meaning to cure some genetic diseases. The genetics has a very close correlation with pharmaceuticals, and the pathogeny of many frequently-occurring diseases, such as transmissibility diseases, knob, high blood pressure, asthma and diabetes, are genetically related. The research result of objective gene treatment, antisense RNA technology, RNA interference etc. treatments shows great future. Genetics has a very close relation with society and law, such as the influence of pollution to gene and chromosome and paternity testing and so on.

Before the students learn the genetic knowledge, explaining the hot topics of genetics research should emphasize particularly on the exordium of examples. On the lecture of art, completely using advantages of lively simile and multimedia teaching inspires the students' curiosity and thirst. With the aid of multimedia teaching excellent in both pictures and texts characteristics, the teachers exhibits the operation of genetically modified organisms and the naissance process of Dolly, the cloned sheep etc. contents to the students. In a word, the teachers should try the best to avoid the explanation of profound theory and emphasize particularly on the practicability and interesting. In the class of genetics exordium, the teachers should teach the relation between genetics and industrial and agricultural production and make the students definite the important meaning of well learning genetics, such as the purposes of learning genetics, tasks and meaning, encourage the students to well learn the genetics and to reach the anticipative teaching effect.

In conclusion, the teaching of genetics exordium opens up another door to the field of life science to the students. However, the teaching that in deed does this and brings the students to the sea of life science knowledge is not an easy thing. It not only requires that each teacher exercises the mind and explores the effective teaching methods, but also requires that each teacher continuously improve his own qualities, enrich his own learning and understand the hot topics of genetics development and research. As the saying goes, good beginning is half done, and because the genetics exordium as the first class for students to contact genetics, its function is self-explanatory. If the teachers make the students definitude study object and contents and inspire their learning interest to genetics, it will be very helpful to their future teaching work.

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Emotional Intelligence of Malaysian Academia towards Work Performance

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Abstract

This paper describes the research conducted in relating to emotional intelligence of university staff to work attitude. The Emotional Intelligence (EI) Scale devised by Schutte et al. (1998) is used in this study, which is more suitable compared to BarOn Emotional Quotient Inventory. Beside their experiences, knowledge and skills, emotion play an important role in pushing individual to produce and perform the best. Emotion is critical in motivating, persuading, communicating, leading and controlling individuals and groups. The role of EI in employees' work attitude has not been explored in-depth especially in higher institutions which rather focus EI on students and their academic performances. Quantitative method is adopted and questionnaires are distributed among academics and middle-management employees using simple random sampling. The questionnaire has been designed to assess how effectively individual deal with emotion. The findings of this empirical study would highlight the importance of EI in university and give details on EI factors that influence the work attitude among employees. The t-test, correlations and multiple regressions were used to analyze the data. The findings found that EI is positively related to work-attitude. Appraisal and expression of emotion are moderately correlated to job performance and job satisfaction.

Keywords: Emotional intelligence, Work attitude, Job satisfaction, University staff

1. Introduction

Most of literature review viewed emotional intelligence as a factor which has a potential to contribute to more positive attitude, behaviors and outcomes. Schutte et al (1998) cited "evidence exists that emotional intelligence can be conceptualized as either ability (Ciarochi et al, 2000; Mayer et al., 1999) or a personality trait (Schutte et al., 1998). Emotional intelligence is the ability to use emotions adaptively (Salovey & Mayer, 1990 and Mayer et al., 2000). Bar-On et al. (2000) viewed emotional intelligence as a non-cognitive intelligence which is defined as an array of emotional, personal and social abilities and skills that influence an individual's ability to cope effectively with environmental demands and pressures. The success of practical workplace application involving the emotional intelligence and the results of empirical research investigating the relationship between emotional intelligence and crucial work-related factors suggest that emotional intelligence of employees is an important aspect of organization (Goleman, 1995; Carmeli, 2003). Goleman (2001) found that emotional intelligence is positively related to job performance. A study conducted by George (2000) showed that aspects of emotional intelligence contribute to effective leadership. Job satisfaction is considered as a proxy for employee's well-being at work (Grandey as in Carmeli, 2003). Smith et al. (1969) suggested that job satisfaction is positively related to construct of emotional intelligence. Emotion regulation had unique predictive power for affect and job satisfaction for the younger age group (Kafetsios &

Loumakou, 2007) when survey was conducted on 475 educators in Greek. Carmeli et al (2003) and Schutte et al (1998) found a positive relationship between emotional intelligence and work attitude. Research suggests that people with high level of EI lead more effectively (Caruso et al. 2002; Barling et al. 2000; and Rosete & Ciarrochi, 2005 as in Dimitriades, 2007); are efficient job performers (Abraham, 2000; Carmeli, 2003); engage in organizational citizenship behaviors (Carmeli, 2003); feel satisfied with their job (Carmeli, 2003) and committed both to their career and to their employing organization (Carmeli, 2003). In short, EI is strongly linked to work-attitude especially job performance and job satisfaction.

This paper describes the research undertaken with a sample of Universiti Teknologi MARA (UiTM) staff, comprising academics and non-academics. The purpose of this study was to examine the relationship between emotional intelligence and work attitudes in the university setting. The university's environment today is very challenging and demanding due to changes of policies and the increasing standard and expectation of education in Malaysia. On top of that, the staffs especially lecturers, not only need to focus on teaching but also to embark on research and consultancy as well. Due to these pressures, it is important to explore their managerial skills – particularly the emotional intelligence of these staff in order to identify their capabilities as they are the main resource of the university in producing better and highly qualified graduates. Most of EI surveys were conducted among students and managers in private firms. Survey on university staff especially academics is rare. In all universities, human capital is an important intangible asset.

2. Methodology

2.1 Questionnaire survey

The emotional intelligence (EI) scale devised by Schutte et al (1998) was administered to university staff – academic and non-academic. The scale consisted 33-items used a 5-point Likert scale to measure EI on three main categories. 5 items of job performance adopted from Pearce and Porter (1986) and 5 items of job satisfaction adopted from Tsui et al (1992) are used to measure employee's work attitude (Carmeli, 2003) using 5-point Likert scale. All items were ranged from 1 = strongly disagree to 5 = strongly agree. After scale purification, 23 of the initial 33 responses were summed and averaged to obtain overall EI score. Appendix I show the questions asked in the questionnaire survey.

2.2 Development of hypothesis for emotional intelligence and work attitude

Goleman (2001) found that emotional intelligence is positively related to job performance. A study conducted by George (2000) showed that aspects of emotional intelligence contribute to effective leadership. Job satisfaction is considered as a proxy for employee's well-being at work (Grandey as in Carmeli, 2003). Smith et al., (1969) suggests that job satisfaction is positively related to construct of emotional intelligence. Emotion regulation had unique predictive power for affect and job satisfaction for the younger age group (Kafetsios and Loumakou, 2007) when survey was conducted on 475 educators in Greek. Carmeli et al (2003) and Schutte et al (1998) found a positive relationship between emotional intelligence and work attitude.

H1: Emotional intelligence is positively related to work attitude: Emotional intelligence and demographic (gender, age, tenure of experience). With both males and females generally have equivalent abilities to develop their emotional intelligence (Fatt, 2002 as in Dimitriades, 2007), men and women as groups tend to have a shared gender-specific profile of strong and weak points (BarOn, 1997). Specifically women are more aware of their emotions, show more empathy and are more adept interpersonally (Fatt, 2000 as in Dimitriades, 2007) whereas men are more self-confident and optimistic and can handle stress more effectively.

H2a: Female gender is estimated to be positively correlated with emotional intelligence and work attitude.

Employees who have been with their employing organizations for a long time are more likely to develop a rich understanding of customers' varying expectations and needs (Carmile et al, 2003).

H2b: A positive relationship is hypothesized between duration of service and EI and Work Attitude.

The age of participants is strongly related to higher Emotional Intelligence and work performance (Higgs, 2004).

H2c: Emotional intelligence and Work Attitude are positively associated with age

This study was conducted in Universiti Teknologi MARA Johor. 200 questionnaires were distributed but only 127 (60%) questionnaires were returned. The summary of the respondents is described in the Table 1 below:

<<Table 1. Summary of respondents surveyed in the study>>

3. Results and discussions

Table 2 showed the descriptive analysis of the respondent sampled during the survey.

<<Table 2. Descriptive Statistics of All Principal Constructs (N = 127)>>

The mean scores of all variables are high. There is no low level of mean scores. The high mean scores implicate that respondents agree that all variables influence the work attitude. Among the independent variables, utilization of emotion

and appraisal of emotion have more influence towards work attitude. Even though the rest of knowledge management activities are moderately high, their mean scores of more than 5.00 imply that these variables are important because they may influence work attitude and organizational effectiveness to certain degree.

Finally, the standard deviations for all variables seem to fall between the ranges of 0.667 to 1.079 which simply reflect the existence of considerably acceptable variability (0.648) within the data set. The variation value indicates that all answers on the study variables were substantially different from one respondent to another, thus signified the existence of tolerable variances in responses.

For the 33-item scales the reliability is 0.826. Previous studies reported 0.84 (Austin et al., 2004), 0.89 and 0.90 (Schutte et al., 1998) and 0.93 (Dimitriadis, 2007). The reliability test of each category is shown in Table 3.

<<Table 3. Reliability test>>

Briggs and Cheek (1986) recommend that optimal range for inter-item correlation of 0.2 to 0.4. Overall alpha values are more than 0.7 which is considered reliable with the sample (Pallant, 2001). In Schutte et al (1998), model EI is suggested as a “homogenous construct” based on two arguments; first, there are alternative operationalization of emotional intelligences to the ones provided by Salovey and Mayer (1999) model and secondly, the model was represented by a limited set of self-report items. Alternative items or an assessment technique other than self-report might show more specific factors. Therefore exploratory factor analysis (EFA) was undertaken to examine the dimensionality of EI with present sample. Principal Axis Factoring with oblique rotation was performed, in line with recent methodological arguments (Dimitriadis, 2007). Frequently used measures to assess the appropriateness of factor analysis are the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity which provides the statistical probability that the correlation matrix has significant correlations. KMI was .719 and Bartlett’s was significant at $p < 0.001$ (approx. Chi-Square = 1548.974, $df = 630$) indicating that the sample was suitable for factor analysis procedures. Due to the exploratory nature of the analysis, the latent root criterion (eigenvalue-greater- than-one rule) was employed for extraction of factors where only variables loading 0.5 or above were used for factor interpretation (Hair et al., 1998). The results are shown in Table 4.

<<Table 4. Factor analysis>>

Communalities below 0.50 are considered “too low for having sufficient explanation” (Hair et al, 1998). Therefore, 10 items were removed from subsequent analysis. As guideline, an alpha value of 0.70 and above is considered to be the criterion for demonstrating internal consistency (Nunnally, 1988). Cronbach’s alpha in this study was 0.747. After eliminating items which did not meet the selection criteria, only 26 items remained which were subjected to another factor analysis. The items loaded on three meaningful factors – factor 1: Utilization of emotions, factor 2: Regulating of emotion, factor 3: Expression of emotion. H1 correlation analysis was tested and found that emotional intelligence is moderately positively correlated with Work Attitude at 0.396 ($p < 0.01$). The overall model explained 48% of variance in dependent variable and this is a significant contribution of $p < 0.00$, $F = 12.375$. Therefore, H1 is supported.

The regulation of emotion does not have any inter-correlation with utilization of emotion and expression of emotion. But regulation of emotion is correlated negatively with job performance and job satisfaction as shown in Table 5. Gender is entered in ANOVA model and marginal means is presented in the Table 6 and 7. Male scored higher than female on both EI ($F = 0.216$, $p > 0.00$) and work attitude ($F = 0.057$, $p > 0.00$). However, there is no significant difference between male and female.

<<Table 5. Correlation Analysis of EI and Work Attitude (N = 127)>>

<<Table 6. Correlation of EI elements and Work-Attitude elements>>

<<Table 7a. Descriptive test of EI, Work Attitude and Gender>>

To test demographic influence on Emotional Intelligence and Work Attitude, an independent-samples t-test was conducted to compare Emotional Intelligence scores for males and females as shown in Table 7b.

<<Table 7b. ANOVA>>

An independent-samples t-test was conducted to compare Work Attitude scores for males and females (Table 8). There was no significant differences in scored for males ($M = 3.95$, $SD = 0.562$) and females ($M = 3.90$, $SD = 0.444$); $t = 0.083$, $p = 0.239$. The correlation between Emotional Intelligence and Work attitude is higher for males = 0.513 compared to females = 0.392 (Table 9)

<<Table 8. EI and Work Attitude towards Gender>>

<<Table 9: EI, Work Attitude and Duration of Work>>

We found no statistically significant gender differences in EI and Work Attitude but male scored higher on both EI and Work attitude. From this test, it showed that men had higher correlation value of 0.513 compared to women at 0.392 (Table 10).

<<Table 10: EI, Work Attitude and Age>>

Age and length of service are not correlated to EI as well as job performance and job satisfaction (Work Attitude) which is contrasted to the study conducted by Kafetsios and Loumakou (2007) and Higgs (2004). Therefore, all H2 are not supported.

Culture could be another reason of low response rate as people are not comfortable to discuss their emotions openly. This is especially among the non-academics. This study is only conducted in Johor branch. As majority of respondents' length of service was less than 3 years, this did not indicate a comprehensive view of the real emotional intelligence among staff. For future research, the study should be conducted for the whole organization to get a better finding.

4. Conclusion

The purpose of this study was to examine the emotional intelligence – component of managerial skills- towards work attitudes in the university setting. Overall, EI was found to be positively related to work-attitude. Appraisal and expression of emotion is moderately high correlated to job performance and job satisfaction. This indicated that the staffs of UiTM Johor are good in leading and managing people whereby utilizing emotions is important for creative thinker, better planner and highly motivated people. This could be due to the fact that the majority of the respondents are serving less than 3 years and age range from 25- 40, a period which they are constantly striving for improvement in their career path. However, the regulation of emotion is negatively correlated to job performance and job satisfaction indicated that when people experiencing a negative affective states, they would feel unhappy therefore unable to produce better performance.

The findings showed that age, length of service, position and experience did not have any impact on emotional intelligence. There isn't any difference between males and females when dealing with work attitude as proven by Langhorn(2004) when he conducted EI survey among general managers. However, when tested EI and Work Attitude together, males showed a higher EI and Work Attitude compared to female. Interestingly, males are better in capitalizing their EI for better work attitude compared to female which the former form the majority of workforce in the organization.

The study implies that organization should provide an adequate conducive environment and training of EI for lecturers. Those with lower EI would affect their work attitude. Females are the majority work force in the university but their EI is lower compared to males. Regulation of one's own emotion and moods can results in positive and negative affective states. These findings showed that staffs are lacking of regulation of emotion when dealing with others and unable to manage their emotion. The aim of this study was to examine the level of emotional intelligence among lecturers and management staff. Emphasizing more training in Emotional Intelligence would help staffs to be more open in expressing their emotions thus will help them to manage their emotions to enhance their performance. The academics are interacting directly with students; therefore being able to positively manage their emotions effectively might result in either positive or negative affective results.

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Table 1. Summary of respondents surveyed in the study

		Frequency	%
Gender	Male	38	29.9
	Female	89	70.1
Age	<25	4	3.1
	25-30	45	35.4
	31-40	49	38.6
	41-50	26	20.5
	>50	3	2.4
Ethnicity	Malay	117	92.1
	Chinese	3	2.4
	Indian	5	3.9
	Others	2	1.6
Position	Assoc Prof	3	2.4
	Senior Lecturer	10	7.9
	Lecturer	99	78.0
	Administrator	10	7.9
	Others	5	3.9
Length of service	< 3 yrs	56	44.1
	3 – 6 years	32	25.2
	7 – 10 years	19	9
	11 – 15 years	9	7.1
	> 15 years	11	8.7
Education level	Degree	15	11.8
	Masters	98	77.2
	PhD	1	0.8
	Prof Qualification	1	0.8
	Others	11	8.7
Work Experience	Only in univ	43	33.9
	Other govt agency	33	26.0
	Corporate	51	40.2

Table 2. Descriptive Statistics of All Principal Constructs (N = 127)

	Mean	Std. Deviation
Regulation Emotion	5.81	.667
Appraisal Expression	6.33	.742
Utilization Emotion	6.35	.685
Job Performance	6.86	1.041
Job Satisfaction	6.88	1.079
EI	6.16	.557

Table 3. Reliability test

	Cronbach's Alpha	N of Items
Emotional Intelligence	0.740	36
Work Attitude	0.848	10

Table 4. Factor analysis

Item	Communalities	Factor Loadings
EI1	.720	.773
EI2	.550	.502
EI5	.624	.683
EI6	.705	.747
EI8	.571	.669
EI11	.570	.576
EI12	.674	.782
EI13	.758	.552
EI15	.594	.558
EI16	.620	.529
EI17	.627	-.717
EI21	.666	.753
EI22	.626	.687
EI23	.586	.503
EI24	.621	.601
EI25	.651	.725
EI26	.679	.709
EI27	.450	.537
EI29	.689	-.600
EI30	.583	.529
EI31	.660	.774
EI32	.522	.536
EI33	.637	.730
EI34	.574	.523
EI35	.711	.781
EI36	.525	.671

[Scale means 96.375 Scale SD 7.848 Alpha 0.747]

Table 5. Correlation Analysis of EI and Work Attitude (N = 127)

		EI	Work Attitude
EI	Pearson Correlation	1	0.396**
Work Attitude	Pearson Correlation	0.396**	1

** Correlation is significant at the 0.01 level (2-tailed).

Table 6. Correlation of EI elements and Work-Attitude elements

		Regulation Emotion	Utilization Emotion	Expression Emotion	Job Performance	Job Satisfaction
Regulation Emotion	Pearson Correlation		-.086	-.095	-.205(*)	-.199(*)
Utilization Emotion	Pearson Correlation	-.086		.496(**)	.427(**)	.418(**)
Expression Emotion	Pearson Correlation	-.095	.496(**)		.436(**)	.444(**)
Job Performance	Pearson Correlation	-.205(*)	.427(**)	.436(**)		.643(**)
Job Satisfaction	Pearson Correlation	-.199(*)	.418(**)	.444(**)	.643(**)	

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Table 7a. Descriptive test of EI, Work Attitude and Gender

		Mean	SD
EI	Male	3.568	0.3315
	Female	3.540	0.2598
Work Attitude	Male	3.952	0.5626
	Female	3.930	0.4440

Table 7b. ANOVA

		F	Sig
EI	Between Groups	0.216	0.643
	Within Groups		
	Total		
Work Attitude	Between Groups	0.057	0.812
	Within Groups		
	Total		

Table 8. EI and Work Attitude towards Gender

Gender			EI	Work-Attitude
Male	EI	Pearson Correlation	1	.513*
		Sig. (1-tailed)		.000
		N	38	38
	Work Attitude	Pearson Correlation	.513*	1
		Sig. (1-tailed)	.000	
		N	38	38
Female	EI	Pearson Correlation	1	.392*
		Sig. (1-tailed)		.000
		N	89	89
	Work Attitude	Pearson Correlation	.392*	1
		Sig. (1-tailed)	.000	
		N	89	89

Table 9. EI, Work Attitude and Duration of Work

	EI	Work Attitude	Duration of Work
EI	1	.437(**)	.033
Work-Attitude	.437(**)	1	.051
Duration of work	.033	.051	1

Table 10. EI, Work Attitude and Age

	EI	Work Attitude	Age
EI	1	.437(**)	.043
Work-Attitude	.437(**)	1	.149
Age	.043	.149	1

Appendix 1. The instrument questions (The rate is ranging from 1 = strongly disagree to 7 = strongly agree)

No	Emotional Intelligence
1a.	I use my feelings to help to find new ideas
1.	I know when to speak about my personal problems to others
2.	When I am face with obstacles, I remember the times when I was facing similar obstacles and overcoming them.
3	I generally expect to succeed when I am trying something new.
4.	Other people find it easy to confide in me.
5.	I am sensitive to others' emotions and moods
6.	Some of the major events of my life led me to re-evaluate what is important and not important
7.	When I am happy, I see new possibilities
8.	Emotion doesn't have much effect on my quality of life.
9.	I can quickly pull myself together after a setback
10.	I generally don't expect good things to happen.
11	I prefer to keep my emotion private.
12	When I experience a positive emotion, I know how to make it last.
13.	I can make my friends relax when they are stressful.
14	I seek out activities that make me happy
15	I can show people how I am feeling through my "body language"
16	I have little interest in the impression I make on others
17	When I am in a positive mood, solving problem is easy for me
18	I can tell when someone is upset with me
19	I don't usually know why my emotion changes.
20	I don't find that being in a positive mood helps me to come up with new ideas
21	I find it hard to control my emotion
22	I easily recognize my emotions when I experience them
23	I motivate myself by imagining a good outcome on the tasks I take on
24	I compliment others when they have done something well
25	I am aware of the "body-language" messages other people sent.
26	When others tell me about an important event in their lives, I almost feel as though I have I I I have experienced myself
27	When I feel happy, I tend to come up with new ideas.
28	When I am faced with a challenge, I give up because I believe I will fail
29	I know what others are feeling by looking at them
30	I help others feel better when they are down
31	I use good mood to helps myself to keep trying in the face of obstacles
32	I can tell how others feel by the tone of their voices
33	It is easy for me to understand why people feel the way they do
34	I find it hard to stay positive when I get stressed or worried
35	I trust my feeling when I make important decisions

No	Work-Attitude
1.	Overall, my work performance is good
2.	I can get along with anybody in the organizations
3.	I can complete my tasks on time
4.	I achieve the quality of performance as set by my organization
5.	I am able to achieve and fulfill the work performance goals
6.	I always achieve the targets as what I written for my SKT
7.	I am satisfied with the nature of the work I perform
8.	Overall, I am satisfied with my current job situation.
9.	I am satisfied with the quality of performance I delivered
10.	I am satisfied with the my colleagues
11	I am satisfied with promotional opportunities given by my organization



Causes for Ineffective College English Teaching and Relevant Countermeasures

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Abstract

Through a questionnaire and a survey, the paper analyses the present College English teaching and the contributing factors for the ineffective College English teaching. Based on the analysis, the paper suggests four countermeasures to improve College English teaching quality. According to this paper, only when teachers and educational workers continue to learn modern foreign language teaching theory, reform teaching methods and patterns, instruct students in adjusting learning strategies, train students' intercultural communication competence, and enhance the construction of College English course, can we improve the teaching effect and students' practical English competence.

Keywords: College English, Teaching pattern, Learning Strategy, Contributing factors, Countermeasures

To promote College English course teaching reform and relevant research, and train students' practical English competence are always important subjects for College English educational workers and teachers. During recent ten years, College English course teaching and teaching reform has gained noticeable achievements, publishing College English (new edition) serial textbooks, multi-media courseware, comprehensive textbooks, and national test questions storehouse, further perfecting CET (College English Test) 4 and 6. College English course teaching has gained wide social attentions. However, College English course teaching faces series of abnormal phenomena, such as "time consuming but low efficiency", "mute English", and "high grades but low competency". What is the sticking point in College English teaching? How to change the "time consuming but inefficient" condition? In order to find solutions for these questions, authors perform a questionnaire survey and make deep studies and analyses on the result. In conclusion, authors suggest relevant countermeasures for improving College English teaching effects.

1. Design and execute the questionnaire survey

(1) Objective: Lots of questionnaires and evaluations focus on College English teaching effects. In order to improve the College English course teaching effect better in North China Institute of Science & Technology, identify factors that restrict the College English course teaching effect, and advance relevant countermeasures, we perform a questionnaire survey in May, 2004.

(2) Objects: Objects in this survey include 200 college students, 150 boys and 50 girls, whose majors concern more than twenty subjects but not English in North China Institute of Science & Technology. These students have already finished their College English serial curricula.

(3) Content: It covers five aspects, including College English teaching pattern, College English listening and speaking teaching, College English learning beliefs, College English textbooks and teaching contents, College English learning attitudes and methods. In the questionnaire survey, students must select the closest item from all options.

(4) Data analysis: By sampling, this survey targets at 200 students who major in any subject but not English. These students complete the questionnaire at spare time. Afterwards, we make data statistics and analysis.

2. Analyze the results of survey

2.1 College English is an important basic course. However, it tends to be "time consuming and inefficient" at present.

College English is an important basic course for college students. It covers the first, the second, the third, and the fourth term. Students in Class A study the Concise Course for College English Improvement. "Foreign language studies need not only considerable time but also making best use of time. (Shichun Gui, 1985)" According to Table 1, the average time spent by students in learning English at their spare time is no more than 1-2 hours everyday.

2.2 Although College English listening and speaking teaching has been emphasized, students could not adapt themselves to it psychologically. They fail to improve the listening competence, still more the speaking competence.

The *College English Curriculum Requirements* regulate: "In designing College English courses, requirements for

competence in listening and speaking should be fully considered, and corresponding teaching hours and credits should be adequately allocated. Moreover, the extensive use of advanced information technology should be encouraged, computer-based and web-based English teaching should be promoted, and students should be provided with favorable environment and facilities for language learning.” According to Table 2, students show a kind of psychological repulsion to College English listening and speaking teaching, teaching environment, and teaching effect. These students regard leaning English as a nightmare.

2.3 Teachers do not master necessary modern foreign language theories. Students fail to adjust their learning strategies. Neglect to train the intercultural communication competence.

The *College English Curriculum Requirements* regulate: “As a systematic whole, College English has as its main components knowledge and practical skills of the English language, learning strategies and intercultural communication; it takes theories of foreign language teaching as its guide and incorporates different teaching models and approaches.” Teachers should study modern foreign language teaching theories and language acquisition principles, instruct students to adjust their learning strategies, and perform intercultural communication teaching properly.

According to Table 3, teachers do not acquire sufficient modern foreign language teaching theories. They prefer to impart language knowledge but not the cultural background of English-speaking countries to students, and neglect to train students’ language skills and communication abilities. Because teachers do not point out the cultural differences in teaching, students usually feel frustrated due to cultural barriers in learning English, which is also named as a culture shock phenomenon. Students fail to adjust their learning strategies properly.

3. Reasons for College English teaching’s poor effects and countermeasures for improving teaching effects

3.1 The teaching pattern and language environment restrict the train of English application skills. The teaching pattern should realize a spanning development of “students-centered task-based and reflective teaching approach” based on the Constructivist Learning Theory.

The *College English Curriculum Requirements* regulate: “The new model should combine the principles of practicality, knowledge and interest, mobilize the initiative of both teachers and students, and attach particular importance to the central role of students in the teaching and learning process.” However, the survey shows that although College English teaching adopts the multi-media teaching approach, it still focuses on the traditional teaching model that takes teachers as the center in class. Because of an absence of English teaching environment, students’ enthusiasm and interests in learning English suffer from certain constraints. As a result, it is meaningless to talk about improving students’ English application competence.

According to Table 4, traditional teaching model and dull language environment seriously hurt students’ interests and initiatives, killing students’ desire and enthusiasm for English studies.

Therefore, firstly the teaching model should realize the spanning development of “students-centered task-based and reflective teaching approach” based on the Constructivist Learning Theory. The *College English Curriculum Requirements* regulate: “Changes in the teaching modelin a shift from the teacher-centered pattern, in which knowledge of the language and skills are imparted by the teacher in class only, to the student-centered pattern, in which the ability to use the language and the ability to learn independently are cultivated in addition to language knowledge and skills.” “All the courses, whether computer-based listening and speaking courses or classroom-based reading, writing, and translating courses, should enable students to have a solid foundation in the English language while developing their ability to use English, especially their ability to listen, speak, and write in English.” “Colleges and universities should each design a computer-based or Internet-or campus-network-based multimedia listening and speaking teaching model that suits their own needs in line with their own conditions and student situation. Those in more favorable situations may deliver listening and speaking course via the Internet.” The students-centered task-based and reflective teaching approach exercises the scientific development view. Its core is “human- oriented” and “learning-oriented”. The theoretical base is the “constructivism”. So, it can inspire students’ interests and inner initiatives in learning, help teachers to know learners’ English levels, create a favorable psychological environment for learners, make teachers to help learners to develop the self-controlled learning consciousness, assist teachers to adopt the heuristic teaching, and train students’ creative and self-study competence.

Secondly, the teaching should realize a spanning development that “takes listening and speaking as the primary task, emphasizes on reading, writing, and translating, and lay stresses on intercultural knowledge”. For a long period, teachers are the center. In order to complete teaching tasks, teachers are busy in imparting language knowledge and students are busy with taking notes. Communications between teachers and students are few. Generally speaking, College English teaching merely focuses on training students’ reading and translating competence but neglect trainings on listening, speaking, and writing. As a result, students’ listening and speaking competence is poor. Students fail to realize a comprehensive development in English listening, speaking, reading, writing, and translating.

3.2 What students study for is to pass the national test, which strays away from learning initiatives and interests. To train students' intercommunication competence becomes a lie. The teaching approach should realize a spanning development "emphasized on both language teaching and cultural teaching", training students' intercultural intercommunication competence.

Language test exerts a strong effect on teaching. CET 4, CET 6, and PRETCO (Practical English Test for Colleges) impact the reform of teaching contents, teaching approaches, and teaching methods, and students' learning strategies, learning attitudes, and learning interests to a great degree, neglecting to train students' speaking skill. Widdowson (1978), an English linguist, points that in social communication, language exchange is an interpersonal activity. The objective of language teaching is to help students to use the language to accomplish necessary communication. From Table 3 and 5, we notice that students lay stresses on the pass rate of CET 4 and CET 6. The initiatives of learning tend to be multi-polarized, such as passing the test, job-hunting after graduation, or improving language application and communication competence. CET Spoken English Test (CET-SET) is still not popularized at present. The task of College English teaching strays away from training students' language competence. The teaching model and test model need to be reformed deeply.

Therefore, the teaching approach should realize a spanning development "emphasized on both language teaching and cultural teaching", training students' intercultural communication ability. College English course is to impart basic language knowledge, which can expand students' vision and help them understand the western social culture. So, necessary cultural background knowledge can benefit the training of language application competence. Byram, an English linguist, thinks that "Language is the richest source for learning the culture". Kramsch points out: learning the cultural consciousness and the secondary language culture can help to improve the efficiency of the secondary language acquisition. Without knowing the similarities and differences of cultures, people may fail to achieve effective communication, and even face mistakes or failures in intercommunication. Therefore, as teachers impart language knowledge and skills to students, they should disseminate international culture knowledge, make a comparison between Chinese culture and western culture, perform a cultural recognition teaching, and realize an organic integration of language teaching and cultural teaching, improving students' insight into the culture, and training their intercultural communication ability. Just as what Mr. Zuoliang Wang says: "Without knowing the social culture in certain language, nobody can master the language completely."

3.3 College English teaching materials and contents are lack of timeliness and interests in a sense. The teaching materials and teaching approaches should realize a "three dimensional" and deep development, building provincial or national elite courses, and achieving students' autonomous learning.

The design of textbooks restricts the class teaching model and impacts students' learning model and learning effects to a great degree. The composition of textbooks should follow the principles of modern language teaching theories. According to Table 6, the satisfaction degree is only 70%, which indicates that the structure of College English serial textbooks needs to be adjusted further, improving the timeliness and interests of contents. Therefore, it is urgent to compose a brand-new edition for College English textbooks, and perfect the three-dimensional web-based teaching platform. Then, these approaches are in accordance with the training of students' English application ability.

Therefore, textbooks and teaching approaches should realize a deepening development, building provincial and national elite courses, applying web-based courses, and achieving students' autonomous learning. The *College English Curriculum Requirements* regulate: "The new model should be built on modern information technology, particularly network technology, so that English language teaching will be free from the constraints of time or place and geared towards students' individualized and autonomous learning. The new model should combine the principles of practicality, knowledge and interest, and mobilize the initiative of both teachers and students." The perfect of "three dimensional textbooks" can benefit the comprehensive application of "web-based course" and realize the organic integration of "class teaching" and "web-based teaching". By this way, it will be easier to accomplish teaching management and evaluation. The College English Course in North China Institute of Science & Technology has been selected as a provincial elite course, what means a significant progress of College English teaching reform.

Therefore, it is urgent to modernize the teaching facilities for English education. Based on the Internet and school net, we should build up web-based College English course, realize the net teaching approach and digital teaching information, apply the credit system, offer students for optional course modules, create individualized learning environment, and improve the English teaching effect. Meanwhile, we should make up credit standards and guidance for English course, taking students' initial levels and final levels as main indexes to evaluating their English levels. Besides, students can choose the learning time and courses freely and adjust their learning strategies in time. By this way, we can inspire students to adopt multiple approaches to improve their English application competence.

3.4 Students fail to make up effective learning strategy and lack of initiatives of learning English. They could not evaluate their English levels properly. The English teaching should realize a spanning development that "integrates with strategy teaching", training and adjusting students' learning strategies.

Learners are subjects of language learning. The absence of learning strategy and initiatives, and improper self

evaluation will inevitably affect the learning effect. Morrow (1981) says that an important component of language teaching is the positive participation of learners.

According to Table 7, more than 60% of students do not devote themselves to English exercises and lack of initiatives in class. More than 60% students could not make self evaluations properly and seldom adjust their learning strategies. More than 70% of students just accept English knowledge passively in class and seldom speak in class. Nearly 90% of students seldom join in English secondary classes. More than 60% of students do not prepare for new classes. And about 70% of students do not review former knowledge.

Therefore, the English teaching should realize a spanning development that “integrates with strategy teaching”, training and adjusting students’ learning strategy. O’Malley & Chamot think that “Strategy teaching should combine with the language teaching. Teachers should not impart strategies only. Strategy teaching should be direct. Then, learners can better understand the contents and application of strategies, which can help them to employ relevant strategies in similar environment.” O’Malley & Chamot define the learning strategy as “the special thought and behavior used by learners to understand, learn, and memorize new information”. Or, in other words, the learning strategy is certain special method and approach used by learners in learning language to acquire, store, and process information. Therefore, in order to obtain effective learning strategy, amounts of trainings are necessary. Meanwhile, to emphasize on information feedback and evaluation on the effects of strategy teaching and help students to realize self supervision, self evaluation, and self adjustment can improve the learning effects. Just as what says by Andrew D. Cohen (1990), a linguist, “The success of language learning is determined by learners themselves, the individual factors, and their abilities of making best use of learning opportunities.”

4. Conclusion

The *College English Curriculum Requirements* regulate: “The objective of College English is to develop students’ ability to use English in an all-round way, especially in listening and speaking, so that in their future work and social interactions they will be able to exchange information effectively through both spoken and written channels, and the same time they will be able to enhance their ability to study independently and improve their cultural quality so as to meet the needs of China’s social development and international exchanges.” Generally speaking, College English teaching usually emphasizes on imparting language knowledge and language skills but neglect the cultivation of English application ability. In authors’ opinion, College English teaching experiences two reforms. Now it is the time of the third reform for new breakthrough and improvement. The Ministry of Education extremely supports the construction of national and provincial elite courses. Therefore, all English educators and teachers should explore the problems in College English teaching, change traditional teaching thoughts and ideas, take modern education and teaching theories as guidance, regard reform of teaching contents, teaching model, and teaching approach as breakthroughs, start from training students’ intercultural communication ability, emphasize on cultivating students’ English application abilities, especially the listening and speaking competence, and focus on training students’ effective learning strategies and humanistic qualities. Supported by the three dimensional textbooks and web-based courses, teachers can create a nice environment for learning English, improving College English teaching effects and quality to a great degree, realizing a significant achievement, and meeting the requirements for China’s social and economic development better.

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Table 1. The average time used for learning English everyday

Half an hour	One hour	Two hours	Three hours	Four hours	More hours on weekend
15% (30 students)	49% (98 students)	26% (52 students)	2.5% (5 students)	1% (2 students)	6.5% (13students)

Table 2. The questionnaire for College English listening and speaking teaching

English teachers' education and teaching conception	Need to be changed	Computer knowledge and application competence needs to be improved		Familiarize with and make best use of multi-media education technologies	
	50%	40%		60%	
English listening and speaking teaching approach	Recorder	Language lab for watching and listening		Multi-media language lab	
	85%	10%		5%	
English listening and speaking self-learning approach	Mono-player	Repeater	Language lab is available for spare time		No training
	67%	13%	5%		15%
English listening and speaking training approach	Join in class discussion actively	Language lab for watching and listening		Multi-media language lab: group discussion, communication, and appreciating films.	
	26%	10%		5%	
Psychological barriers in English study	Traditional teaching and Chinese thinking	Be negative in class		Multi-media teaching. Rich contents, various approaches, and strong interests.	
	85%	10%		5%	
Language lab (for listening, watching and listening)	Satisfaction	Common		Dissatisfaction	
	75%	10%		15%	
Multi-media language lab	Satisfaction	Common		Dissatisfaction	
	25%	45%		30%	
Language experiment teaching materials	Rich and perfect	Relatively rich		In serious short	
	25%	5%		70%	
Language lab utilization and management	Orderly management	Disordered management		Improve management	
	35%	30%		35%	

Table 3. College English learning strategy

Main English-learning activities	Memorize words, learn texts.	Focus on listening and speaking	Extracurricular reading	Exercises after classes	Model tests
	46% (92 students)	33% (66 students)	15% (30 students)	5% (10 students)	1% (2 students)
English teachers' preference for teaching contents	Impart language knowledge	Emphasize on language application	Skill training	Impart knowledge and train skills	
	26% (52 students)	29.5% (59 students)	11.5% (23 students)	33% (66 students)	
Know the culture and background in English teaching	Lots of	More	Some	Few	
	4% (8 students)	39% (78 students)	48% (96 students)	9% (18 students)	
English teachers' primary task	Impart language knowledge	Emphasize on exercises	Class discussion	Guidance and answering	
	57.5% (115 students)	18% (36 students)	10% (20 students)	14.5% (29 students)	
Master communication skills by learning English	Lots of	More	Some	Few	
	4% (8 students)	41% (82 students)	50.5% (101 students)	4.5% (9 students)	
English learning preference	Language knowledge		Language application	Language communication	
	18% (36 students)		33.5% (67 students)	48.5% (97 students)	

Table 4. College English teaching model

Main English teaching approach	Textbook, blackboard, and chalk	Add record and video	Multi-media teaching
	65% (130 students)	23% (46 students)	12% (24 students)
Create English teaching environment	Group discussion in class	Add new figures for introducing background knowledge	Students' spot play
	31% (62 students)	21% (42 students)	48% (96 students)
Preference for English teaching model	Duck-fed teaching, traditional and unchangeable	Diversified and enlightening	Intercommunication
	12% (24 students)	51% (102 students)	37% (74 students)
Preference for English classroom teaching design	Teaching all the time	Take the teacher as the center	Take students as the center
	6.5% (13 students)	49% (98 students)	44.5% (89 students)

Table 5. College English teaching's guiding effect

Pass CET 4 and CET 6	Emphasize on pass rate		Relatively emphasize		Have nothing to do with teachers	
	24.5% (49 students)		56% (112 students)		19.5% (39students)	
Pass PRETCO	Emphasize on pass rate		Relatively emphasize		Have nothing to do with teachers	
	46% (92students)		46% (92students)		8% (16students)	
Objective of learning English	Pass course exam	Pass CET 4, CET 6	Pass PRETCO	Job-hunting after graduation	Interpersonal competence	
	5.5% (11students)	25.5% (51students)	7.5% (15students)	31.5% (63students)	30%(60students)	
Main model for learning English	Memorize words and sentences		Lots of after-school reading	Amounts of questions and tests	Emphasize on practical use	
	29.5% (59students)		25% (50students)	0.5% (1students)	45% (90students)	

Table 6. College English textbooks and the contents

College English textbooks	Strong college character	Weak college character	Stray away from practical life
	57.5% (115students)	38.5% (77students)	4% (8students)
College English teaching contents	Full of timeliness and interests	Lack of timeliness and interests	Seldom concern cultural knowledge
	54% (108students)	30% (60students)	16% (32students)
Whether College English textbooks and teaching contents help to train the intercommunication ability of students	Very helpful	Helpful basically	Almost unhelpful
	11% (22students)	69% (138students)	20% (40students)
Whether students feel satisfied with or interested in College English textbooks and teaching contents	Very satisfied	Satisfied basically	Dissatisfied
	7% (14students)	72.5% (145students)	20.5% (41students)

Table 7. Students' attitudes and approaches in learning College English

Plan for English learning	Plan for learning at spare time	Unclear plan for learning		No plan for learning
	61.5% (123students)	33.5% (67students)		5% (10students)
Constraints for English learning ability	Self conditions	Teachers' levels		Teaching environment
	61% (122students)	11.5% (23students)		27.5% (55students)
Learning state in class	Passive	Initiative		Negative
	57.5% (115students)	34% (68students)		8.5% (17students)
Self evaluation on English learning	Often	Sometimes		Seldom
	21% (42students)	26% (52students)		53% (106students)
Reasons for class discussion and answering questions	Teaching model	Be afraid of others' teases	Few chances	Lack of interests
	35% (70students)	12.5% (25students)	22.5% (45students)	30% (60students)
Participate in English secondary class	Often	Sometimes	Seldom	Never
	11.5% (23students)	47.5% (95students)	32% (64students)	9% (18students)
Attitudes toward English exercises and whether finish them or not	Many, timely	Common, passive	Bad, copy	Indifference, undone
	44.5% (89students)	51.5% (103students)	2.5% (5students)	1.5% (3students)
Preparation	Careful preparation	General preparation	Occasional preparation	No preparation
	21% (42students)	39%(78students)	19%(38students)	21%(42students)
Phase review	Often	Sometimes	Generally	No
	22%(44students)	38.5%(77students)	33.5%(67students)	6%(12students)



The Influence on Chinese Language from Postcolonial English

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Abstract

From the point of view on postcolonial theories, this paper explores English language's influence on normal Chinese and Hong Kong Chinese, and concludes the advantage and disadvantage of this phenomenon.

Keywords: Postcolonialism, Chinese, English, Vocabulary, Syntax, Influence

1. Introduction

One of the most important characteristics of modern cultural globalism is the majority of the study of postcolonialism. On the aspect of language, postcolonialism utilizes its cultural hegemony to penetrate the language of nucleus countries, especially English, into the eged or undeveloped countries by all kinds of means to influence or change their language and culture. Thus makes these nations' language become stranger and more complex, and their dependence on this nucleus countries has produced. On the one hand, it is unavoidable that English, the powerful language, has the strong effect on Chinese language's changing into the state of Postcolonialism and the richness of Chinese's vocabulary and its ability of expression. On the other hand, the Postcolonial penetration to Chinese can be negative, too. This paper aims at the point of the theory of Postcolonialism to explore the influence on Chinese language's dictionary and syntax owing to English language's penetration.

2. The influence of borrowed English words

Although postcolonialism has no similarity on Colonialism, military occupying and economic grabbing on those undeveloped nations, they penetrate on their language and culture and enlarge their influence step by step by the means of economy assistance, culture and education, communication, movie and TV transmission, and the enlargement of expenditure habits, etc. because of their international influence on politics, economy and culture.

Since the Chinese mainland carried out the policy of reformation and liberalization, the influence on Chinese language from Postcolonialism has been much deeper than ever, especially on vocabulary and syntax.

2.1 *The tendency on the initial abbreviation of English letters*

As China is facing with the enormous intrusion of politics, economy, science and technology, education, culture and consumer goods from those nucleus countries, in Chinese language a large number of English initial-letter abbreviation appears. For example,

The abbreviation of politics: UN, APEC, WTO, USA, NATO

The abbreviation of science and technology: IBM, WWW, Modem, DNA, SRS

The abbreviation of measuring units: am, pm, A.D. , B.C., Km, mm

The abbreviation of news language: BBC, VOA, NBC, ABC, CBS, etc.

2.2 *The tendency on the combination of English and Chinese*

Vocabulary on technology and message: BP ji, IT ji shu, IC ka, B chao, IDD dian hua

Vocabulary on culture, education and advertisement: GRE kao shi, HB qian bi, DM guang gao, GEMAT kao shi, TOFEL kao shi

Vocabulary on politics and economy: san K dang, BOT jiao yi, T xu shan, etc.

2.3 *The tendency on imitated translation*

Qian nian chong (Millennium), re gou (hot dog), dian zi you jian (E-mail), mi yue (honeymoon), wei ruan (microsoft), etc.

2.4 *The tendency on direct utilization of English words*

Tuo kou xiu (Talk show), bo che (park), bo yin (Boeing), nuo ji ya (Nokia), kua tuo (quart), qiang sheng (Johnson), etc.

2.5 The tendency on using English words' affixes

The following Chinese affixes have close relationship according to the introduction of English ones:

Prefixes: fan- (counter-) duo- (multi-) bu- (un-, non-) wei- (micro-)

Suffixes: -zhu yi (-ism) -hua (-fy) -ba (-bar)

The affixes from English have great instructive ability. For instance, wei bo, wei guan; di shi, mian di; duo yuan hua, quan qiu hua; she hui zhu yi, zi ben zhu yi, etc.

3. The meaning of evolution and quality transformation of borrowed English terms in Chinese language

In the context of postcolonialism, owing to the western cultural shock, a new trend has appeared recently. That is, the meaning of those foreign words in Chinese has changed because of the meaning's change of English words. For instance, in Chinese, jiao fu (Godfather) means the man who has the responsibility of giving baptism and religious education to children. Now, because of the changing meaning of the corresponded English words, its new meaning is the powerful man who has strong influence in an organization of community. Another example, the word "mail" in "E-mail" refers to the message transmitted by computer rather than the traditional mail sent by post. Its meaning has changed already.

The transformation of words' quality is another trend and feature of Chinese receiving influence from English. This is an apparent phenomenon in Hong Kong's publications. According to some scholar's research, in Hong Kong Chinese, the deformation owing to the transforming of some words' quality occupies an outstanding position. Most typical examples are "Xian dai hua", "He li hua", "Fu za hua", etc., which are used as transitive verbs rather than intransitive. For instance, Yi xie wai yong gu zhu zhi ze wai ji yuan gong, cong er *he li hua* wai yong xin chou xing wei. This kind of transformation is so universal in Hong Kong, showing the English language's penetrating ability into Chinese under the context of postcolonialism. Fortunately, this shock wave hasn't had factual effect on Chinese mainland's normal Chinese.

4. English language's influence on Hong Kong Chinese language grammar

In language, grammar is the steadiest factor that is the least changeable. However, in the New Culture Movement, some translation methods made Chinese grammar's evolution, showing the westernized syntax, that is, the structure of a sentence being lengthy and complex. But under the context of postcolonialism, a new characteristic coming from Chinese grammar appeared due to the influence of English. Hong Kong's Chinese transformation is the most obvious because of long time's colonialism and postcolonialism.

4.1 The tendency of using more nouns

In Hong Kong Chinese, one of the most common phenomenon is the nouns could be used as adjectives or verbs, which is so different from normal Chinese. Here are three examples:

- a. Wo bi xu dui shi min you *cheng dan*.
- b. Jue ce zhe xu yao te bie ju you *min gan*.
- c. Zhun bei di er fen shi zheng bao gao jiao di yi fen geng *tiao zhan*.

The above three sentences are obviously mistaken and unacceptable in normal Chinese. However, in Hongkong Chinese, they are not only acceptable but easy to be seen anywhere. It owns to the word -for -word translation from English. *cheng dan* in example a is from *to have a commitment*; *min gan* in example b probably comes from *Tension is mounting/ rising/ escalating*; *tiao zhan* in example c has its resource from *to present a greater challenge* or *to be more challenging*.

4.2 The tendency of using more verbs

In Hong Kong Chinese, nouns, noun phrases, and adjectives could be transformed into verbs, which is rare in normal Chinese.

For example,

- a. Ta men zhou yi qing chen jiao xing zong li nei ta ni ya hu, *jian bao* zhe ci xi ji.
- b. Shou xian yao *di diao* zi ji.
- c. Ta *guan shi fang wen* wai di.
- d. Ta ming xian *nao nu* lai wen si ji.
- e. Bai fen zhi wu shi de ren shuo *hai xiu* gou mai.

jian bao in example a is from *to believe*, *di diao* in example b comes from *low key*, *guan shi fang wen* is from *official visit*, *nao nu* in example d is received from *be annoyed/ irritated/ angered by*, *hai xiu* gets from *ashamed that*. Those

words can absolutely not be used in normal Chinese, so this situation can only be shown under the context of the intrusion from English colonialism and postcolonialism.

4.3 The tendency of putting attribute to the end

In normal Chinese, the attribute can be put before the central noun and rather short. In English, it can be put before or after the central noun, and as a attributive sentence, being put to the end is a regular way. Owing to this phenomenon, in Hong Kong Chinese, the attribute tends to be put to the end. For instance,

- a. Xian zai shi shi dang shi hou tui xing zhe xiang ji hua.
- b. Zheng fu wei you qi xian bei li sha li kai ben guo.
- c. Zuo ri shou tian jie dao tou su cheng shi dian xun guang gao tai bao li.
- d. Shi shi hou tan tan xiu ci fa le.

Example comes from *It is time to do something*, and normal Chinese should be *Xian zai shi tui xing zhe xiang ji hua de shi dang shi hou le*. Example b is from *The government has not set a date for Berithar to leave the country*, the normal Chinese is *Zheng fu mei you gui ding bei li sha li kai ben guo de qi xian*. Example c immitates the pattern of *complaint about excesive violence*, the normal Chinese is *Zuo ri shou xian jie dao chang shi dian xun guang gao tai bao li de tou su*. Example d has the same situation as example a. In a word, attribute being put to the end as a new tendency in Hong Kong Chinese, could not be allowed in normal Chinese.

5. The advantage and disadvantage of the influence on Chinese language from postcolonial English

In the context of postcolonialism, the transmission and enlargement of English all over the world tend to be accelerating. America and Britain promotes policies on English language colonialism. The culture commission and overseas volunteer service agency in Britain and some governmental and civil agencies in America play an important role in carrying out global English colonial policy and oversea English teaching. And many sorts of media resource and expenditure culture accelerate this wave.

Following the joining in WTO and the communication with other countries, the Chinese language has absorbed quite a lot of foreign words, especially from English. This advantage is obvious. International culture can be mixed with regular rules, the rubbing and barrier can be lessened, Chinese can be full of energy supplied with new blood to turn into an international language some day. Therefore, in this opportunity to absorb some necessary vocabulary is full of benefits. However, too much borrowing activity also leads Chinese into subcolonialization, with the lost national characteristics in Chinese culture. For example, You Piao in Chinese needn't be taken its place by Shi dan (stamp). Also, if faced with some strange words from Hong Kong Chinese, we should treat them as universally accepted, the point being whether it is available for the mainland's idiom expression. Especially its syntax structure owing to the deep influence from English language should be used without any reformation, though it's been conceived in Hong Kong in a long period. If we imitate this structure, the rules of Chinese grammar may be destroyed and the Chinese character's authority may also be doubted. Unfortunately, more syntax structure imitating Hong Kong Chinese emerges in our daily life, which has disadvantage on children's normal language learning. Therefore, effective language policy should be made to defend the negative influence on English postcolonialism. It is so essential that it needs the highly stress from our government and mutual supporting from every class of our society.

6. Conclusion

The globalism and postcolonialism of English are both chance and challenge for Chinese. On one hand, we'd better borrow not deluge English terms, especially on science, technology and expenditure culture, etc.. On the other, secure the root of Chinese grammar, decrease the using of English syntax and avoid the strangeness of grammatical structure.

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An Empirical Study on Teaching Listening in CLT

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Abstract

In the traditional ELT in China, much emphasis has been put on the students' mastering vocabulary and grammar. Language form was regarded as the content of teaching. And listening skill has been ever neglected for a fairly long time in ELT in China. Recent years, more and more attention has been drawn to learners' listening ability. This paper introduces teaching listening course at college level in communicative approach, which involves background knowledge introduction and into which various skills: speaking, reading and writing are integrated. It discusses the task design, strategy training, possible teaching plan, classroom arrangement; and presents an empirical study in this approach.

Keywords: Communicative language teaching, Listening comprehension, Skills integration, Background knowledge

1. Introduction

In modern times, the world has shrunk and in many cases interpersonal communication is now more vital than academic usage. It is now important for the learner to be equipped with the command of English which allows him to express himself in speech or in writing in a much greater variety of contexts. Learning to use a language thus involves a great deal more than acquiring some grammar rules and vocabularies and a reasonable pronunciation. It involves the competence to suit the language to the situation, the participants and the basic purpose. Conversely, and equally important, it involves the competence to interpret other speakers to the full.

It is observed that language students are best motivated by practice in which they sense that language is truly communicative. The teacher's skills are moving them forward to a fuller competence. In the traditional ELT in China, much emphasis has been put on the students' mastering vocabulary and grammar. Language form was regarded as the content of teaching. There are signs that linguists are turning language teachers' attention to the communicative properties of language and the functioning of language in social context. Influenced by these functional and social-cultural linguists, language teachers are paying more attention to the function of language.

Listening skill has been ever neglected for a fairly long time in ELT in China. This led to that graduates who have been studying English for about 10 years don't have a satisfying proficiency on listening comprehension and speaking. Actually a person's speaking proficiency is directly related to his listening ability. However, this problem has been realized and measures have been taken to improve the situation. For example, many colleges and universities have opened "listening" or "listening and speaking" courses, listening textbooks are being developed, language lab has been improved and increased. Moreover, listening test has been added to CET and PETS. Listening as an important way of getting information is getting more and more attention.

2. An Analysis of Current Listening Teaching Situation

Although more and more colleges are opening listening course for undergraduates of non-English major, the situation is far from satisfying. The main complaints are: the text is too hard; there is no interest in this course (boring); it's easy to get tired and sleepy; the improvement is not obvious, etc.

A questionnaire was ever carried by the author during her students, and the only one question is "what are your problems in listening to English?" According to their answers, the problems concentrate on the following items:

- 1) Trouble with sounds: I have trouble catching the actual sounds of the foreign language.
- 2) Have to understand every word: I have to understand every word; if I miss something, I feel I'm failing and get worried and stressed.
- 3) Can't understand fast, natural native speech: I can understand people if they talk slowly and clearly; I can't understand fast, natural native-sounding speech.
- 4) Need to hear things more than once: I need to hear things more than once in order to understand.

- 5) Find it difficult to keep up: I find it difficult to “keep up” with all the information I am getting and can’t think ahead or predict.
- 6) Get tired: If the listening goes on a long time I get tired, and find it more and more difficult to concentrate.
- 7) Insufficient vocabulary: My vocabulary is smaller than the text demands and there are some words that I can’t understand.

These problems are typical among college students in their listening to foreign languages. When we analyze these items, we can see some of them are concerning the “bottom-up process” (e.g. Item 1, 3, and 7) The core difficulty for them lies in discriminating sounds in connected speech: strong and weak forms and modification of sounds, including assimilation, elision and liaison etc.

Some of the items are concerning the “top-down process”(e.g. Item 5). They show that there is a lack of background knowledge in listening comprehension. Item 2 and 5 show that the students need listening strategy-training (selective listening and prediction).

The reasons that bring these problems are various. They relate to teaching material (too difficult for most cases), teaching plan (too much content in limited time), teaching purpose (teaching for passing exams) , students’ motivation (attention paid to listening is not enough), so on and so forth. Among them the most important cause, in fact, should be teaching methods.

The general teaching mode in listening classroom at colleges is quite simple and widely used: the teacher play the recorder and the students do exercises after listening. No background knowledge introduction, no strategy training, no discussion and negotiation, no speaking, reading and writing—skills integration, the tasks and exercises are boring, no encouragement for response... Actually testing is far more than training during this class. It is hard to see that the students are being taught any particular skill in such a class. What weaker students inevitably and rapidly learn is that they are weak in listening comprehension in the foreign language. Naturally the students are becoming less and less motivated. And these directly lead to the students’ poor communicative competence on listening comprehension.

In order to solve the problems and improve the situation, a variety of measures can be taken. Besides strengthening the students’ linguistic competence (pronunciation, vocabulary, grammar, discourse,etc.) , we have other means to help them improve their communicative listening competence.

3. Measures to Improve Communicative Listening Ability

3.1 Teaching Stages

Harmer (1991) suggests a basic methodological model for the teaching of receptive skills, which in the author’s opinion is to a large extent acceptable:

The model has five basic stages which are:

1) Lead-in

Here the students and the teacher prepare themselves for the task and familiarize themselves with the topic of the listening tasks and exercises. One of the major reasons for this is to create expectations and arouse the students’ interest in the subject matter of the spoken or written text.

2) Teacher directs comprehension task:

Here the teacher makes sure that the students know what they are going to do. Are they going to answer question, fill in a chart, complete a message pad or try and re-tell what they heard/saw? This is where the teacher explains and directs the students’ purpose for listening.

3) Students listen for task

The students then read or listen to a text to perform the task the teacher has set.

4) Teacher directs feedback

When the students have performed the task the teacher will help students to see if they have completed the task successfully and will find out how well they have done. This may follow a stage in which students check their answers with each other first.

5) Teacher directs text-related task

Teacher will then probably organize some kind of follow-up task related to the text. Thus if the students have filled a form based on a heard discussion, the text-related task might be to discuss in groups the same or related topic.

3.2 Background Knowledge Introduction

According to schema theory, listeners might need to use their background knowledge to work out what various

reference items might refer to. Here we are dealing with the prepositional level of language. Let us now look at how background knowledge might help us interpret discourse on a functional level. When studying functions, the question is not “what is the speaker trying to tell us about events and things in the world?” but “what is the speaker trying to achieve through language?” Widdowson provides an interaction to demonstrate the points he wishes to make:

A: *I have two tickets to the theater tonight.*

B: *My examination is tomorrow.*

C: *Pity.*

What are our fictional speakers trying to do here? According to Widdowson, there are implicit assumptions on both sides that A's first statement is an invitation. B's response, which, on the surface, has little to do with A's statement, is taken as a refusal of the invitation. This is recognized in A's final remark. Of course, the encounter may not have gone quite as smoothly as this. Consider the following exchange, in which A's opening gambit is intended as an invitation. What do you think the speakers are trying to do in the other utterances in the exchange?

A: *I have two tickets for the theater tonight.*

B: *Good for you. What are you going to see?*

A: *Measure for Measure*

B: *Interesting play. Hope you enjoy it.*

The negotiation is not going to plan, and A has to renegotiate to return to his original discourse strategy.

A: *Look, are you free tonight?*

B: *I'm not sure, why?*

The message is still not getting across, so he tries again.

A: *Well, I'd like to invite you to come to the theater with me.*

B: *Well, actually my exam is tomorrow.*

Now Widdowson allows A to be obtuse.

A: *I know, so is mine. What's that got to do with it?*

These negotiating procedures depend crucially on the participants knowing what each utterance stands for functionally (that is as “invitation”, “polite refusal”, etc.) The implication on ELT is, the student must have enough background knowledge of the culture, knowledge which is relevant to the particular instance of the language he is concerned with, to enable him to assess why what is being said is being said. We would assume that the more the background knowledge which is assumed in a particular discourse, the more difficult that discourse will be for the student to understand if he does not share that knowledge. Therefore, background knowledge is an important part of listening teaching.

3.3 Important Listening Strategies Training

From the former chapter we have seen learning strategy training is beneficial to foreign language or second language learning. For listening comprehension, there are a variety of strategies. According to Nunan (1999), the following are some of the most important strategies with examples:

1) Listening for gist:

e.g. Is the speaker describing a vacation or a day in the office? Is the radio report about news or weather?

2) Listening for purpose:

e.g. Are the speakers making a reservation or ordering food? Is the speaker agreeing or disagreeing with the suggestion?

3) Listening for main idea:

e.g. Why is the speaker asking the man questions? Did the speaker like or dislike the movie?

4) Listening for inference:

e.g. What are the speakers implying by what they said?

1) Listening for specific information:

e.g. How much did they say the tickets cost? Where did she say the meeting was being held?

2) Listening for phonemic distinctions:

e.g. Did the speaker say first or fourth? Did the speakers say they can or can't come to the party?

3) Listening for tone/pitch to identify speaker's attitude:

e.g. Did the speaker enjoy the wedding or not? Is the speaker surprised or not?

4) Listening for stress:

e.g. What is more important, where he bought the watch or when?

In the process of listening class, the teacher should integrate these strategies into listening tasks and get them introduced to the students naturally.

3.4 Skills-integrated task design

In designing listening tasks, now we can naturally conclude that teachers couldn't take listening as the sole skill and goal. Since in real life, skills are actually combined for people to communicate; and in language learning the learner can directly see the value of one skill in the general language development when it is integrated into the others. This is also a good way for students to give proper responses to what they have heard.

So teachers should bear in their mind the principle of skills-integration when designing and carrying on a listening task. That is, in completing a listening task, the other three skills--speaking, reading and writing can possibly involved.

The following case as an example to communicative listening teaching can illustrate the above ideas.

4. A Lesson Plan of Listening Teaching

This is a case based on the theory of CLT, which is carries out in the English reading course to the students at college level.

4.1 Text

The teaching material is *Listen To This: 1*, Lesson Ten, Section Two.

Tapescript

A. Discussion

Eddie is talking to Tom.

Eddie: Have you ever been really frightened?

Tom: I suppose so, once or twice.

Eddie: Can you remember when you were most frightened?

Tom: That isn't difficult.

Eddie: What happened?

Tom: Well, we used to have a favorite picnic place beside a lake. We had a boat there. I was there with some friends and I decided to swim to a little island. It didn't look far and I started swimming ...but half way across I realized it was a lot further than I thought. I was getting very tired. I shouted. Luckily my friends heard me and brought the boat. I thought I was going to drown. I've never been more frightened in my life.

B. Forum:

Should school children take part-time jobs?

This is a discussion which will appear in a magazine.

Editor: This month our panel looks at part-time jobs. Are they good for school children or not?

Headmaster: Definitely not. The children have got two full-time jobs already: growing up and going to school. Part-time jobs make them so tired they fall asleep in class.

Mrs. Barnes: I agree. I know school hours are short, but there's homework as well, and children need a lot of sleep.

Mr. Barnes: Young children perhaps, but some boys stay at school until they're eighteen or nineteen. A part-time job can't harm them. In fact, it's good for them. They earn their pocket—money instead of asking their parents for it. And they see something of the world outside school.

Businessman: You're absolute right. Boys learn a lot from a part-time job. And we mustn't forget that some families need the extra money. If the pupils didn't forget that some families need the extra money. If the pupils didn't take part-time jobs they couldn't stay at school.

Editor: Well, we seem to be equally divided: two for, and two against. What do our readers think?

4.2 Teaching goal

Title: Should School Children Take Part-time Jobs

Function: Describing a series of actions

Stating views and the arguments

Notion: agree, be for... , be against...

4.3 Teaching Procedure

Lead-in

1) Questions: Do you have experience of being really frightened?

Can you describe it to us?

Do you have a part-time job? Why do you take it? How do you like the experience?

Method: discussion in the whole class

2) Vocabulary Study: *panel, full-time, absolutely, extra, picnic, drown*

Teacher directs comprehension task

"In this section we'll listen to a description on an experience of being frightened first and then the second part will be a forum on whether taking part-time job is good for children or not."

Students listen for task

A. Discussion

1. Listen to the tape once and then try to work out a summary for this conversation.

Summary: Tom is telling Eddie about _____

(strategy: general listening)

2. Fill in the missing words.

We used to _____ place beside _____. We had _____. I was there with _____ and I decided to _____. It didn't look far and I _____...but _____ I realized it was _____ than I thought. I was _____. I shouted. Luckily _____ and brought _____. I thought I _____. I've never been more _____ in my life.

(strategy: listening for specific information)

B. Forum

3. Complete the remarks given by the four participants at the forum so as to show each one's answer to the question: Should school children take part-time jobs?

Headmaster:

(1) The two full-time jobs that children have already got are:

a. _____, and

b. _____.

(1) Part-time jobs make them _____ that they _____ in class.

Mrs. Barnes:

(2) What children need is _____.

Mr. Barnes:

(3) A part-time job can't _____ boys.

(4) They _____ instead of asking their parents for And they _____ of the world _____.

Businessman:

(1) Boys _____ from a part-time job.

(2) If the pupils _____ they couldn't _____.

(strategy: listening for gist)

Teacher directs feedback

After the students finish the tasks, they check their answers with each other first. Then the teacher talked about the answers with them.

Teacher directs text-related task

- 1) Write a short passage describing as vividly as you can an experience of being extremely happy.
- 2) The task is to discuss in a small group “Do you agree that taking part-time job is good for school children? Why or why not?” Then each group will recommend a representative to present the (may be) different views of the members in his group and his own opinion on this issue with the argument.

4.4 Conclusion

The whole procedure of teaching listening section is designed according to the functional/notional and task-based syllabus. At each stage of reading, a definite task is proposed and the class is student-centered. Pair and group work, as language learning activities, is a useful technique for guiding the language learners towards better and easier communication. This type of practice gives the whole class maximum opportunities for practicing the language. The students are encouraged to discuss in groups and state individually. Some listening strategies which greatly help their listening are presented. Speaking and writing are integrated into the tasks. The students keep interest in the target text all the time. The atmosphere in the classroom is active and pleasant.

Through the tasks, the students get a deep impression of how to express their views and communicate with each other. They have desired the language function.

5. A Case Study on Effect of Teaching Listening In CLT*5.1 Objectives*

The recent developments in language teaching have been motivated by a number of factors, such as changes in linguistics, in learning psychology, and in the social environment, with the increasing importance of global institutions. Also, increasing dissatisfaction with the results of earlier methods leads to a search for more efficient methods and approaches.

As we mentioned in the former part, listening as an important means of input has been neglected for a long time. It seems a nut for most students; while the present teaching of listening comprehension is generally inefficient. The main reason, as we have analysed, lies in the teaching methods. The traditional method is simple, dull, unscientific, discouraging and more seriously, it can not help the students improve their communicative competence.

Starting from the current needs of foreign language learning, we have found some of Communicative Language Teaching principles can be borrowed to apply to English teaching classroom. On listening teaching it is also of value. In Chapter 4, we have discussed the possible ways to realize the ideas of making listening training more efficient in CLT. The specific suggested ways are vivid Background knowledge introduction, Strategy training, and skills-integration Tasks, which, for the sake of convenience, will be referred to as “BST” in the following part.

The experiment to be introduced here is a preliminary study of listening comprehension at college level in the light of CLT, which advocates the importance of communicative competence. This study intends to Investigate how the instruction affects the listening comprehension performance, and how language proficiency relates to the results. Thus, two research questions are formulated:

- 1) Does BST affect the listening performance of the students?
- 2) Does BST help the students improve communicative competence as demonstrated by an increase in reading comprehension?

*5.2 Research Design**5.2.1 Sample*

The general principles of sampling in this study are: 1) taking intact classes as subjects; 2) the subjects being typical and representative. The participants in this study were two classes, 89 first-year non-English majors of Shandong Institute of Commerce and Technology. The two classes are from the oldest and largest department—Engineering and Technology Department, whose students’ English Proficiency has generally been in the middle of all departments. The selection of the two classes also intended to control as many variables as possible. The subjects were of very similar academic and family background. They were all engineering students and most of them from rural areas.

A background questionnaire was designed to determine how similar the two classes were in the following areas: previous listening experience, types of high school, sex proportion, grades in the placement test, family background. Analysis of mean difference of the data obtained between the two groups using Chi-square test and t-test found that the two groups did not differ significantly on any of the background characteristics (Table 1). Then one of the two classes was randomly appointed as an experimental group and the other as a control group.

Insert Table 1 Here

5.2.2 Treatment

The experiment consisted of an 18-week BST instruction program. Both of the control and experimental groups took part in the regular first semester /English listening course. They met twice a week in 50-minute classes, used the same course materials (*Listen To This: 1* edited by Beijing University For Foreign Studies), and followed the same syllabus, the only difference being that the experimental group students were given BST instruction. Both the experimental and the control group were taught by the author. Different lesson plans for the experimental group focused on introducing necessary background knowledge, listening strategy training and completing various tasks

5.2.3 Instrumentation

Measures of Teaching Listening in CLT

1) Background knowledge Introduction

In order to help the students understand the listening material by Top-down processing, necessary such kind of knowledge was introduced in various and attracting forms: teacher's presentation, pictures-showing, video-showing, discussion, etc.

2) Listening Strategy Training

The strategies training was integrated into the regular coursework rather than as a separate component and usually underlined in listening tasks.

3) Skills-integration Tasks

One of the outstanding features of CLT is task-based classroom activities. In the listening classroom for experiment group, besides the tasks in the course book, the author designed other text-related tasks for most of lessons. In these tasks, not only listening skill but also speaking, reading and writing skills are involved.

Time Arrangement

Since the two groups have the same syllabus and class time is also equal, while in the class of experimental group there are more interactive activities, time should be controlled properly. The treatment is: usually in class for control group, the last 10-15 minutes would be used to re-listen all of the content that the students had heard during that class. For experimental group this period of time was employed to carry on BST measures.

Measures of Listening Comprehension Performance

Two parallel tests were designed especially for the study to measure the subjects' listening comprehension performance. Four teachers were invited in the designing job. Each presented one type of listening tasks for four samples. One sample included: 1) multiple-choice for understanding short conversations; 2) multiple-choice for understanding short passages; 3) compound dictation; 4) answering questions. These types of tasks are corresponding to those suggested for the National College English Test (Band IV). Then the experimenters organized the sample test papers into the final ones.

To guarantee reliability and a moderate difficulty, and to see if the two tests are parallel ones, a pretest was first administered to 30 randomly selected first year students (none of the students involved in this present study was included). For the test lasting less than half an hour, the students were asked to finish the two tests at one time with only an interval of twenty minutes. Table 2 shows that the two tests can be used as parallel tests.

Insert Table 2 Here

5.3 Data Collection and Analysis

After the students had experienced the listening course for one week, both the experimental and control group were given a pre-test to measure the listening comprehension performance and the questionnaires to elicit what they actually did in listening activities. At the end of the semester, a posttest and the questionnaires were administered again to determine students' improvement in listening performance and the change of strategies use. The data thus obtained were analyzed by means of SPSS. The analysis procedures involved are as follows: To determine the students' improvement in listening comprehension performance, the pre- and post-test mean scores were first compared using one-way ANOVA between the experimental and the control group. Then the significant difference in the gain scores (post-test score minus pre-test score) between the two groups was tested by paired sample t-tests separately within the treatment and control group.

5.4 Statistical Results

The results of the statistics generated by One-way ANOVA analysis in Table 3 show that there is no difference in pretest between the experimental group and the control group ($P = .924$), whereas a significant difference is seen in the posttest ($P = .001$), indicating that the treatment to the students seems to have caused some change.

Insert Table 3 Here

The result was further tested by the paired sample t-test. Compared with the pretest, the experimental group made a significant progress ($P = .000 .05$) in the posttest, while the control group found no clear improvement (Table 4). Thus, a conclusion may be drawn here that the explicit strategy training is successful for improving listening proficiency. In addition, the P-value obtained from the ANOVA analysis for the posttest is .001, indicating that this is a very strong effect.

Insert Table 4 Here

5.5 Discussion of the Statistical Results

From the data collected and the subsequent statistical analysis of the data, it would seem that adding BST training component to listening course has a significant effect in the areas investigated in this study. It appears to have greatly improved the experimental subjects' listening comprehension performance.

Compared with the control class, the experimental class achieved significant improvement in listening performance. The result is consistent with the objectives of the treatment since emphasis was placed on effective BST for improving listening performance.

Generally, unlike the traditional listening classes attended by the control group in this study in which the teacher only used listening activities to test the listening abilities of the students, emphasizing outcome and leading to anxiety and apprehension, BST teaching focused on the process by exposing students to a rich background knowledge and various effective and efficient listening strategies for approaching listening tasks of different types, opening up less frustrating routes to successful listening. These activities might become more relevant and interesting for the learners. Being actively involved and strategically smart, the students are more likely to make greater progress.

It is obvious that this study is not a strictly complete one. With regard to what roles each part of BST plays on the students respectively, no answer is supplied. To achieve this goal, more experiments need to be put up.

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Table 1. Background Characteristics of the Sample

		C Group	E Group	Test
Sex	Female	8	9	$X^2 = .153$ Df = 1 P = .695
	Male	37	35	
	Total	45	44	
High school	Key	18	21	$X^2 = .939$ Df = 1 P = .331
	Ordinary	27	23	
	Total	45	44	
Previous listening	Yes	11	12	$X^2 = .908$ Df = 1 P = .757
	No	34	32	
	Total	45	44	
Family source	Urban	14	15	$X^2 = .288$ Df = 1 P = .592
	Rural	31	29	
	Total	45	44	
Placement test		69.8	70.6	P = .717 > .05

Table 2. Statistical Results of the Two Tests

	Mean	SD	P-value	R
Test 1	18.80	5.04	.53	.903
Test 2	18.60	4.67	.52	

Note: P-value: index of difficulty

Table 3. One-way ANOVA of Pre- and Post-test of Listening Comprehension across Experimental and Control Group

	Source	SS	df	MS	F	Sig.
Pre-Test	Between Groups	.22	1	.22	.009	.924
	Within Groups	1997.83	83	24.08		
	Total	1998.05	84			
Post-Test	Between Group	258.80	1	258.80	10.95	.001
	Within Group	1961.25	83	23.63		
	Total	2220.05	84			

Table 4. Paired Sample t-test on Pre- and Post-test of Listening Comprehension in Experimental and Control Group

Group	Pretest	Mean Posttest	Gain	df	T	P
E Group	15.26 (4.96)	19.42 (4.96)	+ 4.16	44	7.96	.000
C Group	15.36 (4.85)	15.93 (4.75)	+ .57	43	1.15	2.57

Note: E Group: experimental group; C Group: control group.

Below the means in parentheses are standard deviations.



Rural Educators' Understanding of the Legislations That Impact on School Practice with Specific Reference to the Bill of Rights and the South African Schools Act

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Abstract

The aim of this article is to investigate the rural educators' understanding of the legislations that impact on school practice. An argument is presented that the understanding of the legal frameworks that govern school practice begins with the educators' understanding of the Bill of Rights and the South African Schools Act.

The article reports on a study in which quantitative methodology was used to obtain information from rural educators who are members of the school management team, about their understanding of certain sections of the Bill of Rights and the South African Schools Act that have a founding impact on the school practice.

The study is concluded by the submission that it is essential for rural educators to be given necessary training so that they can have a working knowledge of the legislations that impact on their school practice to understand the legal processes and principles and determine the legality of their decisions.

Keywords: Rural educators, School Management Team, Bill of Rights, South African Schools Act, Learners

1. Introduction

Since 1996, the South African government introduced several reforms in the form of education policies and legislations intended to democratize education and school practice. The most comprehensive of these reforms are catered for in the South African Constitution Act (Act No 108 of 1996) and in the South African Schools Act (Act No 84 of 1996). Since the establishment of these Acts, the enormous expectations imposed on educators have prompted a significant change in the nature and scale of their accountability.

It should, however, be noted that education and training received by these educators are largely based on teaching and learning aspects and no particular attention to the training in the legislations that affect the school practice is evident, yet educators are expected to have a working knowledge of these legislations so that they can understand the legal processes and principles and determine the legality of their decisions.

The concept of education law is novel to many educators and this lack of preparation makes the task of legal intervention foreign and uncomfortable to most educators. Serious offences such as sexual harassment, unfair discrimination, corporal punishment, and other criminal activities committed in schools both by learners and educators are on record. With the upsurge of these acts, the demand for school - based legal intervention services in rural schools has increased significantly. Training programs for educators in education law will not only equip educators with the tools they require for effective legal intervention obligations, but will also promote their status as school-based legal interveners.

There is ample evidence that schools are not immune to violence. Escalating crimes varying from relatively less serious incidents, such as fistfights, theft, or vandalism, to serious crimes such as a rape, physical attacks with weapons or robbery occur in schools and educators are expected to make decisions which warrant the understanding of the legal principles and processes. It is ironic that educators with no proper training in legal aspects of education practice are expected to deal with these legal challenging circumstances. It makes sense that such a delicate exercise needs a well-trained educator in education legislations, who, in times of needs makes quick, accurate, and critical decisions.

Consequently, the training of educators in the legislations that impact on school practice such as the Bill of Rights and the South African Schools will provide for more potent and constructive educators as legal interveners.

This article focuses on the educators' understanding of the legislations that impact on school practice such as the Bill of Rights and the South African Schools. Consequently, the purpose of this article is to draw attention to issues such as the essentiality of the educators' working knowledge of the legislations that impact on the school practice, the educators' knowledge of the sections of the Bill of rights and the South African Schools Act and suggestions by the educators that can improve their understanding of these legislations.

First, the background to the study is provided, next, the genesis and the substance of the Bill of Rights and the Schools Act are presented and the method of investigation and results are discussed. Finally, the implications of the findings are outlined.

2. Background to the study

A cross-section of the field of education management reveals that very little research has been conducted on rural educators' understanding of the legislations that impact on school practice. The understanding of these legislations by the educators is instrumental in ordering the rights and the duties of all parties involved in schools so that there is a harmonious and balanced order between all the school participants (Oosthuizen, 2004, p. 1).

The relative unavailability of literature on this research problem is itself an indication that research has to be done in order to provide more insight and improved approaches to this issue. The policies are challenging the educators to redesign their school work and at the same time new relationships have to be forged between the educators and learners. The educators are faced with the task of unraveling the details and the implications of the new Acts.

3. The genesis and the substance of the Bill of Rights and the South African Schools Act

3.1 Bill of Rights

The South African Constitution Act was passed in 1996 and came into operation on 4 February 1997 (Oosthuizen, 2004, p. 21). Chapter 2 of this Act contains the Bill of Rights in which the State guarantees the protection of individual's fundamental rights. This Bill of Rights is a cornerstone of democracy in South Africa, as it enshrines the rights of all people in the country and affirms the democratic values of human dignity, equality and freedom. Some provisions of the Bill of Rights which are of particular importance to school practice are mentioned below.

3.1.1 Equality (Section 9)

This section stipulates that everyone is equal before the law and has the right to equal protection and benefit of the law. This section further on lays down that there may not be unfairly discrimination directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, color, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth (Jones, 1999, p. 26 & RSA, 1996b, p. 12).

3.1.2 Human dignity (Section 10)

This section mentions that everyone has the right to have his dignity respected and protected. It is because of this section that Jones (1999, p. 26) submits that corporal punishment is not allowed as a person cannot be treated or punished in a cruel, inhuman or degrading manner.

3.1.3 Privacy (Section 14)

This section discloses that everyone's right to privacy is guaranteed, including freedom from searches of property and person, seizure of possessions, and violation of the privacy of personal communications. Jones (1999, p. 27) adds that a person cannot without justifiable reason be searched nor has his property searched.

3.1.4 Freedom of religion, belief and opinion (Section 15)

In this section it is stated that everyone has the right to freedom of conscience, religion, thought, belief and opinion and religious observances may be conducted at state or state-aided institutions, provided that those observances follow rules made by the appropriate public authorities, they are conducted on an equitable basis and attendance at them is free and voluntary (Jones, 1999, p. 27).

3.1.5 The Right to Education (Section 29)

This section recognizes that every person has a right to basic education and to equal access to educational institutions. This means that the state has to do all that it reasonable can to make sure that everyone receives education. Basic education is defined by the education ministry as the attainment of a General Education Certificate, on completion of Grade 9. The state is therefore under an obligation to provide education up to this level. Everyone has the right to receive education in the official language of his choice where this is 'reasonably practicable' (Jones, 1999, p. 28 & RSA, 1996b, p.13).

3.1.6 Cultural, religious and linguistic communities (Section 31)

In this section it is laid down that people belonging to a cultural, religious or linguistic community may not be denied the right to enjoy their culture, practice their religion or form associations, provided that they do not contravene any other provision in the Bill of Rights (Jones, 1999, p. 28 & RSA, 1996b, p. 13).

3.1.7 Limitation of rights (Section 36)

In conclusion, in this section it is mentioned that the rights in the Bill of Rights may be limited only in terms of law of general application to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom (Jones, 1999, p. 29 & RSA, 1996b, p. 13).

3.2 South African Schools Act

The South African Schools Act (Act No. 84 of 1996) came into effect in January 1996 (DoE, 1997, p. 1 & Potgieter, et al., 1997, p. 14). The origin of this Act can be traced back to the 1995 Hunter Commission's Report, whose task was to recommend a national framework of school organization, functioning and formal governance (Sayed and Carrim, 1997, p. 22). The Hunter Commission Report proposed that educators, learners, non-educators and parents should serve on the school governing bodies which are expected to deal with various issues such as:

- Key policy matters (language of instruction, religious observances, code of conduct for learners, etc.),
- Routine school administration (time tables, maintenance of physical assets, etc.) and
- Financial matters (Potgieter et al., 1997, p. 14).

The South African Schools Act is the engine of school governance. It deals with the most important school administration policies. It is the *de facto* kingpin of educators' activities in schools, as it contains the important information on the following:

- Admission to public schools,
- Language policy of public schools,
- Freedom of conscience and religion at public schools,
- Suspension and expulsion from public school and
- Prohibition of corporal punishment (RSA, 1996a, p. 12).

It is therefore important to mention that educators that are ignorant of the South African Schools Act are a liability to the school as they do not effect school duties as per the mandate of the legislation.

In this article, the focus will be on those sections that are conspicuous and noticeable to the daily activities of the educators, as highlighted above.

3.2.1 Admission to public schools

This section states that a public school must admit learners and serve their educational requirements without unfairly discriminating in any way. It further stipulates that no learner may be refused admission to a public school on the grounds that his or her parent- is unable to pay or has not paid the school fees determined by the governing body, does not subscribe to the mission statement of the school; or has refused to enter into a contract in terms of which the parent waives any claim for damages arising out of the education of the learner (RSA, 1996a, p. 13).

3.2.2 Language policy of public schools

In this section it is mentioned that the governing body of a public school must draft the language policy of the school subject to the Constitution, and bearing in mind the fact that everyone has a right to receive education in an official language of his choice, where it is reasonably practically possible (Oosthuizen, 2004, p. 207). It is however cautioned that the decision of the governing body should not result in racial discrimination (DoE, 1997, p. 37).

3.2.3 Freedom of conscience and religion at public schools

This section stipulates that religious observances may be conducted at a public school under rules issued by the governing body if such observances are conducted on an equitable basis and attendance at them by learners and members of staff is free and voluntary (Oosthuizen, 2004, p. 207).

3.2.4 Suspension and expulsion from public school

In terms of this Act, a governing body may suspend a learner from attending school at a particular school. However, according to Oosthuizen (2004, p. 209) that is subject to the following:

- Learner must receive a lawful hearing before being suspended;
- Learner may not be suspended for more than a week;

- The period of suspension can exceed one week where it is recommended that the learner must be expelled and the governing body is awaiting the decision from the Head of Department.

This section further stipulates that the expulsion of the learner may only be effected by the Head of Department, after the learner has been found guilty of serious misconduct at a fair hearing (RSA, 1996a, p. 23). Jones (1999, p. 27) further on submits that the parents of the expelled learner may appeal against the decision of the HOD to the MEC. In conclusion, Naidu, et al., (2008, p.20) asseverate that if a learner who is subject to compulsory attendance is expelled from school, the HOD must make an alternative arrangement for his placement at another public school.

3.2.5 Prohibition of corporal punishment

In this section, it is explained that corporal punishment in all schools including in independent schools is prohibited. The legislature banned corporal punishment to protect schoolchildren from abuse. The section takes into consideration the importance of the child's right to dignity: Section 10 of the Constitution (RSA, 1996b, p. 11 & Mothaba, et al., 1997, p.39).

4. Method of Investigation

4.1 Research Design and Instrumentation

4.1.1 Nature of research design

A survey to gather questionnaire-based data in a real-life setting was used in the study. The research design included the delimitation of the field of survey, the selection of respondents (size of the sample and sampling procedures), the research instruments, namely the questionnaires, a pilot study, the administration of the questionnaires, and the processing of data.

4.1.2 Population and Sampling

The researcher used the cluster and simple random sampling method to select one hundred educators, who are members of the school management team from KwaZulu Natal Midlands Cluster. Two rural districts in this cluster were selected, namely Sisonke and Ugu. This method was favored for its simplicity, unbiased nature, and its closeness to fulfilling the major assumption of probability, namely that each element in the population stands an equal chance of being selected (McMillan and Schumacher, 2006, p.210 & Kumar, 2005, p.112).

4.1.3 Instrumentation

The questionnaire was used as research instrument. This quantitative methodology was chosen in the light of the purpose of the study, the kind of information that was required and the available resources. The researcher believed that this kind of survey would lead to some truths about the rural educators' understanding of the legislations that impact on school practice with specific reference to the Bill of Rights and the South African Schools Act.

(a) Format of the Questionnaire

The questionnaire was divided into four sections, with each section focusing on the aims of the study. Section 1 which dealt with the biographic and general information consisted of questions 1.1 to 1.6. Section 2 had closed questions focusing on the educators' knowledge of the legislations that impact on school practice. The respondents were asked to rate their responses according to the following scale: **Good, Average, Poor.**

Section 3 had closed questions focusing on the essentiality of the educators' working knowledge of the legislations that impact on school practice. Questions in this section were operationalized using the following four-point scale and the respondents were asked to rate their responses as follows: **Fully Agree, Agree, Disagree, Fully Disagree.**

Section 4 consisted of open-ended questions, wherein educators had to suggest what could be done to improve their understanding of legislations that impact on school practice.

(b) Administration of the Questionnaires

The researcher conducted a pilot study in two schools in the KZN Midlands Cluster. These schools were part of the general population from which the sample was drawn, but not part of the sample itself. No inherent weaknesses were discovered in the questionnaires and the data solicited confirmed the questionnaires' validity and reliability, consequently there was no need to modify the questionnaires. In the actual study, educators were requested to complete their questionnaires and post them to the researcher.

The first sample population responses were 64 (64%) educators. After the follow-ups, 15 educators returned the completed questionnaires to make total responses of 79 (79%) respondents. That represented a satisfying response.

5. Data processing

After all the questionnaires had been received, the important task was then to reduce the mass of data obtained to a format suitable for analysis. The respondents' responses were coded. Frequency distribution was used.

6. Results and Discussions

6.1 Educators' Qualifications

Table1. Educators' Qualifications

Table 1 revealed that more than half of the respondents (65%) had matric (grade 12) and more than three years qualification, another 22% had matric (grade 12) plus two year qualification and only 13% had matric (grade 12) plus one year qualification. That confirmed the assertion that the education level of rural educators was improving and educators are eager to improve their qualifications so that they can meaningfully participate in the school administration activities.

Success in the execution of educators' duties is determined by the extent to which the educators are educated. Educators need to know and understand the school's legal documents, if they are not well educated, it would be a miracle if they manage to comprehend their legal obligations.

6.2 Educators' knowledge of the Bill of Rights

Table2. Educators' knowledge of the Bill of Rights

- The Educators' Knowledge of Section 9: Equality
- Table 2 revealed that a high proportion of the respondents (87%) indicated that their knowledge of Section 9: Equality was good, whereas 13% indicated that theirs was average. That implied that most educators knew how they could be involved in the implementation of this Section 9 in school practice.
- This section deals with the most important school administration matters such as the prohibition of unfair discrimination directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, color, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth (RSA, 1996b, p.12).
- The Educators' Knowledge of Section 10: Human Dignity
- Table 2 also revealed that more than half of the respondents (87%) indicated that their knowledge of Section 10: Human Dignity was good, whereas 13% indicated that theirs was average. This implies that as it is the case with Section 9, most educators know how they can be involved in the implementation of this section in school practice.
- This section deals with school matters such as the banning of corporal punishment in schools since everyone has the right to have his dignity respected and protected (RSA, 1996b & Potgieter, et al., 1997, p. 14).
- The Educators' Knowledge of Section 14: Privacy
- Table 2 further on revealed that 62% of the respondents indicated that their knowledge of section 14 was good, whereas 34% indicated that theirs was average and only 4% indicated that theirs was poor.
- This section asserts that a person cannot without justifiable reason be searched nor has his property searched or his possession seized (RSA, 1996b, p. 12 & Potgieter, et al., 1997, p. 14).
- The Educators' Knowledge of Section 29: Education
- Table 2 again revealed that a high proportion of respondents (87%) indicated that their knowledge of Section 29 was good, whereas 13% indicated that theirs was average.
- This section stipulates that every person has a right to basic education and has the right to receive education in the official language of his choice where this is 'reasonably practicable'. The section further on stipulates that the State is under an obligation to provide education up to Grade 9(RSA, 1996b, 12 & Potgieter,et al., 1997, p. 14).
- The Educators' Knowledge of Section 31: Cultural, religious and linguistic communities
- Table 2 revealed that less than half of the respondents (32%) indicated that their knowledge of Section 31 was good, whereas (28%) indicated that theirs was average and close to half of the respondents (40%) indicated that their knowledge was poor.
- This is really worrying, taking into account the fact that the National Policy on Religion and Education confirms that South Africa is a multi-religious country (RSA, 2003, p. 12). This section observes that the freedom of religion is guaranteed and religious observances are allowed in the state or state aided institutions. This therefore means that the learners and the staff have the right to have their own religious views respected and the school needs to ensure that learners and staff with different convictions have an equal opportunity to attend religious observances according to their faith (RSA, 1996b, p. 13).
- The Educators' Knowledge of the Bill of Rights Section 36: Limitations of rights

- Table 2, in conclusion revealed that less than half of the respondents (28%) indicated that their knowledge of Section 33 was good, whereas (20%) indicated that theirs was average and more than half of the respondents (40%) indicated that their knowledge was poor.
- In this section, it is mentioned that the rights may be limited if the limitation is reasonable and justifiable in an open and democratic society (RSA, 1996b, p. 13).
- 6.3 Educators' Knowledge of the South African Schools Act
- Table 3. Educators' knowledge of the South African Schools Act
- Educators' knowledge of the school's policy on learner admission
- Table 3 revealed that a high proportion of the respondents (66%) indicated that their knowledge of the school's policy on the admission of learners was good, 30% indicated that theirs was average, and only 4% indicated that theirs was poor.
- This section states that a public school must admit learners without unfairly discriminating in any way and no learner may be refused admission to a public school on the grounds that his parent is unable to pay the school fees determined by the governing body (RSA, 1996a, p. 13).
- Educators' knowledge of the school's policy on language
- Table 3 also revealed that the majority of the respondents (62%) indicated that their knowledge of the school's policy on language was good, 28% indicated that theirs was average, and only 10% indicated that theirs was poor.
- This section stipulates that the governing body must draft the language policy of the school bearing in mind that the Constitution stipulates that everyone has a right to receive education in an official language of his choice, where it is reasonably practically possible (DoE, 1997, p. 37).
- Educators' knowledge of the school's policy on religion
- Table 3 also revealed that less than half of the respondents (48%) indicated that their knowledge of the school's policy on religion was good, 45 % indicated that theirs was average, and only 7% indicated that theirs was poor.
- This section stipulates that religious observances may be conducted at a public school, but neither the learners nor staff members can be forced to attend them (Ooshuizen, 2004, p. 207).
- Educators' knowledge of the school's policy on the suspension and expulsion of learners
- Table 3, in conclusion revealed that less than half of the respondents (32%) indicated that their knowledge of the school's policy on the suspension and expulsion of learners was good, 48 % indicated that theirs was average, and 20% indicated that theirs was poor.
- In this section, it is stated that only the School Governing Body may suspend a learner from school and only the Head of Department can expel the learner from school (RSA, 1996a, p. 23 & Ooshuizen, 2004, p. 209).
- 6.4 Essentiality of the educators' working knowledge of the legislations that impact on the school practice
- In this section the educators were required to determine the essentiality of their working knowledge of the legislation that impacts on the school practice
- Table 4. Essentiality of the educators' working knowledge of the legislations that impact on the school practice
- Pregnant girls must be allowed to learn until they give birth
- Table 4 revealed that more than half of the respondents (51%) indicated that they did not agree with the statement the pregnant girls be allowed to learn until they give birth and 49% indicated that they agreed that pregnant girls should be allowed to learn until they give birth. This is ironical; taking into account the fact that the same respondents indicated that their knowledge of Section 9 of the Bill of Rights was good. This section prohibits unfair discrimination directly or indirectly against anyone on one or more grounds, including pregnancy (RSA, 1996b, p. 12 & Jones, 1999, p. 26).
- Dagga smoking learners can be expelled by the SGB and Principal
- As shown in Table 4, the majority of the respondents (65%) agreed that dagga smoking learners can be expelled by the School Governing Body and Principal. The same respondents had claimed the good knowledge of Section 9 of the South African Schools Act, which discloses that the expulsion of the learner may only be affected by the Head of Department, after the learner has been found guilty of serious misconduct at a fair hearing (RSA, 1996a, p. 11 & Mothaba, et al., 1997, p. 39).
- The principal and School Management Team can suspend learners who smoke dagga
- Table 4 also revealed that more than half of the respondents (59%) agreed that the principal and School Management Team can suspend learners who smoke dagga. Again; this becomes ironical, as the same respondents had indicated

earlier that their knowledge of Section 9 of the South African Schools Act was good. This section stipulates that only a School Governing Body may suspend a learner from attending school (RSA, 1996a, p. 23 & Jones, 1999, p. 27).

- Learners who are 'rastas' can form their club and practice their rites in school
- Table 4 further on revealed that a majority of the respondents (70%) indicated that they did not agree with the statement that the learners who are 'rastas' can form their club and practice their rites in school. In the previous section the same respondents indicated that their knowledge of Section 31 of the Bill of Rights was good. This section determines that people belonging to a religious community may not be denied their right to establish, join and maintain their religious associations and bodies. Furthermore, no person may be denied his right to practice his religion with other members of that religious community (Oosthuizen, 2004, p. 209).
- Educators are allowed to seize cell phones and rings from learners
- Table 4 showed that a high proportion of respondents (66%) disagreed that educators are allowed to seize cell phones and rings from learners, their disagreement may be based on their understanding section 14 of the Bill of Rights, which states that everyone's right to privacy is guaranteed, including freedom from searches of property and person, seizure of possessions, etc. (Clarke, 2007, p. 122).
- All learners must attend religious morning assembly in school
- In conclusion, Table 4 showed that a majority of the respondents (86%) agreed that all learners must attend religious morning assembly in school. The strong support for this item indicates that educators do not know Section 15 of the South African Schools Act, which stipulates that the attendance of religious observances in a school is free and voluntary (Clarke, 2007, p. 122).
- 6.5 Educators' suggestions on improving their understanding of the legislations that impact on school practice (Analyzed according to the frequency rate)
- Educators in an open-ended question were required to make suggestions on what can be done to improve their understanding of the legislations that impact on school practice. Their responses were ranked in the order of frequency as follows:
- The Dept of Education should organize workshops for educators (77%);
- Principals should motivate educators to read the Bill of Rights and South African Schools Act (65%);
- The principal and the school have the responsibility to provide necessary documents and information available to the educators (63%);
- Educators should to further their studies (56%); and
- Education service providers should design modules whose contents include legislations that impact on school practice (53%).

7. Summary of the findings

This summary that follows highlights the salient issues that emerged from the study.

7.1 The educators' educational background

The empirical survey revealed that a high proportion of rural educators have good teacher education qualification, that education background can form a good base for the establishment of training programs. The less educated the educator is, the more likely it she/he will be reluctant to become involved in training programs.

7.2 Essentiality of the educators' working knowledge of the legislation that impacts on the school practice

The study found out that educators did not agree with the statement the pregnant girls should be allowed to learn until they give birth, despite the fact that Section 9 of the Bill of Rights prohibits unfair discrimination directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, etc. (RSA, 1996b, p. 12). The study furthermore found that the majority of the educators were opposed to the stipulation in the Bill of Rights that people belonging to a religious community may not be denied their right to establish, join and maintain their religious associations and bodies. Furthermore, no person may be denied his right to practice his religion with other members of that religious community. The study also confirmed that educators are in opposition to the seizure of cell phones and rings from learners, basing their disagreement on their understanding of Section 14 of the Bill of Rights, which states that everyone's right to privacy is guaranteed, including freedom from searches of property and person, seizure of possessions, etc. (Jones, 1999, p. 27). However this can be done if Section 36 of the Bill of Rights is attended to. The study in conclusion, found that the majority of the educators agreed that all learners must attend religious morning assembly in school, despite the stipulation in the Schools Act that the attendance of religious observances in a school is free and voluntary (Jones, 1999, p. 27).

These findings are of great concern to the school practice as the knowledge of these pieces of legislation by educators in South Africa has always been taken as a *fait accompli*, the reality is that to rural educators, this still remains a wishful thinking, despite the fact legislations are undoubtedly the critical foci of school practices in the new democratic dispensation in the South Africa schools.

It is therefore imperative that every educator is familiar with and understand these legislations, so that he can use them to enhance his teaching and learning, as Naidu, et al. (2008, p. 18) submit that it is essential for educators to have a working knowledge of these legislations so that they can understand the legal processes and principles and determine the legality of their decisions.

8. Conclusion

It is essential for the rural educators to be given the necessary training, which should include the opportunity to acquire the necessary knowledge so they would be in a position to participate meaningfully in matters affecting the school practices.

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Table 1. Educators' Qualifications

Education Qualification	N	%
Below Matric (Grade 12)	0	0
Matric (Grade 12)	0	0
Matric + 1 (M+1)	10	13
Matric +2 (M+2)	17	22
Matric+3 and above	52	65
TOTAL	79	100

Table 2. Educators' knowledge of the Bill of Rights

Items		Good	Average	Poor	Total
Section 9 : Equality	N	69	10	0	79
	%	87	13	0	100
Section 10 : Human Dignity	N	69	10	0	79
	%	87	13	0	100
Section 14 : Privacy	N	49	27	3	79
	%	62	34	4	100
Section 15: Freedom of religion, belief and opinion	N	43	30	6	79
	%	55	38	7	100
Section 29: Education	N	69	10	0	79
	%	87	13	0	100
Section 31 : Cultural, religious and linguistic communities	N	25	22	32	79
	%	32	28	40	100
Section 36: Limitations of rights	N	22	16	41	79
	%	28	20	52	100

Table 3. Educators' knowledge of the South African Schools Act

Items		Good	Average	Poor	Total
School's policy on learner admission	N	52	24	3	79
	%	66	30	4	100
School's policy on language	N	49	22	8	79
	%	62	28	10	100
School's policy on religion	N	38	36	5	79
	%	48	45	7	100
School's policy on the suspension and expulsion of learners	N	25	38	16	79
	%	32	48	20	100

Table 4. Essentiality of the educators' working knowledge of the legislations that impact on the school practice

Items		Fully Agree	Agree	Disagree	Fully Disagree	TOTAL
Pregnant girls must be allowed to learn until they give birth	N	25	14	8	32	79
	%	31	18	10	41	100
Dagga smoking learners can be expelled by the SGB and Principal	N	27	25	19	8	79
	%	34	31	25	10	100
The principal and SMT can suspend learners who smoke dagga	N	20	27	8	24	79
	%	25	34	10	31	100
Learners who are 'rastas' can form their club and practice their rites in school	N	11	13	20	35	79
	%	14	16	25	45	100
Educators are allowed to seize cell phones and rings from learners	N	6	21	14	38	79
	%	7	27	18	48	100
All learners must attend religious morning assembly in school	N	41	27	11	0	
	%	52	34	14	0	100



A Brief Discussion on Motivation and Ways to Motivate Students in English Language Learning

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Abstract

With the requirement of economic development, English has become more and more important that people begin to learn English with fully enthusiasm even from younger age. Learning a foreign language is not a simple and easy job but sometimes it is boring and dull. Motivation is critical in English learning, thus, how to effectively motivate students in English learning is an important problem. This paper expounds this importance and ways to motivate students. First, the author shows the definition of motivation and then explains intrinsic and extrinsic motivation and their relations, following with some personal factors that influence motivation. At last, according to the rationale, the author suggests several effective ways to motivate students in English learning.

Keywords: Motivation, English language learning, Ways

1. Introduction

In recent years in China, learning English has been a very prevalent tendency and it has become more popular and urgent as China succeeded in bidding to hold the 2008 Olympic Games and entering into the World Trade Organization. Mastery of a foreign language, especially English is viewed as a passport to one's future success, thus, more and more people swarm into the tide of English learning. In addition, the English learners have become younger and younger that English courses are taught in Grade Three or Grade One of primary schools and even in kindergartens. Furthermore, most of parents send the children to some after-school English classes on the weekends in the hope of promoting the children's English learning, yet some of the teachers and parents are in frustration of recognition of the children's low attitude and grades in English learning. Therefore, as teachers should know the psychological theory and the process of English learning in order to encourage and enhance the English learning of students.

Language learning is a very complicated process that is influenced by many factors. Besides the intelligent factor, the non-intelligent factors----motivation, attitude, interests, age, methods, will and character----are the direct and the most important factors to English learning. Because the behavior of English learners is dominated by cognition, in other words, the learners have a desire in which is a drive to persist in English learning. It is true that two students sit next to each other in a class. They look alike and are similar in ability, but they act very differently. One jumps into assignments, participates eagerly in class, and gets good grades; the other hesitates on assignments, seldom joins in discussion, and barely gets by. Why? This situation is typical. How many times have we heard teachers say, "She could." Theories of motivation help us explain these differences. In Jakobovits's research, he shows that the mainly influential factors to English learning are: motivation which takes up 33%, aptitude which takes up 33%, intelligent which takes up 20%, and others which take up 14%(cited in Jia Guanjie, 1996). Therefore, teachers and parents are interested in motivation, which can drive students in English learning actively.

2. Theoretical Rationale

2.1 Definition of motivation

2.1.1 In the term of psychology

People are always motivated; in fact, they are never unmotivated. They may not be motivated to do what we would prefer they do, but it can never be truly said they are unmotivated (Belyayev, 1963). In psychology, motivation is a force that energizes and directs behavior toward a goal (Paul Eggen & Don Kauchak, 1994). Just as a force moves an object, motivation moves a person. More visualized, if individuals are machines, motivation is as the very engine that powers and directs individuals' behavior. Motives serve three important functions: 1) energizing us (i.e., turning the key and starting the motivational engine), 2) directing us (i.e., pointing us in a particular direction), and 3) helping us to select the behavior most appropriate for achieving our goals (Don Hamachek, 1989, p.262). In a word, motivation is an inner

state that arouses individual's desire for a goal and maintains their efforts in a certain direction and time.

2.1.2 In language learning

Motivation is not only an intensive desire for learning and acquiring knowledge of English, but also an inner cause that push students forward in English learning with enthusiasm and willingness. It is something like the engine and steering wheel of an automobile that can moves students from boredom to interest. It is an inner power to drive and persevere students in English learning. Gardner indicates that the motivation of foreign language learning contains four aspects: a goal, effortful behavior, a desire to attain the goal and attitude (cited in Jia Guanjie, 1996). Students who have strong learning motivation take a correct and positive attitude towards study and make great efforts to master English with clear goal and desire and consequently gain better grade than those who haven't acquired motivation and those students usually regard English learning as a heavy and boring burden. It is true that motivation is such a basic factor in language learning that no teacher could avoid being concerned with students' motivation. So it is necessary to understand motivation more deeply, an idea the author turns to next.

2.2 *Intrinsic and extrinsic motivation*

Motivation can be described in many types and the main broad categories are intrinsic and extrinsic motivation.

2.2.1 Definition of intrinsic motivation

Intrinsic motivation is a response to needs that exist within the learner, such as curiosity, the need to know, and feelings of competence or growth (Paul Eggen & Don Kauchak, 1994, P.428). It exists when someone works because of an inner desire to accomplish a task successfully, whether it has some external value or not (Cheryl L. Spaulding, 1992, p.4). In other word, students are willing to learn the knowledge that is new and interesting in the purpose of fulfilling of their curiosity, the need to know and feeling of competence and growth that cause intrinsic motivation. Their purpose of learning is also the enjoyment of the learning process not for praise or rewards. Students with intrinsic motivation orientation study English on their own initiative and tend to prefer moderately challenging tasks. This has a great value and importance in learning, for the inward interest makes them self-starting and self-perpetuating and can keep the motivational machinery going for a long time.

2.2.2 Definition of extrinsic motivation

In contrast, extrinsic motivation is as an outward force in the form of expectation, praise and rewards powers students in English learning. It exists when individuals are motivated by an outcome that is external or functionally unrelated to the activity in which they are engaged (Cheryl L. Spaulding, 1992, p.4). When students work hard to win their parents' favor, gain teachers' praise, or earn rewards such as pocket money, we can rightly conclude that their motivation is primarily extrinsic, their reason for work and study lie primarily outside themselves and the aim of learning is not for the knowledge itself but the outward rewards in order to gain self-esteem. And the outward praise and rewards encourage students to study more actively.

2.2.3 Relationship between intrinsic and extrinsic motivation

Both intrinsic and extrinsic motivations are important, inseparable and complementary to each other in English learning. Intrinsic motivation is the type of inner drive that propels students forward and onward with continuous energy fueled by its own curiosity and interest. However, in the real world not all of the students are automatically energized to perform this or that task, or to learn about this or that topic. Sometimes, a good grade, the threat of failing and praise move students from an inactive to an active state. The use of rewards as extrinsic motivators have sometimes been found to increase intrinsic motivation, especially when the rewards are contingent on the quality of the performance rather than simply on participation. It is clear that extrinsic motivators are sometimes necessary either to get students started in the first place, or to start them down a track that they might not know exists (Don Hamachek, 1989, p.267). However, oversteering the use of extrinsic motivation can stifle intrinsic motivation.

2.3 *Personal factors in motivation*

Motivation can be explained as interactions among behavior, the environment, cognitions, and personal factors. And personal factors take a very important position in individual English learning. Here, let's focus on these four personal factors: arousal, needs, beliefs, and goals.

2.3.1 Motivation and arousal

Paul Eggen and Don Kauchak (1994) explains:

Arousal is a physical and psychological reaction to the environment, including anxiety and curiosity motivation. Anxiety is arousal to the point of general uneasiness and tension and curiosity motivation is based on the idea that students derive pleasure from activities with an optimal (intermediate) level of surprise, discrepancy, or incongruity—each of which induces arousal.

When a teacher hands out a test, the students are sitting nervously and curious about the content of the test, with

elevated blood pressure, fast breath and sweaty hands. This time, the students are alert and wide-awake. They are aroused and their motivation is at a high level. An optimum level of arousal is needed for peak performance. So an appropriate arousal assists in enhancing motivation.

2.3.2 Motivation and need

A need is the lacking of something necessary or desirable. In Maslow's hierarchy of needs, he divided needs into two categories. The bottom four are called deficiency needs, and the top three are called growth needs. Until the lower needs are met, people are likely to move to higher ones. His work has important implications for education. In classroom, students who are threatened by potential embarrassment are less motivated to learn, until they study in secure and relaxed environment, they will move to the need for competence which related to competence motivation that is an innate need in human beings that energizes people to master tasks and skills. The need for achievement drives students to fulfill their goals. Students with a high need for achievement tend to be motivated by challenging assignments, high grading standards, explicit feedback, and the opportunity to try again. In contrast, students with a need to avoid failure avoid challenging tasks and experience anxiety in testing situation. Being aware of these differences can help teachers respond different students with different needs and as a result, teach all students more effectively.

2.3.3 Motivation and beliefs

A third personal factor that affects people's motivation is their beliefs. An optimistic belief about one's ability in English learning can help students increase their motivation. In incremental view of the beliefs about ability, human can hold the beliefs that ability can be improved with effort. Although students incline to be influenced by teachers' evaluation of their ability in participating activities, they have an optimistic view of their ability to a certain extent which cause their self-confident originally. They also react strongly to failure and self-doubt. A linking theory is attribution theory, which is an attempt to systematically describe students' explanations for their successes and failures in classroom situations. So teachers can help students attribute their successes to ability and effort while failure bad luck and task difficulty and provide them more opportunities to experience success for the sake of setting an optimal belief of the learning ability as well as enhancing learning motivation.

2.3.4 Motivation and goals

Students' goals influence their motivation and effort in English learning. With learning goal, students study purposefully and throw great effort into English learning. They are concerned about mastering of language and accomplishing tasks and not worried about failure or comparison to others. It is effective to help students setting realistic and appropriate goals in motivating them in learning.

3. Ways to motivate students in English learning

"You can lead a horse to water, but you can't make him drink." Motivating students is a little like that. It involves not only leading them to English, but also making them thirsty for knowledge and understanding of English. As a language learning, English learning has its own characteristics that need the learners remember more, practice more and communicate more than other subjects. Students' motivation is critical for English learning. English teachers are organizers or leaders in teaching. They have responsibility to increase their students' inclination to perform willingly and actively on English learning.

3.1 Using various and interesting activities

It is effective and functional to apply various and interesting activities with moderate challenge to attract students to arouse their curiosity in English learning in view of intrinsic motivation, arousal and the characteristic of language learning. Language learning is a little different from other subjects that need students to develop roundly in four skills of listening, speaking, reading and writing by remembering plenty of vocabulary, sentences and grammar, practicing and speaking more in class. Students are willing to participate in English learning by Combining English with recreation and to realize that English learning can be interesting and fun with their involvement in which is the key to maintaining motivation throughout a lesson. Games are welcomed in English teaching especially in elementary schools. As Aydan Ersoz explains:

Well-chosen games are invaluable as they give students a break and at the same time allow students to practice language skill. Games are highly motivating since they are amusing and at the same time challenging. Furthermore, they employ meaningful and useful language in real contexts. They also encourage and increase cooperation

Guessing game, gap filling, chain story games are practical and interesting that can be used in English learning. In-role play, songs and summer English camping trips are also effective. Some real situation discussion and creative activities such as create an advertisement are encouraged in higher grade. Various and interesting activities encourage students involve as much of the time and effort as possible and as well as enhance learning motivation.

3.2 Involving new and effective techniques

As some techniques have been employed in teaching, there are more choices and more methods for teachers to stimulate students' intrinsic motivation such as CALL (computer assisted language learning), multimedia, using Internet and educational software. These methods are innovative, interesting, practical and effective with colorful pictures, vivid voices, plentiful information and effective interaction that arouse students' curiosity and interest and as well as promote their intrinsic motivation. With intrinsic motivation, many students can start self-study in schools or at homes to effectively improve their listening, reading and writing through this method.

3.3 High expectation and using reward appropriately

High expectation and using reward appropriately are effective methods as outward power to stimulate students in English learning on the basis of extrinsic motivation theory. Sometimes our expectations about people cause us to treat them in ways that make them respond just as we expected they would (David Freeman & Yvonne S. Freeman, 1978). Extrinsic—motivated students need to be refueled by outward energy such as teachers' high expectations, praise and some rewards. Research demonstrates that teacher expectations influence student achievement—higher expectation can yield better performance from students. "I know that you can all solve these problems if you work at it. Now get started and I'll help you if you run into some problems." These words show the teacher's emotional support and confidence in the student's abilities and as result the student who is especially introverted and shy to speak in class tries his or her best to overcome the problems with expectation. Moreover, during class, teachers can ask students to answer questions more often, which are more complete and accurate, and allow more time to answer and give more encouragement to stir up their arousal. And after exams, cooperative activities and home assignments, teachers can offer more complete and positive feedback or evaluations to students about their performance. Meanwhile, as teachers, do not forget to give more effective and appropriate rewards, which must be explained why the student deserves it; avoid giving severe criticism which will lower student motivation and rewards excessively that students may rely on rewards as the reason for learning not for the knowledge itself

3.4 Create a relaxed and positive learning climate

Climate is important because it creates an environment that encourages both achievement and motivation (Richards, J. C., & Theodore, S. R., 1988). From the view of Maslow's hierarchy theory, motivation and need and the character of English learning, a relaxed and positive learning climate should be providing for students learning English. In a friendly atmosphere, students can feel secure and their sense of understanding and challenge as well as learning motivation can be promoted. In English learning, students need a great deal of practice to speak in class, thus implementing some rules to ensure them make sufficient use of the practice time and at the same time to make them feel safe and comfortable and are away from criticism and laughing by making mistakes. Meanwhile, teachers should allow students to discuss broadly without the fear of expressing their own thoughts different from others. When students make some mistakes, teachers describe them as opportunities for improvement with warm comments, such as "This is a good experience for you. When you finally get it, you will have improved a lot." with more smiles and encourages, teachers can have more interactions and stand closer to students. Afterward, before starting class and activity, teachers' explanation of what students supposed to be learning and why they are learning it promote a sense of value and make students more clear and positive in learning English. Then teachers should present tasks with challenging in the principle of neither too easy nor too difficult that beyond the students' capacity, because tasks that are too difficult discourage them from trying; tasks that are too easy produce boredom and decreased feelings of competence and self-efficacy (Hu Chundiao, 1990, p.460). And when students are dealing with the tasks, teachers should prepare to give supportive aids at any moment.

3.5 Cooperative activities

Cooperative activities are at optimal level to keep students feel safe and can stimulate their arousal. Thus, more and more teachers use cooperative activities in English teaching rather than competition, which is also relatively effective. In cooperative activities, students can decrease fear of failure while communicate and exchange information effectively and involve with high emotion and efforts to solve problems. In this case, students who are reluctant and fearful to perform are drawn to participate to share their ideas. This method is suitable for higher level of students to communicate in English. For example, group discussing and doing project, which are complex and challenging, are a good way to enable students to work cooperatively with peers. And as teachers, it is more effective to provide helps and comment fairly on their work in time or ask students to make a self-evaluation about their projects. This enables students to focus on their learning process and allows them to see their progress. And self-evaluation gives students a sense of accomplishment and responsibility for learning.

3.6 Providing opportunities for students to experience success

The most important use of learning English is to communicate with people by using the target language, but not all of the learners are active to use English especially when they frustrated by failure in English learning. The more ways we can give our students to use English, have fun with English and experience success in English learning, the more likely

we are to keep all our students motivated and successful based on the theory of needs and beliefs. And Hamachek has done a good deal of research on the effects of failure on school achievement, and almost without exception concluded that success tends to encourage students to raise their level of aspiration, whereas failure generally causes them to lower it (1972). This point can be reached by providing more chances to join activities for students to experience success with more freedom and self-determination. For instance, teachers can take five minutes out of every class time for students to do the "I am a teacher today" activity in which provides students an opportunity to change their role into teacher to teach other students English on class as a sense of success. During these five minutes, students can decide what to teach such as to review, to teach new words and to tell story.

4. Conclusion

In conclusion, motivation is fatal important and the ways to motivate students in English learning is more important to English learning. The ways the author mentioned above are relatively effective to motivate and sustain students in English learning. Sometimes, teacher is rather like a salesman who must convince and persuade his consumers (i.e. students) to believe that he has what they need and what is useful for them (cited in Kripa, 1988). As a teacher, it is essential and useful to acquire more knowledge of educational psychology especially motivational rationale and effective methodologies and meanwhile come up with the new techniques to be a good "salesman" to motivate and sustain students in English learning.

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Establish an Explored Way of Geography Teaching and Models

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Abstract

For the full implementation of the quality of education, education reform is sweeping the earth of the motherland, realizing the reform from materials to the ways of teaching, from the contents to the form, from the form to the essence. However, how can the reform of basic education exist without the reform of normal education? We must face the reality and actively act to carry out a comprehensive reform of teacher education in order to meet the needs of the times. To take the innovation of the teaching methods and establish a new mode of teaching is on the table the biggest task in front of teachers.

Keywords: Explored, Geography teaching, Ways and modes

1. The Research's Background

1.1 The International Background

In the 21st century human society is pregnant with another great leap - the knowledge economy era. Today science and technology is exploding, international competition in knowledge-based economy is meeting the fierce competition, and the competition of education becomes increasingly intense. Every country is stampeded into reforming the education system so that the quality of basic education can be improved quickly. Of course, China would not want to be left behind.

1.2 Domestic Background

In 2000 the Ministry of Education promulgated "the full-time ordinary high school course program (a revised version of the trial)" and "the guide of the research Study implementation in the ordinary high school (Trial)", which aims at to the full implementation of quality education, innovative students' spirit and practical ability to change the way that students are studying and teachers are teaching. "As a result, education reform swept across the country and realized the reform from the teaching materials to the teaching ways, from the content to the form, and from the form to the essence.

1.3 Unit Background

We belong to the normal school in higher education institutions, and our students are the teachers of secondary school in the future. However, how can the reform of teacher education exist out of the reform of basic education? How can we achieve the quality of basic education without the improvement of teacher education? Now our teacher education is still mainly the traditional teaching way-based, how can it adapt to the needs of the society? Therefore, we must face the reality and act energetically to carry out a comprehensive reform of teacher education in order to meet the needs of the times. To innovate the teaching ways to establish a new mode of teaching is the greatest task on the table in front of the teachers.

2. The Research Objectives

This study focuses on culturing students' scientific inquiry interest, methodology and ability, to emphasize the process of learning and the first-hand experience of exploratory activities. We should pay attention to the following objectives in the implementation process:

2.1 Culturing Students' Spirit of Scientific Inquiry

At the scene designed by teachers students can get the first-hand experience of scientific research, to foster interest in and desire for knowledge, and gradually have the courage to question the form, happy to explore, and strive to learn scientific attitude and spirit in the inquiry learning process.

2.2 Culturing Students' Ability of Science Inquiry

In the process of inquiry teaching, teachers should update their knowledge structure, improve teaching methods, and encourage students to discover questions and consciously ask questions in the process of study. According to what we have learned, bring forward scientific assumptions, and design science programs to verify that hypothesis. When we are guiding students in designing the program, we have to help them learn how to use various channels to collect, to collate,

to summarize, to judge and to use information. We should guide students how to analyze the results of the implementary program scientifically, come to conclusions or put forward new problems, and the formation of a written report to enhance their language of expression. Through the whole process of scientific inquiry's practice, we can effectively foster the scientific explore capacity of students.

2.3 Culturing Students' Ability of Social Adaptation

Interpersonal communication and cooperation is the basic quality of modern people. The spirit of teamwork should be stressed in the process of inquiry teaching, and in the process of cooperation and fruitful exchanges students will learn to share and cooperation. Through these activities, we can gradually develop and enhance their social adaptability.

3. The Main Content:

3.1 Classroom teaching - "interactive" model [1]

Classrooms are the main positions of teaching and learning at school. Whether the leading role of teachers and students of the main role can be full played is the key to teaching quality and efficiency. The scientific design of the teaching process is the core of classroom teaching reform.

On the premise of following the cognitive laws, the teaching design should reflect the levels of features: from the shallower to the deeper, step-by-step. So we can found the teaching model such as to stimulate import – to think problems –to systematize knowledge - to expand horizon - the feedback effect. If the teachers guide effectively and students participate actively, so that we can promote the intellectual development of students to achieve the overall optimization of classroom teaching.

3.1.1 To Stimulate Import

First of all, we need to create some geographical incident scenes to inspire students' interest and curiosity in the introduction of the new class. Generally, using the video or the multimedia to create geographic incident scenes enables students to think. We can also use the focus and hot spots of social problems to arise students' cognitive attention. We can also use the relative subject knowledge or a variety of charts in teaching materials to let students to assimilate new knowledge based on the original cognitive structure and background knowledge. Second we can quote the suspect to explain the difficult question, to stimulate students' interest in geography, to release their initiative, enthusiasm and subconscious energy. Third, teachers should combine the import to put forward some valuable questions, and then the students can think them. And to encourage students go on divergent thinking and ask more questions.

3.1.2 To Think Problems

In order to develop students learning ability and learning initiative, first of all, teachers should careful design the teaching content in the form of questions and wrote on the blackboard when instructing a new lesson, so that students can with a clear objective in mind to read the books on their own initiative. However, teachers must pay attention to the issue of the level, targeted and effective. Secondly, teachers should guide students rightly to learning by themselves, to accept knowledge initiative and easy, to master the main contents and answer questions actively.

The divergent thinking is the core of innovational thinking. In the course of self-study, teacher should induce students to think and find the answers from different angles in time. Their different cognitive and different views burst the sparks of wisdom. At the same time students have doubts about the difficult questions and start to think so that they could learn how to bring the initiative into play. The third, teachers have to control time in the self-study and answering questions. Only time appropriate arrangements can be satisfactorily completed at various aspects of the teaching, to achieve the teaching target and optimize the design class.

3.1.3 To Systematize Knowledge

First of all, teachers ought to be targeted for comments about the question that students have answer, and pay attention to intensive comments. The main idea is to help students organize and build a knowledge network schema. Through interactive teaching, students can enrich the knowledge of understanding, and have a clearer idea of learning, which is conducive to widely transfer of learning. Secondly, teachers should combine with comments to build the backbone of knowledge with students, to develop students overall capability. Sort out the level of academic knowledge in context to make it systematic; analysis of the linkages between knowledge, so that it can be structured; sum up the geographical incident's distribution, movement and changes of the law, to make it regular; combine a variety of images, charts, maps with words so that it can be visualized; The contacts and comparisons between evens should have diagrams to make it clear. Which is a formative process of comprehensive analysis, comparative classification, being inducted and deducted, general reasoning with other abilities. Only by classified and systematic the geographical incidents which are seem isolated, establishing the appropriate knowledge system as a whole, which can benefit students grasp the basic knowledge, form a correct integrated cognitive structure to lay the foundation for the further analysis of the

geographical law. The third, we should pay attention to use of the modern teaching methods and heuristic education.

3.1.4 To Expand Horizons

When cultivating the academic ability of students, firstly, we should put emphasis on the interdisciplinary relations and the study of the knowledge cross-points. Secondly, we must guide the students concerned about the social hot spots and focus, imparting consciously such knowledge can reflect that geography is widely available and has social value, introducing the latest progresses and achievements in geography to enhance the spirit of the times of geography, which also can not only extend students' visions but expand their mind. Thirdly, we should consciously link the learned knowledge and practical problems together and use it to explain some natural phenomena and social problems, to enable students to use geographic perspective to observe and analyze the life, production and social realities in the various issues related to geography. Fourthly, to guide students concern about affairs at home and abroad, watch as much as possible programs such as "CCTV News" and "Man and Nature", read newspapers, especially pay particular attention to guide students give sufficient attention to the major events and achievements of science and technology which are involved in the environment, resources, population and development. For example, when speaking of energy, we can allow students to analyze the cause and essence of the U.S. involving in the Middle East the problem from the energy, political, economic, human rights, global strategic and so on; when talking of nuclear fuel, we can let students to discuss the harm caused of the United States and Britain bombing Yugoslavia by depleted uranium bomb; When talking about global climate Warming, to enable students to analyze the reasons, to discuss the harm to identify concrete solutions to foster creativity of our students.

3.1.5 Feedback Effect

"Knowledge is the carrier of the ability, the ability is the sublimate of knowledge." Without the accumulation of knowledge, the ability will like the water without its source, the wood without its root. Without the ability, the knowledge has become the dead wood or backwater. This requires that teachers lay a solid foundation in basic knowledge and basic skills instruction, to put forward higher requirements for the knowledge of the study points. Therefore, the teacher has to change the way that teaching-testing-reciting, not only teach the students to learn, but also how to learn by themselves. At this stage, the mainly task is to train our students to summarize, analyze, compare and integrated the geographical events, put their levels of knowledge to a higher stage. In addition, we have to design some related questions to test students to understand the basic content of the materials and we can know whether the goal of teaching can achieve. When we answer to the question of students, we should help students learn to identify errors, to provide feedbacks and reliable basis for the classroom teaching.

In short, through the interactive communication between teachers and students, students received feedback, and constantly reflect on their own and deepen the process of thinking, which will help students develop the ability to innovate and improve classroom teaching. The whole process of teaching is a dynamic process, the student activities-oriented, students are not only the main body of information processing but also a carrier of knowledge, then the final test about the classroom teaching's quality and standards on the basis of students development.

3.2 Second Class – "Simulated" Model [2]

The second class is the first class's expanding and addition. Carrying out the second class with a variety of activities can stimulate student's interest in learning geography, reinforcing the control of "double-base" knowledge. The second class is the best way to train the student's the ability to think, to observe, and to simulate, which can raise the effectiveness of the first class teaching.

3.2.1 By "the Problem Way", Leading Students Study "the Exploring Simulation"

When we are teaching "Introduction to the Earth", the concept of celestial objects and operation is hard for the students to master. Because it's hard to imagine, and there was no corresponding teaching aids for demonstrations. Teachers have to consciously set up some sense of suspense and vivid image problems, which would make students have the urgent desire of getting the bottom of the matter, thus to stimulate the interest in learning knowledge and the desire to lead. Leading students initiatively to explore the unknown world in the state of mind can bring a great drive to cultivate students to have a comprehensive understanding of laws and essence of the geography. By making special second class activities, let students circumfused the difficult issues in the classroom, make a kind of teaching aids or a wall chart, and show his presentation on a celestial body issues. The activity was very successful. Students's motivation is high. They divided into study groups, and produced 18 kinds of teaching aids and 6 pieces of wall charts. They elected 4 pieces of wall charts and 2 kinds of teaching aids and gave demonstration on them.

After the activity, a student said: "This is the first time I'm in a teacher's capacity to consider and explain a question. I have to find ways to solve my own teaching aids (wall), to demonstrate on the podium, I'm so worried. But I learn a lot, I think it's successful. I will work hard to be a good teacher." The activity is not only good for students to have interest in geography, deepen their understanding the knowledge of geography, but also making them full of confidence in the

teaching profession, and enhancing their abilities to think, to do and to simulate teachers.

3.2.2 To Develop the Mind and Intelligence of Students, We Have to Go on Learning the Exploring Simulation.

In teaching teachers should pay attention to cultivating students' habit of association of ideas, fully mobilizing the enthusiasm of the students, and opening up the horizons of science and the realm of thinking. We should pay attention to guiding and developing the students mind, making students to observe, analyze, and judge based on the geographic phenomenon, which can reveal the right way to get the law of conclusions, train student's ability to innovate, and life-long learning ability, and adapt to the society survival and development's abilities.

The first activity is aiming at the main contents of the book, to ask students to make a teaching chart according to the elements of making a map, to select the winner in race, and to show the production and explain all geographic information that the chart can display. The second activity is measuring the activities of the campus and drawing the floor plans. The third is in the lesson of "Theories for Guides", to select some students simulate tour guides and members of the group to simulate tourist to demonstrate a tour activity.

Students expand the horizons of science and the realm of thinking, strengthen the observation, analysis, determination, reasoning ability of students, to achieve the goal that students can have the abilities of innovation and lifelong learning, as well as adapting to the survival and development of the society.

3.3 Practising Classroom—the "Master-Apprentice" Model[3]

The practice of teaching is the key to train students' abilities in the applied technology. Aiming at the poor effect of practicing teaching, we should adopt the "master-apprentice" model.

First of all, it should be clearly that the objectives fostering students' capability corresponding to the contents of practice teaching. Second, aiming at different aspects of teaching practice, to employ some engineers and professional teachers with rich practice and teaching experience to establish the relationship between masters and apprentices, carry out the hands-on teaching. Third, after the practice teaching, we should have a examination about demonstration or report. In accordance with the objectives of geography curriculum requirements, the practice lesson of geography should follow the principle that scientific combine thinking, close to students' life, and adapt to the physical and mental development of students. By design, the type can be divided into: the production of hands-on, games and entertainment, observation, visit and survey, audio-visual and reading, lecture and competition, experiment and operation, plan and design, paper-writing, travel and adventure and so on. In accordance with practice contents it can be divided into three categories: Practice, practice teaching, and writing thesis.

3.3.1 Professional Practice

First of all, by learning some relevant information, the students can understand the practice content, to master the natural environment and other related knowledge. Mostly students have to understand the geographic location and the regional factors including natural and socio-economic factors which impact on the practice district, and other related knowledge. To be familiar with the basic map of the practice district, to learn how to set the direction on the map, look at the ratio, measure the distance, distinguish the high and the low, know the outline, fill in the mark, draw the section and so on, so as to master how to research all kinds of geographical location on the map, including latitude location, amphibious location and adjacent land. To learn how to determine all kinds of the geographic things' characters, distribution and the reflected the geographical features. To have the ability to read different maps, analyze the relations and affections between the elements of things and the geographical cause. To have the ability of drawing a simple outline, sketch map and distribute chart and so on.

Secondly, to lead the students to go on inspection at the practice district is regarded as the objectives fostering students' capability corresponding to the contents of practice teaching. Aiming at different aspects of teaching practice, to employ some engineers and professional teachers with rich practice and teaching experience to carry out the hands-on teaching. In the course of internship, students can simulate the related departments to discuss regional development and advance some reform programs. They can also be divided into several groups to carry out the research activities, to draw the empoldered drawings or design the empoldered models, and to discuss with others groups.

Third, we should have an evaluation by the ability to operate or practice investigation and design report to evaluate the academic performance at the end of practice.

3.3.2 Teaching Practice

The last practice for normal students is teaching practice, which is a large-scale training before they graduate a pre-employment vocational training. The specific processes are to carry out training, to prepare lessons, and to have trial lectures, at last to have classes. There are classes with professional teachers; director training with director; who are carry out the hands-on teaching, to guide the students.

3.3.3 Writing Thesis

This is not only a large-scale training to train the students ability engaged in scientific research, but also lay the foundation for practical work in the future. Specific process is that -teachers and students choose the topic together, professional teachers give some guidance, and then amend it again and again, at last hand on the final papers. Thesis writing is a test and a summary on the university study to students. And it is also a turning point from learning to scientific research. They should be fully prepared for meeting the needs of the society.

To sum up, we can see that the new teaching methods and teaching modes will become more and more with the development of times, changing everyday. But there is something that will never change, and that is, only having the geography teachers with a strong sense of innovation can we have a brand-new of geography teaching, can we bring up the students with innovation ability and the inquiry spirit of geographical science. Let us work hard for it.

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Indigenous Knowledge Construction and Experiential Learning of Taiwanese Aborigines

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Abstract

Indigenous peoples in Taiwan belong to the Austronesian racial group. Confined to their oral language tradition, knowledge about Taiwan aborigines based on written documents reflected the positionality of dominant ethnic groups. This qualitative study employed participatory research approach to explore the process of producing their own knowledge through collective investigation of problems and issues among Taiwan aborigine tribal members in the Nantou region. Nantou is located in the central mountain range of Taiwan. The data were collected through participatory observation and interviewing 6 key research participants about their experiences of participating in this project. Two main findings are revealed from the analysis of these data. The first finding is the participants' expectation of adult educators' role as an information provider. They also expect adult educator as a facilitator for promoting the project to move towards a more empowering praxis and as a mediator for attracting external attention on indigenous voices. The second finding is that minority's experiences are always a site of struggle and central to this struggle is the reconfiguration of 'ethnicity' which is rooted in socio-cultural context. Taking account of context, experience might be distorted while experiential learning can be stigmatizing, in that learners can become un-reflective prisoners of their experience. However, experience certainly has the potential of liberating marginalized learners. The findings implied the importance of the socio-cultural context of situated 'experience'. This insight suggests that 'power' can be renegotiated to challenge and eventually change the structure of the socio-cultural context.

Keywords: Indigenous knowledge, Experiential learning, Ethnicity, Taiwan aborigines

1. Introduction

Taiwan is a multi-ethnic society and around two percent of the population is aborigines who belong to the Austronesian racial group. Confined to their oral language tradition, knowledge about Taiwan aborigines based on written documents reflected the positionality of dominant ethnic groups, such as the Dutch, Spanish, Japanese, and Han (Chinese from mainland China). For a long period of time, indigenous peoples were stigmatized as 'savage' or 'backward'. Education of the aborigines was implemented by their assimilation into dominant culture. The profile of Taiwan aborigines was depicted as 'inferior others'. Recently, the Canon debate of knowledge construction offers more space for the indigenous voices. This study employed participatory research approach to explore the process of producing indigenous knowledge through collective investigation of problems and issues among Taiwan aborigine tribal members in the Nantou region. The aim of the study is to understand communal features that emerged through a process of group inquiry into the nature of personal experiential learning.

2. Theoretical framework

Based on Jurgen Habermas' framework of knowledge theory, Merriam (1991) discussed the relationship of research to the production of knowledge in terms of three paradigms for the purpose of unveiling the underlying particular worldview and assumptions: the positivist or empirical-analytic; the interpretive; and the critical. The positivist view of knowledge assumes the notion of a single, objective reality—the world out there—that we can observe, know, and measure. Thus, the aim of the research within this paradigm is to uncover laws that will explain aspects of this reality. In contrast to the positivist paradigm, interpretive paradigm assumes that there are multiple realities constructed by the human mind. Therefore, the context and the meaning of that context of the people in it are of utmost importance. The critical paradigm accepts multiple realities constructed by people's interpretations in their particular contexts. This paradigm recognizes that people's interpretations of the world may be ideologically distorted because the existing social structure may be as partly, if not totally, coercive and oppressive. This paradigm also assumes that the existing social structure can be challenged, constantly open to negotiation and renegotiation, and transformed by human agency.

Additionally, the critical paradigm is engaged in a 'war of position' in all spheres of social life, so that different sites of

social practice can be transformed into sites of adult learning as expounded by critical adult educators like Paulo Freire, Myles Horton, and Henry A. Giroux. Mayo (1999) describes 'war of position' as a challenge and a transformation of social structures and social relations in order to prevent the oppressed people from remaining at the periphery of social life. Positionality indicates the important aspects of individual and collective identity such as gender, race/ethnicity, class, age, etc. The validity of knowledge comes from an acknowledgement of the knowledge producer's specific position in any context defined by gender, race/ethnicity, class and other variables (Banks, 1996).

Although research into the practice of adult education does not always so neatly conform to a particular paradigm, certain paradigm might still be more powerful in specific context and for the purpose of the research/practice. From the researcher's point of view, the worldwide racial/ethnic conflicts are becoming more serious, and the responsive solutions based on the knowledge produced by the positivist paradigm do not seem to be effective enough. Shift of paradigm seems necessarily to explore the marginalized situation of the indigenous peoples. Thus, this study employed the critical paradigm to explore the nature of marginalized people's experiential learning through collective investigation of problems and issues among Taiwan aborigine tribal members.

3. Description of the setting

Nantou, located in the central mountain range, is the only county without a coastline in Taiwan. It has many important pre-historic archaeological sites, which have revealed many cultural encountered among various ethnic groups, such as the Bunon, Atayal, Sedeq, Thao, Pinpu, Han, and others. The mountains and rivers create an obstacle for outsiders and help to preserve the traditional rituals and lifestyles. Its long cultural-diversity results in its art inheritance. Most mansions at Nantou keep their traditional ornamentation, sculpture, calligraphy and other culture properties. Also, pieces of ceramics and bamboo/wood handcraft work produce the same outstanding craftsmanship. The life style and economic pattern of this rural region is based on traditional agriculture system. The main products consist of vegetables, flowers, sugar cane, etc. According to a national demographic investigation in 2008, the population of Nantou was 531 753, among which were 27 627 aborigines. Compared to other local regions, the density of the population in Nantou has been quite low. In fact, recently, the total population in Nantou has gradually decreased, but the amount of aborigines has increased contradictorily (Ministry of the Interior in Taiwan, 2009). The shift of the population ratio is probably due to: a) a gradual decline of agricultural development in Taiwan has caused the habitants of Nantou to immigrate to other places for better job opportunities; b) a more flexible policy for Taiwan aborigine's recognition attracts them to go back to their hometown.

From a historical perspective, Taiwan has been inhabited for around 15 000 years. The precise connection between these earliest people and the present aborigines is unclear, but archaeological evidences support the supposition that the ancestors of the aborigines were already living in Taiwan around 6 000 years ago. The aborigines belong to the Austronesian racial group, and prior to 1620, they were the main residents of Taiwan. The arrival of the Dutch and Spaniards brought the aborigines into contact with other people, but foreign influences were relatively minor and they still occupied a dominant position on the island. The establishment of the Ch'ing Dynasty in China led to greater numbers of Chinese immigrants to Taiwan. The island became an official province of China in 1887, and the assimilation of the indigenous people by a thorough alteration of their customs was one of the main policies. The aborigines gradually lost their prominent position through Chinese institutional involvement.

In 1895 Taiwan was ceded to Japan. Under Japanese rule, the tribes were differentiated, thus giving the aborigines a pan-tribal consciousness. There came simultaneously the realization that aborigines were a people living in a society conquered, controlled and colonized where they occupied the most disadvantaged position. When China regained sovereignty over Taiwan in 1945, the aborigines were recognized as 'citizens' according to the 'Minority Peoples' Article' of the Constitution. However, the widely implemented policies reflected the idea that aborigines were a backward people to be exterminated by assimilating them into mainstream society. Institutional discrimination against aborigines hastened the destruction of their traditional societies and deepened cultural stigmatization. However, the emergence of the social movement of 'localization' and political reform in the 1970s and 1980s has provided certain possibility for indigenous revival claims. The 'Association of Taiwan Indigenous Rights Promotion' founded in 1984 revealed a new milestone of reconstruction of ethnic relationships. Indigenous peoples were unified by a pan-tribal consciousness, but it differed from the 'imposed' and 'stigmatized' pan-tribal ethnicity under the Japanese regime. Taiwan aborigines endeavored to challenge the existing power hegemony over them through their collective action of 'Land Claim', 'Name Claim' and other political protests. Gradually, governmental policies of assimilation moved toward multiculturalism, and a new ethnic partnership dawned in the 1990s (Lee, 2001).

Besides the Pingpu Tribe (plains aborigines) virtually merged with the Han population, Taiwan now still has fourteen culturally distinct aboriginal tribes: the Amis, the Puyuma, the Atayal, the Saisiat, the Bunun, the Tsou, the Paiwan, the Rukai, the Yami, the Thao, the Kavalan, the Truku, the Sakizaya, and the Sedeq. They exhibit great diversity in terms of their language, material culture, social organization, and rituals (Council of Indigenous Peoples, Executive Yuan in Taiwan, 2009).

4. Method

This qualitative study employed participatory research approach to explore the process of producing their own knowledge through collective investigation of problems and issues, and collective action to change the conditions among Taiwan aborigine tribal members at Nantou. Participatory research is a system for producing knowledge "of ordinary people, those who are deprived, oppressed and under-privileged" (Tandon, 1988; Merriam, 1991). This type of research questions the origins of the production of knowledge, access to knowledge, and interests and ends knowledge serves.

4.1 Researcher and participants

The researcher obtained her Ph. D. from the University of Wisconsin-Madison in the United States (major in Adult and Vocational Education). She is a Han Taiwanese and has been working with Taiwan aborigines since 1995. During the years of 2001-2005, she was assigned as Chair of the Graduate Institute of Adult and Continuing Education in an University located at Nantou, and started to conduct a long-term participatory research project. Firstly, the researcher invited the tribal leaders and members in the Nantou region to attain a reception for the introduction to the project. Based on the researcher's previous relationship with the indigenous peoples, around 20 tribesmen participated in this reception. Actually, 8 tribal leaders were recommended as the representatives by the participants and they were willing to join in this project. However, two of them were extremely occupied and dropped out of the project two months later. Table 1 shows the demographic profile of the other 6 key participants. Their tribal background reflected the characteristics of the population in the Nantou region. The Atayal, Sedeq and Bunun are mountain peoples and they are the main aboriginal tribes at Nantou which is located in the central mountain range of Taiwan. Therefore, two of the key participants are Bunun, two Sedeq and one Atayal.

According to a national demographic statistics in 2007, the population of Bunun in Taiwan was around 48 000. Many of them are scattered widely in the central mountain range. Their society is maintained mainly by patriarchal social structure. Bunun traditional family is pretty large in size, because non-blood relatives are accepted as normal family members. Ceremonies are scheduled according to millet planting, weeding and harvest. 'Pasibutbut' (praying for a millet harvest), being famous with the outstanding eight parts harmony is sung by Bunun people after weeding. 'Manah Tainga' (hunting animal's ears) is considered as an important life ceremony for manhood. (Council of Indigenous Peoples, 2009)

Atayal is traditionally located in the mid-northern mountain areas of Taiwan. At present, the population is approximately 76 000. Hunting and farming are their traditional life style. Their fabric weaving skill feature sophisticated patterns and designs. Red color symbolizes blood, which is vital and can keep them away from the evils. Therefore, Atayal people prefer to dress in red. Face tattoos are their long standing customs. Ancestral worship groups constitute the major social organization. Ancestor worship rituals are the prominent religious ceremony. (Council of Indigenous Peoples, 2009)

Sedeq was previously recognized as a subgroup of Atayal. Recently, they claimed to be recognized as a new tribe and is accepted by the Council of Indigenous Peoples in Taiwan. The population of Sedeq is around 10 000 in total. Their traditional ritual of adoring 'Utux' (the spirit of ancestors) has extended to conscientious living rules called gaya/waya and has developed different culture, such as tattoo, hunting, weaving, music, songs and dance. Traditionally, Sedeq people make decisions in accordance with Sisin's cry. For the Sedeq tribe, sisin is seen as a sacred bird. (Council of Indigenous Peoples, 2009)

Besides the main tribesmen such as Bunun, Atayal and Sedeq, there are still few other tribesmen scattering elsewhere in the Nantou region. Among them two groups (Thao tribe and the descendants of Pingpu) are distinctive. 'Pingpu Tribe' is a pan-tribal name for Taiwanese aborigines virtually merged with the Han population. There were various sub-groups within the Pingpu tribe. In recent years, their ethnic consciousness has become strong. One of the key participants of this project belongs to 'Kahabu' which is one of sub- group of the Pingpu tribe.

Thao tribesmen about 600 people mainly live together around Sun Moon Lake which is the land mark of Nautou. The legend about the tribe said that their ancestors found Sun Moon Lake while they were hunting a white deer. Therefore, they moved there and settled down. They were deeply influenced by Han culture, yet they still kept some of their own culture well. Ancestors bags are hung in the corner of each family house. The chief is the decision maker of the social business. The position is usually inherited by the eldest son. The eight tribal leaders originally recommended to participate in this project included two tribesmen of Thao, whereas they dropped out of the project two months later.

4.2 Conducting participatory research project

Group discussions between the researcher and the key participants were held regularly using the following steps: First, to investigate their common problems and issues collectively. Several crucial issues were identified: a) economic deterioration--traditional agricultural products have lost competitive power in the free-market system; b) hard access to information because of its geographically remote location; c) disappearance of their traditional culture and language.

Secondly, to share their innovations experimented in different tribes, such as value-adding traditional tribal arts and crafts, combination of agricultural promotion with creative leisure, representing and spreading tribal oral history and legends through in-depth tourism etc. Thirdly, generate collective action for the improvement of their conditions. In this part, the participants decided to create a digital platform through electronic network which consisted of at least three functions: a) transmitting, spreading and promoting tribal culture, language, and other cultural/economic products; b) gaining access to various information and resources; c) strengthening the solidarity of the different tribes through communicating and sharing experiences among them.

4.3 Data collection and analysis

For the purpose of the project evaluation, data collection was carried out through: a) participant observation on how the tribal leaders investigated and solved their problems collectively; b) group and individual interviews which consisted of open-ended questions regarding issues, concerns, and personal learning experiences of their participation in the project.

A set of coding procedures (Strauss & Corbin, 1990) guided the analysis to develop meaningful interpretations of the data. Data analysis progressed through the stages of open, axial, and selective coding. From this process, a set of themes was inductively derived to characterize the nature of knowledge construction, experiential learning, and the roles of adult educators from the participants' perspectives. These themes were theoretically informed by the researcher's understanding of the previous literature review. To enhance the validity of the findings, the researcher arranged to have fellow university researchers to play the role of 'devil's advocate' in reviewing the data analysis and the interpretation of the findings.

5. Findings and Discussion

Based on the data analyses, three essential thematic categories emerged: knowledge construction, experiential learning, and the roles of adult educators.

5.1 Knowledge construction

Knowledge is socially constructed. The personal experiences and positions within society influence the knowledge they produce. Similar to Harbermas' typology of knowledge, three types of knowledge — instrumental knowledge, communicative knowledge, and emancipatory knowledge — were identified from the perspectives of the tribal members. For them, emancipatory knowledge must play the directive role and instrumental knowledge would become the base. Communicative knowledge, however, was less emphasized.

5.1.1 Emancipatory knowledge

Confined to the oral language tradition, all written documents concerning Taiwan aborigines reflected the positionality of dominant ethnic groups, such as Dutch, Spaniard, Japanese, and Han. For a long period of time, indigenous peoples were stigmatized as 'savage' or 'backward'. As a consequence, they intentionally abandoned their traditional heritage and hid/distorted their identity. It becomes crucial for the indigenous people to construct 'the knowledge about who I am' through their own voices, which imply the expression of individual identity, as well as reflect 'empowerment' to challenge the oppression collectively. Some participants expressed their view of emancipatory knowledge in the following statements:

... Alcoholism, ... a lot of problems ... due to people abandoning their Ancestors' tradition ... We don't know who we are. Our tribal history, language, rituals, and legends must be transmitted to our children ... We have the responsibility to construct the knowledge of our tribe...(Temi)

As mentioned before, the critical paradigm assumes that knowledge is not neutral but is influenced by human interests. All knowledge reflects the power and social relationships within society, and that an important purpose of knowledge construction is to help people improve society. However, what is the linkage between knowledge construction and societal improvement? For Foucault (1977), knowledge construction as a counter-memory, is a practice which "transforms history from a judgment on the past in the name of the present truth to a 'counter-memory' that combats the current modes of truth and justice, helping us to understand and change the present by placing it in a new relation to the past."

... Prior to the dominance of national education programs, each aboriginal tribe had its own educational system. Since the establishment of the Japanese regime until the present republic, schooling via the mainstream culture has facilitated 'cultural invasion' ... and constituted a process of 'cultural alienation' (from the tribal tradition) ... I still agree with the importance of schooling for our children, however, the tribal values and rituals provide our people an opportunity to challenge the myth of the orthodoxy of dominant culture and to retell various narratives which may expand the depth and horizon of Taiwanese history ...(Tien)

5.1.2 Instrumental knowledge

The increasing regression of the traditional agriculture and artistry, as well as the abrupt promotion of technological

innovation have negatively affected the economic condition and threatened the development of aboriginal tribes. As some participants have pointed out:

Cultural transmission would become a luxurious pursuit without sustaining basic living conditions ... (excerpt of the interviews of Taku, Temi, Tien, and Behow)

Therefore, the instrumental knowledge (*such as digital and network technologies, agricultural techniques, business administration and marketing, etc.*) must be introduced to the indigenous tribes in participatory projects (*excerpt of the interviews of Pan, Takun, and Behow*).

From the late 1980s, the emergence of Taiwan aborigines' protests against injustice was unified. Gradually, aborigines became conscious that 'anti-power domination' protests and 'central/marginal' dualistic struggles are not enough. They tried to invent a new form of 'cultural existence' through 'subjective discourses' between aboriginal traditions and modernity.

5.1.3 Communicative knowledge

Mutual understanding and reciprocal dialogue based on inter-subjectivity are essential to Habermas' communicative act. However, indigenous people emphasized less communicative knowledge. Some of the participants have pointed out:

... the marginal ethnic groups, mainstream culture are always imposed; as a consequence, indigenous cultures involuntarily become silent ... (excerpt of the interviews of Taku, and Tien)

Indeed, as Brooks (2000) mentioned "the experience and direction of learning transformation may vary according to one's positionality". For example, someone situated in the center of the mainstream may experience transformation as a growth toward recognizing multiple systems, or towards increasingly complex and inclusive structures. However, for someone more marginally situated, like our participants' experience, the transformation may be toward a stronger and more consolidated identity. Power differentials and authority are important here. Power implies competitive access to and control over resources, while authority is only effective when it is legitimate (Jenkins, 1997; Lee, 2001). Toward a more consolidated identity of minority might be an effective strategy of striving for access to and control over resources.

5.2 Ethnicity and experiential learning

The ethnicity was a central part of the experiential learning narrated by the interviewees. Ethnic group is defined as a group that shares a common ancestry, culture, history, tradition and sense of peoplehood, whereas ethnicity is rooted in culture based on shared meanings. As a social identity, ethnicity is both collective and individual. On the one hand, it is externalized for sustaining communal boundary and solidarity, and on the other hand, it is internalized as an integral part of the individually embodied point of view of selfhood. Ideally, either individual or collective boundary is permeable, and ethnicity as transactional process is rooted in reciprocation, exchange and relatively equitable negotiation of social relations. However, ethnicity is, to some extent, manipulable by external categorization ranking, and it is institutionally produced and reproduced in the course of transactions of different ethnic groups (Jenkins, 1997; Lee, 2001), as expressed by one participant:

... Three generations, three different languages spoken in my family ... My grandfather was only educated in the tribe and he could only speak Sedeq dialect; but he was proud of the tribal tradition and language. On the other hand, my father was educated in the Japanese education system and he frequently spoke Japanese because indigenous dialects were openly discriminated against. I was educated in the public schooling of Taiwan. Most of the time we spoke in Mandarin for the purpose of disguising ourselves. We would be recognized and called 'savage', if we spoke our own language. Those experiences were stigmatizing. Actually, we have very strong consciousness of Sedeq ethnicity; however, the failure of fighting against Japanese invasion blurred our collective identity. From that time on, we immersed ourselves in the pursuit of modernity and involuntarily abandoned our tradition ... Since the 1990s the mainstream society gradually modified the attitude towards the indigenous people. And the unexpected disappearance of our tribal tradition and language in the past hundred years raised our collective consciousness again. ... If the extinction of the aborigine's languages has really happened, it would be a great loss of the world heritage. ... (Takun)

The above quotation (the other participants also had the similar experiences) shows the minority's experience is always a site of struggle and central to this struggle is the reconfiguration of 'ethnicity' which is rooted in socio-cultural context.

5.2.1 Power, socio-cultural context and human agency

Taking account of the context, experience cannot be unproblematic while experiential learning can be stigmatizing, in that individuals can become un-reflective prisoners of their experience.

Most indigenous residents in tribal communities are undereducated. The worse economic condition of the tribe impelled them to look for opportunities to survive in the mainstream society. However, the indigenous people very seldom

succeeded in the mainstream society. In the schools and elsewhere, native people have been framed as 'otherness' and have been treated through a lens that places 'the other' in a deficit position. ... Those experiences confined their development and embedded them in a marginal condition. Drunkenness, self-denial, and withdrawal distort their identities. ... Such phenomena became the reproduction of poverty. (Takun).

The experiences of the indigenous people have addressed not only the categorization ranking between ethnic groups, but also highlighted how power is exercised in favor of one group and to the detriment of another. However, experience certainly has the potential of liberating marginalized learners. As Paulo Freire (1973) points out, adult education is an important source of agency, and the task of the adult educators through 'pedagogy of problematization' enables the learners to reflect on the codified versions of their 'reality' (Mayo, 1999). This is confirmed by the following:

As a part of the whole society, the indigenous tribes cannot be segregated. We need to collaborate with the outside experts and academic researchers in order to provide reciprocal learning context within which tribal development initiatives can be more effectively generated and carried out. (Behow).

5.3 Roles of Adult Educators

Although the indigenous schooling experience in the past had certain negative impact on their development, they still hold the belief that learning and education have the potential to transform social structures and social relations. The crucial elements are the roles of education and educators. Their expectations on the roles of adult educators were summarized as follows: 1) as an access for gaining information, 2) as a facilitator for promoting the project to move towards a more empowering praxis, 3) as a mediator for attracting external attention on indigenous voices.

6. Conclusion and recommendations

Usher, Bryant, & Johnston (1997) mentioned, in all the traditions of adult learning, experience has been accorded a privileged place as the source of learning in a learner-centered pedagogy and at the very center of knowledge production and knowledge acquisition. A possible limitation is that experience comes to be taken as foundational and resourceful and hence we might neglect to question the distorted experience. They also suggested, adult educators might help learners to problematise and interrogate experience as much as to access and validate it and to see their experience more as 'text' than as 'raw material'. Thus, the learners might leave open the possibility of a variety of interpretations and assessments of their experience.

The findings of this study revealed that minority's experiences are always a site of struggle and central to this struggle is the reconfiguration of 'ethnicity' which is rooted in socio-cultural context. This study further revealed the subtle, implicit sides of the experiential learning as noted by Usher, Bryant and Johnston. The findings implied the importance of the socio-cultural context of situated 'experience'. This insight suggests that 'power' can be renegotiated to challenge and eventually change the structure of the socio-cultural context, and adult education can act as an important source of agency.

In fact, the efforts of the indigenous people have provoked the consideration of ethnic diversity and cultural pluralism in the pursuit of political democracy and economic development of Taiwan. However, the historical, cultural and situational contexts are crucial for their experiential learning. Indeed, the future development of the indigenous peoples, situated on a disadvantageous position in society, cannot be ameliorated only through individual merit. There is a need to consider structural defects and to create a more humane, just and multicultural society in which the indigenous peoples have greater opportunities for further development through reciprocal respect and dialogue.

Lastly, although the findings of the research are revelatory, the study bears some limitations. As we noted above, the participants were highly educated tribal leaders who were able to articulate their experience in terms of ethnicity and identity. Whether the participants' experience could represent that of the majority (most were undereducated) would be further explored by a field study and detail observation of the tribesmen.

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Table 1. Demographic profile of the key participants

Name	Sex	Age	Tribe	Education	Occupation
Behow	male	40	Atayal	B. A.	Community program organizer
Takun	male	51	Sedeq	B. A.	Governmental official, community leader
Pan	male	61	Kahabu (one of sub-group of Pingpu Tribe)	B. A.	Retired teacher, community leader
Temi	female	64	Sedeq	Doctorate candidate	College lecturer, Community educator
Tien	male	48	Bunun	M. A.	Retired teacher, Journal editor
Miaw	female	47	Bunun	College graduate	Governmental official



Study on Feasibility of MBO in College Management

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Abstract

At first, MBO was widely applied in management of enterprises. This paper organically makes some characteristics of MBO and college management together to talk about the feasibility of MBO in college management.

Keywords: MBO (management by objectives), College management, Intellectual employee, Feasibility

1. Introduction

MBO (Management by objectives) was firstly put forward by peter F. Drucker (who was a well-known scholar of management in America) in 1954. MBO was applied in many organizations after a number of management scholars developed and perfected it. MBO is a comprehensive and democratic systemic management style which is work-centered and people-centered. MBO is a suit of systematization democratic management style which Higher-level and lower-level managers and employees in a organization together set down the common organization goal, form one goal system and specify and outspread to every department, every administrative level, every employee in organization and ties nearly up with their duty and production of every department, every administrative level, every employee within organization, definitely prescribe their consecration and encouragement.

MBO is different from traditional goal. conventional goals are made by the top management then decompose them into all levels of organization, which is one kind of unilateralism process superior make give goals to junior. Such goals are non-operational because junior just passively accept goals. Managers of all levels explain these goals with a lot of understanding of their own even with prejudice because of the lack of communication. As a result, goals will lose those clarity and consistency during the process of decomposition from above to below, even passive embracer of goals often complain. They consider goals are non-reasonable, their work enthusiasm decline and so on, which directly result in lacking power of implementation. The core of MBO is made goals by top and lower levels of organization together and form goals system, so that the specific objectives of the organization become action direction and motivation of each member, each level, each department, at the same time these goals become standards which check work performance of each member, each level, each department, thus the organization can effectively run. MBO emphasizes self-directing, self-control, not by his superiors to command and control.

2. Bring forward the problem

In general, Institutions of higher learning are places which intellectual employees are dense. So-called intellectual employees mean them have their own strong power of learning knowledge and innovating knowledge and innovate, spread, share, use knowledge in the organization and create greater value for the organization. How to motivate knowledge workers, in recent years, many scholars from home and abroad carry through theory exploring and demonstration analysis from incentive factors and so on. However, existing studies are often concerned about infection intension of all kinds of incentive factors namely environmental force on action individual---incentive external force. However, self-motivation about action individual ---incentive internal force is not attracted sufficient attention. Could MBO apply in universities management to effectively motive these knowledge-based employees? This paper organically made some characteristics of MBO and college management together to talk about the feasibility of MBO in college management.

3. Feasibility analysis of MBO in the management of colleges and universities

3.1 MBO in college management easily forms motivation function.

The goal is the expected results which one organization achieves through efforts during a certain period in the future. Motivation means improving employee's work enthusiasm and guiding their action in organization management by influencing realization of individual need of employees. The purpose of motivation is to encourage members to mobilize the enthusiasm of the work and to stimulate their initiative and creativity in order to improve the organization

efficiency. Goal has a strong incentive function for their employees. When the goal becomes a sort of result which every level, every department and every member of the organization wish to accept in the future, and the possibility of realization is quite great, the goal becomes internal incentives of members of the organization. Especially when realize the result and the organization has corresponding reward, incentive function of goal will be more great. With regard to goal turning into incentive factors this kind of had better is the goal which every level, every department and every member of the organization to make themselves. MBO just reflect this side.

3.2 MBO in college management easily forms agglomerate function.

Every department, every member of the organization together design common goal and form one goal system, and has their own sub-goal, the organization has its common goal. In order to realize common goal, everybody must unite as one and work together to achieve their individual goal to achieve the common goal of the organization. As regard as colleges and universities which knowledge-based staff are dense, MBO will help every faculty to agglomerate as one to put their shoulder to the wheel to realize the common goal of colleges and universities, which not only realize the common goal of school but also every faculty realizes their own goals and gains corresponding encouragement and rewards.

3.3 MBO in college management has check function.

MBO provides manager with one standard which can effective check and evaluate employees, of course, MBO also one kind of effective evaluation tool for managers. Present examination for faculty in some colleges are just the same traditional conventionality which the result of examination are short of credibility and mostly are superior to subordinate, leaders to underlings, function departments to teaching departments. However, MBO designs goals for every department with different levels and various employees and regard these goals as the standard which evaluates their work performance and rewards. Therefore, MBO provides college management with one viable means.

3.4 MBO provides college management with one effective democratic management means.

First of all, MBO is one democratic management style, because everybody together designs their common goal, rather than the superiors design the goal then distribute it to juniors. This kind of democratic management way not only improves faculty's enthusiasm, initiative and creativity but also satisfies the mental needs of lots of faculty participating in management. In addition, MBO surely can improve efficiency of organization management. The means of MBO are better than the means of plan management regarding as promoting college management and realizing the ultimate goal. Because MBO is not only activities work of plan, but also a management style of result. This management style forces every level, every department and every member of the organization to firstly consider realizing goals which are decomposition of the organization's overall goal. Therefore, when goals of every level, every department and every Members of the organization are achieved, the overall goal of the organization is also achieved. Once decomposition goals conformed and not conform means or ways which every level, every department and every Members of the organization achieve their own goals, which provide everyone with one innovative room for achieving goals, which effectively improve Organization's management efficiency.

3.5 MBO in college management will help to clear its own task.

MBO can help all levels directors and members of the organization to clearly know the overall goal, structure system, division and cooperation of the organization and their own tasks. This responsibility makes executives to understand that they should given the power to lower levels rather than a monopoly of power in order to complete the goals.

3.6 MBO provides college management with one style of self-control, self-management.

With regard to colleges and universities which knowledge-based staff are dense, some faculty do not want to work under the control of the others after they clearly know their own tasks and goals, but complete their own tasks and goals of work with the style of self-management, self-control. MBO is actually one self-management, self-controlled manner, or is one style which guides every member of the organization to self-management, self-control. In the implementation of MBO every member of the organization not only do work, implement instructions, wait for guidance and decision-making, but also every member already unit or individual whom have definitude goals. On the one hand, members of the organization have participated in working-out of goals and gained the organization's approbation; On the other hand, how to realize their tasks is their own things during members of the organization realize their own goals once goals already made. In this sense, MBO can be at least one style of self-management, self-control.

3.7 MBO provides college management with one effective control means.

Control is one important management function, so-called control is one process which supervise, examine that the work whether is taken according to established plans, standards and methods, then find the deviation and analyze the reasons and correct the deviation in order to ensure to realize the goals of the organization. We must have the control to realize the established goals of the organization. MBO itself is one effective control means, that is, through the realization of decomposed goals, the process which finally ensure that achieve the overall goals of the organization is means of result

control. MBO is not simple decomposition of goals, in fact, high-level directors of the organization must often examine, compare goals and appraise, and correct the deviation if they appear. From another point of view, if an organization has a clear assessable target system, the target system itself is the best gist of intendant control.

3.8 MBO in college management incarnates people-oriented management philosophy.

So-called people-oriented management refers a sort of management means which regard the people's all-round development as the core, create corresponding environment, conditions, and is on base of individual self-management, self-control, which is based on the basic assumptions about people, that is, regarding human as society people whom pursue self-realization, self-management, self-control. Some scholars put forward to carry out people-oriented management in the management of colleges and universities, that is, put forward "three the whole shoot", which is the work of all levels leaders in colleges and universities, all for all faculty and students, for all of all faculty and students, for all faculty and students. MBO is justly a people-centered, democratic management style which emphasizes self-control, self-realization, self-management. Therefore, MBO in the management of colleges and universities can preferably reflect the people-centered administration ideas and philosophy.

3.9 MBO in college management can satisfy lots of faculty mental needs of self-realization.

American psychologist A. Maslow wrote the book "The motive theory on human" in the 1943, in which he put forward the theory of the five needs levels, there was one tiptop need---self-realization need. self-realization is to exert oneself to promote self-growth, try one's best to exert own potential and realize own value, do one's best to realize maximal achievement, which is the highest demand level. In addition, self-realization is also a theory of human nature hypothesis, namely, human hypothesis of self-realization. MBO is a style of self-management which is just on base of the human hypothesis of self-control, self-realization. Therefore, MBO provides faculty in colleges and universities with a platform of self-realization.

4. Conclusion

MBO was initially applied in the operation and management of enterprises, Chinese enterprises introduced the method of MBO in the 1980s, which has achieved good results. However, MBO in the management of colleges and universities has not been attached importance to. Can use MBO to mobilize everybody's enthusiasm, initiative and creativity for knowledge-intensive colleges and universities? According to analysis and discussion above, the authors think that: MBO in the management of colleges and universities is totally feasible. But how to use it, and what should be paid attention to, the author will do further study and research.

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Enhancing the Schooling Level of the Special Higher Education and Perfecting the Disabled People Higher Education System

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The research is financed by the project of "Chinese and American Deaf People Higher Education Development Comparison Research" of Chinese Education Ministry Humanistic Community Scientific Research Plan Funds of 2007. (Sponsoring information)

Abstract

It is the urgent problem to quickly develop the graduate education of disabled college students for Chinese special higher education. Through the comparison of the foreign and domestic disabled graduate education actualities, we should constitute the postgraduate cultivation scheme and the education layout which could not only possess Chinese characteristics, but also accord with the development tendency of the world disabled postgraduate education through deep investigation researches, increase the outlay investment, develop the experimental unit engineering in special education colleges, recruit disabled students and sharing education resources in the postgraduate education of common colleges, make Chinese disabled people higher education develop to the elite education and the popular education at the same time, and form the system in the world to adapt for the demands of Chinese economic construction and social development to the super disabled professional talents.

Keywords: China, Special higher education, Postgraduate education

1. Introduction

Chinese special higher education has experienced 20 years' course, and the special higher education colleges have cultivated thousands predominant disabled talents who have made predominant contributions on their own work posts, and in these graduates, there are members of National Committee of CPPCC, college teachers, college leaders, national and provincial prominent teachers, prominent professional talents who won the prizes in the country or in the world, cadres working in national or provincial institutions, and many prominent talents who studied abroad and obtained the master degrees and doctor degrees, and some of them kept on working in American special colleges and enterprise, and some of them returned and worked in China. The proportion of these predominant talents exceeds 30% of the total disabled graduate amount, and various-level leaders, foreign and domestic experts and medias all praised they were the first-class talents.

With the quick development of Chinese special higher education and the experiences obtained in the disabled people higher education, to enhance the schooling level of special higher education and quicken the development of the disabled postgraduate education is the urgent problem for the present Chinese special higher education, and the bottleneck problem that China reforms the special higher education structure and integrates the international education. At the same time, it is the important task to realize the education equity, share the education resource and establish the harmonious society, and the fill the blank of the postgraduate education in Chinese special higher education. Just as what the vice president of CPPCC, Deng Pufang said, "We are not to fill the blank, but we have bases and conditions to develop the postgraduate education when we have accumulated 15 years' special higher education", when he interviewed with the leaders of Changchun University.

2. Actualities of foreign and domestic disabled postgraduate education

2.1 Actuality of Chinese disabled postgraduate education

(1) Since 1978 when China resumed the postgraduate enrollment system, "the amount of full time undergraduate

increased from 10,000 in 1978 to 370,000 in 2005, and the accumulated number achieved 2.2 millions (Jiangying, 2006, P.29)".

(2) Comparing with common higher education, Chinese special higher education lags obviously. According to the Second Spot Check of Chinese Disabled People, there were 82.96 million disabled people at present (The 2nd Handicapped Spot Check Office, 2007, P.2) which including 0.6 million disabled people in various-level colleges (Gan, 2004, P.1). Up to now, there are 12 higher colleges which can accept disabled people (Chinese Special Education Seminar, 2007, P.1), and the famous colleges include the Special Education College of Chuangchun University, the Second Medical Department of Shandong Binzhou Medical University, the Deaf College of Tianjin University of Technology, the Special Education College of Beijing Union University, and these colleges enroll about 1000 students every year (China Disabled People Union, 2006, P.32-33), but there are not the education level of postgraduate at present, so it is not proportional with the postgraduate education in general higher education, and it is still the blank of the higher education of disabled people in recent 20 years.

(3) The Special Education College of Chuangchun University founded in 1987 begun to declare the award authority of master's degree for the Education Ministry in 2002, and it declared the authority again in 2005, but it was not authorized as yet. The National Federation of the Blind and the member of National Committee of CPPCC, Mr. Gan Bolin put in the overture twice in the Second Session of the Tenth National People's Congress and the Third Session of the Tenth National People's Congress, and Deng Pufang and Zhang Haidi and other 11 commissioners signed on the overture. The representative of National People's Congress, Mr. Hua Zhuxin put in the overture again in 2007, and he appealed to quicken the disabled postgraduate education.

(4) Because there is no the disabled postgraduate education level in China, the disabled graduates can not obtain the further education, and they have to study abroad. Up to 2003, "Chinese deaf students who studied for the doctor's degree and the master's degree in American Rochester National Technological Institute for The Deaf and the Gallaudet University achieves about 30, and other about 10 blind students study for the master's degree abroad (Gan, 2004, P.3)". At the same time, there are quite many students who can not study abroad and loss the opportunity of further education because of economic reasons. At present, more and more students in various special education schools and graduated students run up for the postgraduate education, but Chinese disabled higher education can not fulfill their demands.

2.2 Actuality of foreign disabled postgraduate education

(1) Chinese disabled postgraduate education developed very slowly than foreign countries, and the foreign disabled postgraduate education has about tens histories. "There are about 15,000 students in American Rochester Deaf Technological Institute including 1,200 disabled students (Gan, 2004, P.3), and about 400 deaf students with healthy students study for the undergraduate courses and graduate courses in six colleges, and the specialties are very extensive, and they include the information technology, the computer software design and development, the computer arts, the photograph technique, the biology, the chemistry and the medical technology, and the American finger language-English interpretation specialty and middle deaf education master's degree item enroll in health students and deaf students at the same time (Zhang, 2002, P.287)".

(2) American Gallaudet University is the first university which specially sets up the undergraduate course, graduate course and doctor course for deaf students and students with hearing loss in the world. The doctor course of the special education of the graduate college is in the department of administration management, and the doctor course of the deaf education is in the department of education. The Communication College can award the arts master's degree of the translation and linguistics, the doctor's degree of speech -language pathology and the doctor's degree of clinical pathology. And the College of Arts and Sciences and Technology can award the master's degree of the social work, the master's degree of school psychology and the doctor's degree of clinical psychology.

(3) Japan is also the country with developed special education, and the disabled students are allowed to apply for the postgraduate in common colleges. The highest school of Japanese special education is the University of Tsukuba which was founded in 1987, and it was authorized to develop the graduate education in 2006, and it begun to apply for the award authorities of the master's degree and the doctor's degree in 2007. And Japanese Ministry of Education, Culture, Sports, Science and Technology has accepted the application which might be authorized.

3. Meanings that China develops the disabled postgraduate education

3.1 It is the necessary requirement to perfect Chinese higher education system

To develop the disabled graduate education can perfect Chinese disabled higher education system, solve the urgent problems that the graduates of special education colleges can not accept further education, and fill the blank meaning in Chinese education history. At the same time, the perfection of disabled higher education is the real perfection of the whole Chinese education system.

3.2 It is the embodiment to realize the education equity, share the social education resource and constitute the harmonious society

With the development of social economy and the expansion of the higher education scale, the demand of higher education are more and more increasing, so many problems about the higher education, especially for the equity of the disabled higher education, are more and more being the focus. Therefore, the development of the disabled postgraduate education is the important embodiment to implement the policies of Chinese Communist Party Central Committee about enhancing the quality of feeble group and emphasizing disabled people careers, realize the education equity, share the social education resources and establish the harmonious society.

3.3 It is the effective approach to fully dig disabled people's potentials according to the cultivation target of higher education

The fifth article of "Law of Higher Education of People's Republic of China" regulated that "the task of higher education is to cultivate the super professional talents with innovational spirit and practical ability, develop the scientific technology and promote the construction of the socialism modernization (Zhang, 2002, P.37)". Therefore, it is the effective approach according with the cultivation target of Chinese higher education to enhance the schooling level of disabled higher education, fully dig the intelligences and potentials in disabled people, and increase talents with high quality for Chinese economic construction.

3.4 It is the objective requirement of the social and economic development in present China

The advent of the knowledge economy changes the competition of present society into the competition of scientific technology, the competition of knowledge and the competition of talents, and this sort of competition offers wide stage for the employment of disabled people, and requires high quality for disabled people, and brings more pressures for the employment of disabled people. The data showed that "in Chinese disabled people, the amount that the disabled people depend on family or nation or collectivity occupied 70% of the total amount, which is very close with the proportion between the disabled illiterate people and half illiterate people (Study Group of "Disabled People Higher Education Research" of Shandong Provincial Binzhou Medical University, 2000, P.50)." That indicated it was impossible for disabled people to get rid of the independence without the education, and the disabled people with higher education would obtain more employment opportunities, higher employment level and more incomes. Therefore, the higher-level education is the essential approach for disabled people to completely depend. If the disabled people will not accept more and higher level education than healthy people, they will face more difficulties and bigger resistances in the employment. It is more and more important to accept higher-level education for disabled people, and it is the objective requirement of the social advancement to quicken the development of the disabled postgraduate education.

4. Possibilities that China develops disabled postgraduate education

4.1 Abundant special education experiences have been accumulated in 20 years' course of disabled people higher education

Through 20 years' development, Chinese disabled higher education begins to possess initial scale and the quality of the teacher team is higher and higher. Taking the Special Education College of Chuangchun University as the example, the College has 4 professors, 18 associate professors and 23 instructors. The teaching management experiments in various special education colleges are abundant, and to properly develop the education of the postgraduate layer can not only fulfill the practical demand of the actuality, but can promote the development of the original disabled graduate education.

4.2 Sufficient guarantee of student sources

According to the investigation, whether the school students or the graduates, they all want to accept further education. Until the late of 2005, the disabled school students in colleges achieved about 5,000 (China Disabled People Union, 2006, P.32-33). If we develop the disabled postgraduate education in China, it is very helpful for the disabled higher education and the whole disabled people, and it is very important and urgent to develop the education of the disabled postgraduate, and it can be done completely.

5. Main factors to limit the development of Chinese disabled postgraduate education

5.1 Old opinions are main obstacles to quicken the development of disabled postgraduate education

Because of the influences of old concepts, there are still the phenomena that some people ignore even discriminate disabled people with different extents, which are very obvious to develop the disabled higher education. Some people even think that the disabled people haven't the quality to accept the postgraduate education, and it is the waste of the national education resource. The disabled postgraduate education is the important part of disabled higher education and the disabled people occupation. And it is also the important part of Chinese higher education, and it is the symbol of social civilization and advancement to develop the disabled higher education which is the responsibility of the nation and the whole society. To quicken the develop the disabled postgraduate education, eliminate the old concept, and

establish the new disabled people development view, are the objective requirements to develop the career of disabled people and the objective requirements to quickly develop Chinese higher education.

5.2 The outlay devotion is not sufficient, the teaching establishment is simple and the teaching measure is lagged

The disabled people education needs more assistant establishments, measures and outlays than general education. At present, the special education colleges supported and authorized by Chinese Disabled People Federation and Chinese Education Ministry all lack in outlays seriously, and the teaching conditions and teaching establishments are not perfected, and the teaching measures are lagged, which can not fulfill the requirements of modern teaching and disabled students, and it is difficult to develop the disabled postgraduate education.

6. Measures to solve the problems in the disabled postgraduate education

6.1 Deeply develop the investigation research, use foreign experience for reference and constitute the implementation project of Chinese disabled postgraduate education

There are different situations in China, and every university is a special individual which has the irreplaceable status comparing with other universities. Therefore, the constitution of Chinese disabled postgraduate cultivation plan should not simply imitate and copy the experiences from other countries. We should constitute the scientific and reasonable disabled postgraduate cultivation plan and education layout which can not only reflect the characteristics of Chinese disabled postgraduate education but follow the development tide of world disabled postgraduate education. To confirm the disabled postgraduate cultivation target, talent cultivation mode, teaching method and measures, academic research direction and social service mode, the function of the disabled postgraduate cultivation system in different higher colleges, can make Chinese postgraduate education develop independently in the world, adopt the demand of Chinese economic construction and social development for super disabled professional talents, and follow the harmonious development of Chinese higher education.

6.2 Make experiments of disabled postgraduate education in the special education colleges according with the conditions

China has possessed basic conditions and abundant higher special education experiences to cultivate the disabled postgraduates in many aspects such as scientific research, teaching and service, and the teachers and students all possess stronger innovational ability. Taking the Special Education College of Chuangchun University as the example, in recent three years, teachers assumed about 30 above provincial scientific research and teaching tasks, and there were 9 national tasks. There were about 70 academic articles which included about 30 core journal articles, and there were about 10 teaching materials published. The productions of students of the arts specialty have been showed in US and Japan, and they are recognized by foreign and domestic artists in the same industry. There were about 20 graduates to study for the master's degree abroad. So we can first develop the disabled postgraduate education experimental unit in such special education colleges according with the conditions, and gradually extend and perfect the system of Chinese disabled people higher education.

6.3 Constitute corresponding laws and regulations, establish the support system in common colleges, enroll disabled students according with the conditions and share the education resources

In the work to develop the disabled postgraduate education, we should break through the requirements about the subject attribution of disabled postgraduate education, the master degree and the doctor degree. The present disabled graduate education subjects include medial science, arts and computer, and we should constitute corresponding laws and regulations to enroll in disabled students, share the education resources and reduce the schooling cost of disabled postgraduate education in the postgraduate education of general colleges. For example, combining with teaching materials, American Gallaudet University developed the disabled postgraduate education in many domains such as literature, engineering and management. The sixth article of "UN Disabled People Equity Opportunity Standard Rule" not only affirmed the equal education chance of disabled children, young people and adults, but further put forward the education of these disabled people should in the school environment with the integration of disabled students and other students or in the general colleges (Chen, 2004, P.14). The inclusive education in Chinese higher education has experienced the initial stage, and the material inclusive education has been developed in the special education colleges or other colleges. If the effect is good, we can extend the subject of disabled postgraduate education, and offer wider domain for disabled graduates to make them study more knowledge, and make larger contributions for the disabled people.

6.4 Offer necessary capital support for the colleges incepting disabled postgraduate, and encourage colleges to develop the disabled postgraduate education

Comparing with general education, the special education needs more devotion, so the government should offer necessary capital supports for disabled students to study for the postgraduate course, and encourage and advocate colleges to develop the disabled postgraduate education. However, except for few developed countries, most developing

countries lack in outlays. “Chinese Education Reform and Development Compendium” regulated that “various-level governments should treat the disabled people education as the important part of the education, and adopt various forms such as holding the disabled people schools or enrolling in disabled students in general colleges to develop the disabled people education, and the governments should also gradually increase the outlay of special education and encourage the social powers to hold and donate the schools, and support the disabled colleges and enterprises (Zhang, 2002, P.140).” Therefore, to develop the disabled postgraduate education, we should give priority to the government devotion, and assist with social endowments, encourage the social power to hold the schools with the government for the serious deficiency of the higher education capitals. We should strengthen the assistant system of the disabled postgraduate education social service system, make the research results of disabled people better feed back the society, exert more functions in the social economic construction, and obtain more supports from the society and the government.

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Challenges of Teaching First-Year Students at Institutions of Higher Learning

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Abstract

It is a known fact that coming to the university environment for the first time can be frightening, and this experience comes with a mixed-bag of reactions for most of these first-year students. Undoubtedly, how they react to this new environment, generally impacts on their academic and social adaptation at these institutions. Therefore, the intention of this article is to look at some of the common challenges which these students (with special reference to CUT, FS) are confronted with. Some vital coping strategies are also recommended for especially novice lecturers to be able to effectively manage this challenge posed by these new entrants.

Keywords: Students, First-years, Performance, Teaching challenges, Higher learning institutions

1. Introduction

It is being said that, for many years in South African Higher Education, it was believed that only those who 'fit' higher education would eventually be successful. Those students who possess the talents and skill to 'survive' would succeed and the others would consider other educational possibilities (Eiselen and Geyser 2003; Killen, Marais and Loedolff 2003; Bitzer 2005). Shertzer & Stone (1971) argue that people generally feel emotionally less secure in a new or strange environment. Bojuwole (2002) adds that this is particularly the case with students just coming to the university environment for the first time and becoming members of an institution. Such newly admitted students may feel confused, tense, threatened, anxious, and even helpless (Hamblin, 1989). Transition from a high school to a university environment has the potential to become a daunting task for first-year students. The demands on the lecturer for achieving success with this group of students, is equally as challenging. However, it is essential to note that studies conducted have established that students change substantially over the course of their undergraduate academic experience (Kennedy, Shackle & Kehrhahn, 2000; Lourens & Smit, 2003) and the most dramatic changes occur during their first year of study (Muffo, Dickey & Bodo, 1999).

The findings of Kariuki (2006) on many of the general problems confronting university students, revealed that: (i) understanding the English used in a textbook; (ii) understanding their academic work; (iii) expressing themselves clearly in English; (iv) making friends; (v) and taking notes in class were the five most important aspects identified by the students regarding their university education. Conversely, Downs (2005) reports that following feedback from first year lecturers, students have poor skills in the following areas: summarising, identifying key concepts, discussion, essay writing and comprehension. He went further to suggest that the students have opted for surface level learning, and consequently, the curriculum does not create meaning for them. It might follow that if students have a poor background as well as time pressures, they may not have a choice. He concludes that other studies concerning assessment of student achievement revealed that many students fail to develop effective thinking and problem solving skills.

2. Learning Expectations in the Higher Education Context

In the university context, students face what Kitchener (1983) and Churchman (1971) respectively refer to as ill-structured problems or dialectical problems. These are problems for which there is no single, unequivocal solution

which can be determined at the present moment by employing a particular decision-making procedure. Ill-structured problems are typical of the type of problems where there is seldom a choice to students. Rather, students are confronted with opposing or contradictory evidence and opinion which requires that they consider alternative arguments, seek out new evidence and evaluate the reliability of data and sources of information. Kitchener (1983) distinguishes these problems from puzzles, which are well-structured problems with only one correct final solution, which can be guaranteed by using a specific known and effective procedure or formula.

Fisher (1995) argues that students need to acquire not only the explicit knowledge (as in the content of the curriculum) but also the tacit knowledge (for example, learning to understand and interpret the values, beliefs or social practices of a particular community of scholars). Starfield (1994) similarly argues that, other than focusing on mere content of the curriculum, other levels of knowledge, what forms of explanation and argument are allowable and how new knowledge is produced should also be part of the curricula. In conceptualizing courses, Amos and Quinn (1997) consequently argue that less emphasis should be placed on the content students are required to learn and more on the skills needed for coping academically.

3. Typical Academic Challenges for Students

3.1 First Year Students

A first year student needs support through the transitory process in a series of particular issues (Angelo & Cross, 1993):

a) First year students require new skills

A major concern is to assist first year students to become familiar with what it means to be a self-managed, independent learner. Time management is particularly difficult for students to learn. School leavers are usually more familiar with the day to day involvement of parents and staff who may also take on an inspectorial role. Those coming from the workforce will also have their own particular challenges when they lose the structure of work and daily deadlines and demands. Many students struggle to understand the need for detailed referencing and unimpassioned expression of ideas.

b) First year students need to adopt a new style of learning

In professions-based awards there are often outside pressures from professional associations that tend to overload curriculum content at the expense of the time being spent on learning processes. As a result, there is a risk of teaching becoming content driven, rather than learning driven. The first year can be the hardest for students because there is a need for students to learn a vast range of basic concepts in a number of new fields or disciplines before they can engage with their application to their chosen profession. At first these concepts often do not appear to have any practical application. It is very difficult for students to engage intentionally in this kind of learning if they do not understand the importance as well as the relevance, for future learning and work. First year students often confuse fact and example, and require constant explanation of what materials must be retained post-lecture and studied in detail.

c) First year students have a diversity of needs, experiences and backgrounds

Focusing on students' learning needs rather than curriculum content is further complicated by the diversity of needs that exist in the classroom (age, prior experience, cultural norms, ability, etc.) In the first year there are very few assumptions that lecturers can make about common experiences and understandings. All assumptions about knowledge, understanding, experiences, values and capability need to be verified.

d) First year students show high drop-out and failure rates

In any analysis of first year failure rates it is important to recognise that there are multiple causes of failure. In some cases students enroll for reasons other than interest and personal choice. Early evidence of the risk of failure is when students fail to submit work. In other instances some students work for a mere pass rather than to learn. These factors are not readily apparent in grade distributions.

e) First year students display poor class participation

Some students do not participate by talking in lectures and tutorials due to a fear of being perceived as ignorant. Other students dominate conversations. There is also a concern that where there is a heavy reliance on lectures in the first year, there is a general decline in the attendance of lectures as the course progresses.

f) First year students are typically under prepared

Students fail to understand the depth of preparation that is required for participation in university courses and attend tutorials without having worked through pre-readings. Because of this tutorials frequently revert to mini-lectures rather than active sessions. Students who have done the preparation can then become discouraged from doing so.

3.2 General Academic Challenges for Students

Human beings possess an acquired need to express their innate, biologically ordained competence, called "competence motive" (Hall 1993, 1994). The attainment of human competence is a natural part of the life process and is what ensures

the survival of the species. Therefore, rather than assume students are not intellectually capable of meeting the demands of the university environment, one should consider that such individuals are making use of the incorrect cognitive processes (Craig, 1998). Understanding student learning difficulties within the higher education context, students must be seen as abstract thinkers who have the ability to engage in, benefit from and master formal education but, at the same time, make use of the incorrect cognitive process when grappling with the typically ill-structured problems encountered in the various academic disciplines at higher education level.

Scott (1994) adds that if the complex student learning difficulties in higher education are to be addressed effectively, it is clear that academic development work is required. Such academic development needs to be aimed at preparing all students to mobilise the cognitive process required for success within each of the various academic disciplines. All students have the capabilities to fulfill the demands of university tasks, but, in some cases, the learning-teaching situation does not elicit these competencies and/or the desired performance level (Craig, 1989). Academic development needs to be more than growth, it is about growth and change. Academic development is essentially concerned with the processes of change in teaching and learning in higher education.

Academic development “no longer becomes a problem that lies within a particular group or groups of students, but is a process in which a range of actors in different situations share responsibility for growing into academic life” (Bulman, 1997:09; Van der Riet, Gilbert, Kelly & Fischer, 1996). There is consequently a need to develop academic literacy, not as an adjunct “skill”, but by and through engagement with learning in the mainstream academic disciplines themselves (Langer, 1987; Boughey, 1994) aimed at preparing all students to deal with the set of competencies required at the tertiary education level.

4. Contemporary Didactical Approaches to Meet the Needs of the New “Millennial Student”

Newton as cited by Angelo & Cross (1993) indicated that when attempting to have an influence on the “millennial student” enrolling at higher institutions, the following needs to be taken into account:

Faculty and staff may need to recognise that students are already different in their attitudes and behaviour as a result of the social and technological revolution.

A campus must still offer deliberate classroom and out-of-class opportunities in order for student personal awareness and exploration to take place.

The information revolution has created the need to reduce pressure on students to accumulate a personal knowledge base and, instead, emphasise the development of process tools for information retrieval.

Students need to have skills to manage their daily life.

Campuses need to provide opportunities for students to explore the meaning and purpose of their life activity.

Faculty and staff need to understand, nourish and find ways to influence the peer culture.

Understand and utilise how students are affected by what they perceive as the normative behaviour of their peers in the social environment.

Finally, it is important for all educators, including both faculty and staff, to recognise how one models what is important and valued as higher learning to students.

In a holistic approach in which the individuality of each learner is foremost, Kruger (1999) has suggested that the learning process should not be a temporary endeavour, but that it should span a lifetime, with learners involved in the process as unique, whole beings. This significant role played by various human dimensions (for example, body, spirit, perpetual activities, social processes and environment) has been widely recognised. They have increasingly been highlighted by various researchers in devising more comprehensive theories of learning (Illeris, 2003; Bitzer, 2005).

The implication for institutions is that educators must attend to the non-cognitive as well as cognitive characteristics of students in order to create diverse, stimulating environments that lead to powerful learning experiences and maximise opportunities for holistic learning. Therefore, researchers should assess students' different kinds of existing knowledge and aptitudes, personality traits, expectations, as well as their interest and participation in specific activities, both academic and otherwise, when they register for higher education (Bitzer, 2005).

5. Problem Statement and Aim of the Study

Student performance at institutions of higher learning is generally attributable to a range of diverse reasons, which are both intrinsic and extrinsic in nature. More often than not, teaching first-year students pose more challenges than when teaching senior students. Time-management, self-discipline and independence are some of the traits most of them battle to master. Straus & Volkwein (2002) and Lourens & Smit (2003) insists that while the Higher Education literature provides an exhaustive range of theories about the reasons for students leaving, as well as proposals for positive intervention, it remains critical for administrators to understand the unique combination of factors contributing to student performance and attrition at their institutions, and how to best assist lecturers to deal with them.

At the Faculty of Management Sciences at the Central University of Technology, schools/departments are expected to perform and uphold a certain performance standard. This standard is checked regularly after every examination. Indications from most schools seem to suggest that the cause for most deviations from the agreed standard is attributable to mainly first-year performance. It is against this background that this article came about.

6. Research Design and Sampling

The method used was of a quantitative nature and followed a descriptive and exploratory research design, using a survey to collect the data. The survey instrument was developed by the researcher and was in the form of a questionnaire comprising of 15 closed-ended items, and one open-ended question. The questionnaire was divided into two sections: Section A: demographic information; Section B: factual items as well as attitudinal and perception items, divided between (i) lecturers and (ii) students' opinions on the topic. A four-point Likert rating scale was used to measure the responses to the items on the questionnaire in Section B, and the responses varied from "a very great extent = (4)" to "no extent = (1)"

The issues investigated were obstacles encountered or perceived to be faced by these students during university education, and the following variables were identified as predictors of their performance: language of instruction; diverse academic competency levels in a class; listening skills; active participation in class; class attendance; ability to work independently; self discipline; responsibility; commitment; preparation for class; health and HIV/Aids; support from home; peer pressure; financial issues; and class sizes.

6.1 Selection of respondents

Firstly, due to time constraints, a purposeful or non-probability sampling strategy was used whereby all full-time students at a research university of technology currently in their first-year of training to become teachers, were selected for this study. Students enrolled for the module GSD10AS (General Subject Didactics). The selection was based primarily on the fact that this module, GSD10AS, is a compulsory module for all first-year students who enrolled for any of the 4 year undergraduate B.Ed(FET): Specialisation programmes, and would therefore, at least be a fair and adequate reflection of the Teacher Training student population at the university. The student response rate was 100% (n=154), and this can be ascribed to the fact that the questionnaires were administered just after one of their written assessment in this module.

Secondly, a similar approach was followed to select a total number of 75% (n=21) of lecturers from the four schools namely: Education; Tourism; Public Management; and School for Entrepreneurship and Business Development, all located within the Faculty of Management Sciences at the Central University of Technology. All those selected were lecturing the first-year students within their respective Schools. Because the study was conducted on such a relative small scale (n=154, students) and (n=21, lecturers) over a limited time and in a limited context, this study does not attempt to claim any generalisation of its findings, but provides only indications on trends and tendencies as perceived and reported by both lecturers and students.

6.2 Data collection and analysis

The data derived from Sections A & B, demographic, factual and attitudinal information of the questionnaire: Student and lecturer surveys on perceptions and attitudes regarding challenges of teaching first-year, was coded and recorded on the SAS® (SAS Institute Inc., 2004) database. This is also where all statistical calculations were carried out. A frequency analysis was done using the data obtained from Section A to obtain a demographic profile of both the student and lecturer sample.

6.3 Demographic profile

The demographic profile of the respondents included their age, gender, race and the academic programmes for which they had registered. The student sample (n=154) and lecturers (n=21) are shown as frequencies and percentages in Table 1. The findings reveal that three percent of lecturers involved were in possession of doctoral degrees, 58% had mastered degrees and 39% had B.Tech/Hons degrees. All lecturers had the required qualifications to teach at an institution of higher learning. Their lecturing experience at this institution varies from minimum 3,6 to maximum 18 years.

Table 1 indicates on the one hand, that majority of the first-year students are still relatively young, between the ages of 15-25, and the numbers are dominated by females. Evidently, black students are in a majority amongst the sample population. On the other hand, majority of the lecturers are divided into two categories, namely: those approaching their middle-age (46%) and others already in their prime (31%). Male lecturers dominated (58%), with whites marginally higher in terms of representivity.

Conclusion

From this data in Table 1, it can be safely inferred that given the age of the majority of the students, the dependence syndrome might still be dominant amongst them, which requires carefully thought-out intervention strategies to assist

them in making such a shift from dependency to self-reliance in both their academic and social life. Similarly, it is evident that majority of lecturers are still young and inexperienced. Qualification alone sometimes cannot “do the trick”, a certain degree of maturity is essential for one to understand the behaviour of students at different stages of their development, and develop and apply appropriate intervention strategies to assist them to achieve success.

7. Increasing the Chance of Student'S Academic Success

The challenge of ensuring student success requires an understanding of the nature of learning itself. Learning is a relatively permanent change in knowledge or behaviour that results from practice or experience (George & Jones, 2002). Amongst the vast amount of research done under the topic of learning, two of the most prominent theories are those of Skinner's (1969) operant conditioning and Bandura's (1977) social learning, both of which this article intends to explore. According to Skinner (1969), operant conditioning is learning that takes place when the learner recognises the connection between a behaviour and its consequences. For example, a learner who knows that by studying hard throughout the year, he/she will receive good grades, and will not be overburdened during the final weeks towards examinations (George & Jones, 2002).

Operant Conditioning theory is based on the following components: Firstly, antecedents, which is anything that tells students about desired and undesired behaviours and their consequences, such as instructions, rules, goals and advice from other fellow students. Secondly, behaviours, which can either be desired organisational behaviour (for example, hard work throughout the year) or undesired organisational behaviour (bunking work, absenteeism from classes, etc.). Thirdly, consequences of behaviour, which might lead to either positive reinforcement, that is, administering positive consequences to students who perform the desired behaviour, (such as verbal praise, appointing him/her as class leader, or tutor) or (ii) negative reinforcement, that is, removing negative consequences when students perform the desired behaviour, for example, if a student lives away from home and his/her parents complain that s/he does not call home more often. By calling home, s/he is able to avoid the negative consequence of his/her parents' complaints. Third component is extinction, that is, removing whatever is currently reinforcing the behaviour. If a lecturer wishes to decrease the probability that an undesired behaviour will occur, s/he first needs to determine what is currently reinforcing the behaviour and then remove the source of reinforcement. Finally, punishment, that is, administering negative consequences to students who perform the undesired behaviour. Such as punishing destructive behaviour during the lesson.

7.1 The social learning theory

Bandura (1977) argues that any attempt to understand how people learn must take into account the impact on learning not only of reinforcement and punishment, but also of a person's feelings and thoughts. Social learning theory acknowledges the importance of the person in the learning process by taking cognitive processes into account. This theory is based on the following assumptions (George & Jones, 2002):

The information that impacts on what people learn comes from the school/university, its members, and the school/university situation, from observing others, from the student's past attainments and physiological states, and so on. The learner then cognitively processes this information, which can happen in three various ways, namely: (i) vicarious learning – occurs when the learner observes and imitates a model; (ii) self-control – is evident when the learner learns on his or her own by setting a goal and engaging in self-reinforcement when the goal is reached; and (iii) self-efficacy – leads the learner to believe he or she can perform successfully. Various cognitive processes such as attention, perception and memory are involved in vicarious learning. Clearly a substantial amount of the learning that takes place at institutions of learning occurs vicariously. Finally, the behaviour change, this will manifests itself in the conduct displayed by the student, in this case towards both his/her academic work and university life in general.

8. Discussion on the Findings of the Study

Table 2 indicates that lecturers perceive (i) responsibility; (ii) commitment; and (iii) preparation for class as very central to the success or failure of first-year students. Evidently, the expectation from lecturers is that, because these factors emanate from the student himself/herself, a certain level of maturity must have been acquired by these students to comprehend the impact, especially regarding these three factors. Undoubtedly, very few of first-year students understand and comply with these requirements. One academic remarked that “the struggling students are the ones who fail to attend SI (i.e special instruction) sessions, so how will they pass or cope with the amount of work, if they are not willing to attend extra tuition offered to them?”. Similarly, another academic echoed the same sentiments, that “normally students that excel display a huge amount of commitment, hardwork and self-discipline, the opposite is also true”. It is surprising that issues such as ‘class sizes’ and ‘peer pressure’ are ranked very low by academics, despite the fact that they are arguably the two most common complaints one often hear from academics.

Table 3 reveals that students perceive (i) self-discipline; (ii) ability to work independently; and (iii) support from home as the most significant determinants of their academic success. Interestingly, the three factors do not vary significantly to the ones identified by the lecturers in table 1 above, they are both intrinsic factors, except for support from home

which is extrinsic in nature. From the open-ended question, one student remarked that “some lecturers are unreasonable, they simply give us lots of work and do not understand that we do not have money to buy textbooks some of us”. Another one said “we need proper orientation and guidance so that we are able to balance our social life and academic work, some of us are labelled ‘academic giants but social dwarfs”.

Notwithstanding these complaints, it is quite pleasing to note that the students, placed a high premium on the role they had to play towards their own success, an acknowledgement that their academic success or failure primarily lies in their own hands. Their plea of support and guidance surely needs to be heeded by academics.

From Table 4, it is evident that the t-test indicates that there is a significant difference between the perceptions of students and lecturers in the following cases, namely: (i) support from home; (ii) language of instruction; and (iii) peer pressure. In the case of (i) and (ii), students feel the factors are significantly more important than the lecturers do, and in 3, the lecturers perceive the factor as more important. It is not surprising that students feel support from home to be highly significant. Most of them come from places far from their chosen institution, venturing into the unknown, without friends or relatives. The experience for the very first weeks and months can be a daunting and frightening experience. Language of instruction as well as peer pressure can have adverse effects if lecturers fail to make a conscious and concerted effort to effectively manage them.

9. Summary and Conclusion

Undoubtedly, the first year at university is a time of social and academic transition for most students and their early experiences are critical to their academic success and perseverance in student life. Teaching first year students can also be more demanding on the staff member involved due to the large class sizes, coordination difficulties, extra planning and feedback requirements, amongst other issues (Newton, 2000:08).

Evidently, from this study, most of the first-year students view language of instruction; volume of work; ability to manage time; level of independence and support especially from home, as the most crucial areas that impact on their performance. On the other hand, lecturers identified lack of responsibility; commitment and poor preparation for class as the most key areas to the success of their academic adventure. It stands to reason, therefore, that the success of a lecturer is dependant largely upon the willingness and ability of a student to succeed. It is of paramount importance to understand that lecturers need not only master the subject matter, but also comprehend that the way students learn is a vital ingredient. How to help them develop not only their cognitive skills, such as applying; analyzing; synthesizing and evaluating information (Bloom's 1956) higher order cognitive skills), but also empathy, caring and support equally requires a special skill from a lecturer. A holistic approach, inclusive of student support service or academic development, has to form an integral part of this venture for first-year student to succeed. Quite a daunting task for academics if proper mechanism are not put in place timeously and proactively.

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List of Tables/Figures:

First-year students (n=154)				First-year lecturers (n=21)		
Characteristic	Group	N	%	Group	N	%
Age	15 – 20	61	40%	25 – 30	2	8%
	21 – 25	82	53%	31 – 40	10	46%
	26 – 30	11	7%	41 – 50	6	31%
	31 – 35 an older	0	0	51 and older	3	15%
Gender	Male	63	41%	Male	12	58%
	Female	91	59%	Female	9	42%
Race	Black	132	86%	Black	10	47%
	White	17	11%	White	11	53%
	Other	5	3%	Other	0	0
Programme	EMS	42	27%	Education	9	46%
	Natural Sciences	57	37%	SEBO	5	23%
	Technology/Technical	26	17%	Hotel School	4	18%
	Computer Science	29	19%	P. Management	3	13%

Table 1. Demographic profile of 1st year students and their lecturers

	A very great extent	A noticeable extent	Some extent	No extent	
Factors	4	3	2	1	1 and 2
Responsibility	61.9%	23.8%	9.5%	4.8%	85.7%
Commitment	61.9%	23.8%	9.5%	4.8%	85.7%
Preparation for class	57.1%	33.3%	4.8%	4.8%	90.5%
Self discipline	52.4%	38.1%	4.8%	4.8%	90.5%
Class attendance	47.6%	28.6%	23.8%	0.0%	76.2%
Listening skills	42.9%	33.3%	14.3%	9.5%	76.2%
Diverse academic competency levels in a class	38.1%	33.3%	28.6%	0.0%	71.4%
Financial issues	35.0%	40.0%	20.0%	5.0%	75.0%
Ability to work independently	33.3%	52.4%	9.5%	4.8%	85.7%
Active participation in class	33.3%	38.1%	28.6%	0.0%	71.4%
Class sizes	23.8%	23.8%	42.9%	9.5%	47.6%
Language of instruction	19.0%	38.1%	33.3%	9.5%	57.1%
Peer pressure	10.0%	70.0%	20.0%	0.0%	80.0%
Support from home	5.0%	60.0%	35.0%	0.0%	65.0%
Health and HIV/Aids	0.0%	16.7%	61.1%	22.2%	16.7%

Table 2. Staff perceptions of factors influencing first year student performance

	A very great extent	A notice-able extent	Some extent	No extent
Factors	1	2	3	4
Self discipline	67.5%	15.0%	12.5%	5.0%
Ability to work independently	58.5%	26.8%	12.2%	2.4%
Support from home	55.0%	25.0%	15.0%	5.0%
Class attendance	50.0%	22.5%	20.0%	7.5%
Language of instruction	48.8%	34.1%	9.8%	7.3%
Responsibility	39.0%	43.9%	12.2%	4.9%
Preparation for class	35.0%	40.0%	15.0%	10.0%
Commitment	34.1%	48.8%	12.2%	4.9%
Listening skills	31.7%	51.2%	14.6%	2.4%
Class sizes	30.0%	27.5%	30.0%	12.5%
Diverse academic competency levels in a class	29.3%	61.0%	4.9%	4.9%
Financial issues	23.1%	28.2%	23.1%	25.6%
Health and HIV/Aids	22.5%	17.5%	20.0%	40.0%
Active participation in class	19.5%	58.5%	19.5%	2.4%
Peer pressure	15.0%	35.0%	20.0%	30.0%

Table 3. Student perceptions of factors influencing their performance

Factors	Lecturers Mean	Students Mean	P(T<=t)
Support from home	2.60	1.70	0.0094
Language of instruction	2.33	1.76	0.0220
Peer pressure	2.10	2.65	0.0363
Financial issues	1.95	2.51	0.0559
Preparation for class	1.57	2.00	0.0866
Commitment	1.57	1.88	0.1748
Ability to work independently	1.86	1.59	0.2111
Responsibility	1.57	1.83	0.2606
Health and HIV/Aids	3.06	2.78	0.3588
Active participation in class	1.95	2.05	0.6291
Class sizes	2.38	2.25	0.6330
Class attendance	1.76	1.85	0.7312
Self discipline	1.62	1.55	0.7699
Diverse academic competency levels in a class	1.90	1.85	0.8038
Listening skills	1.90	1.88	0.9059

Table 4. T-test comparison – Lecturers and students

Factors	Lecturers Mean	Students Mean	P(T<=t)
Support from home	2.60	1.70	0.0094
Language of instruction	2.33	1.76	0.0220
Peer pressure	2.10	2.65	0.0363
Financial issues	1.95	2.51	0.0559
Preparation for class	1.57	2.00	0.0866
Commitment	1.57	1.88	0.1748
Ability to work independently	1.86	1.59	0.2111
Responsibility	1.57	1.83	0.2606
Health and HIV/Aids	3.06	2.78	0.3588
Active participation in class	1.95	2.05	0.6291
Class sizes	2.38	2.25	0.6330
Class attendance	1.76	1.85	0.7312
Self discipline	1.62	1.55	0.7699
Diverse academic competency levels in a class	1.90	1.85	0.8038
Listening skills	1.90	1.88	0.9059



Brief Review on Details in Educational Management and Teaching

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Abstract

In reality, quite lots of details are frequently neglected intentionally or unintentionally. Usually, failure is accumulated when one is careless, while success is also accumulated by several details. We human beings often have the exclamation of "Success owing to details, and failure too". We should, from time to time, alarm or remind ourselves that, to emphasize details is conducive without harm whenever, wherever and for whatever. Especially as for education, a project of vital importance, detail is extremely significant, and can't be neglected.

Keywords: Education, Details, Emphasis on details

1. Emphasis on power of details

It is reported that, a foreign businessman came to China for investment. In the process of carefully reviewing investment environment, he was dissatisfied with each enterprise he visited, but finally he chose an enterprise which had quite sanitary toilets. Even the case that one sputum spitted a joint project proves importance of details. An individual's civilization degree is not decided by his educational background, but by his living details; A family's civilization degree is not decided by nobility or elegance of its furnishings, but by its kitchen and toilets; a nation's civilization degree is not decided by the magnificent reporting of its official media, but by words and deeds of its ordinary citizens. The great litterateur Tolstoy said, one's value is not balanced by the quantity, but by his profundity. Likewise, capacity of a cask rests with the shortest wood block, and fastness of a chain with each loop. A common trait of victors lies in that, they carefully do each trifle, and grasp details firmly. The so-called "To see a World in a Grain of Sand, And a Heaven in a Wild Flower" just indicates this principle. It is usually the detail that decides success and failure in the operation of an enterprise. McDonald's possesses approximately 3000 restaurants and a number of 100,000 employees in over 100 countries. Besides, cultural and economic backgrounds of all nations and regions differ from each other, so there might be great difficulties in its marketing and management. Then, is there any magic weapon to keep normal running of so many restaurants with totally different market environments? It is detail and standardization of detail! Scientific and systematic analysis of daily operation and relative business of restaurants will elicit subtle and accurate standards, which are then strictly and correctly implemented and copied continually. This not only cuts down on costs of starting a business, operation and training, etc, but may guarantee quality of products and its service and display image of the brand and specific features of the enterprise culture, which, in turn, will cut down on operation risk and improve operation profits and efficiency. All the above is the power of details.

The same is true not only in enterprises, but also in education. There exist various issues among adolescents nowadays, from ill habits to violation of rules and disciplines, even illegal committing of crimes. There are all possibilities that we should consider this has large association with neglect of educational details in various aspects. For instance, in family education, beloving of children by their parents and decision on all concerned about children result in their regardless of others and lack of elementary self-dependent living capacity, as well as in their lack of responsibility and hardship endurance, etc. Since parents are eagerly ambitious for their children and excessively pay attention to the exam score, their children either have the idea that perfect school achievement equals that all goes well, or they behave strongly against their parents, even playing truant. In school education, the standard of examination-oriented education system judges a student by his school achievement, so detail of conducting oneself is neglected, which leads to the phenomenon that, some students have good school achievement but not all-around development, who are not capable of being necessary talents by the nation and the society. Power of the detail is huge, whether from the perspective of positive side or negative side, which we can find everywhere. The Harvard student Liu Tingting couldn't have succeeded without the help of education in details. "Incident of injury on bear" by a well-known university student is closely related to scarcity of education in details. The incident of intentional murder which happened just because of a squabble might also trace back to issue of details. Recalling a painful experience, we can no longer ignore power of education in details. To carefully pay attention to details, focus on details and grasp details so as to educate and manage

students is already extremely urgent. we should make clear: there is no trifle in school, and everything includes education; teachers can't be neglected, and models of teachers are everywhere; there is no vacancy in management, and it requires education whenever. Students should learn to act from details, while what teachers should do is to set themselves an example to students, devote themselves into detailed education, observe characteristics of each individual student, care about thinking of each student, attach importance to feeling of students, understand their necessities, grasp emotional development of students, listen to aspirations of students, unfold respectful education, and pay attention to every detail of educational and teaching process wholeheartedly. Furthermore, teachers should put education into effect perfectly, meticulously and practically, which may make education in detail nourish each soul of students just like the breeze and drizzle, and make details grow up together with students.

2. Details in educational management and teaching

2.1 Details in behavioral standardization management

Teachers should grasp each word and deed of students, and after careful consideration, correct ill habits of their words and deeds. They should establish a behavioral standardization system which clearly demarcates awarding and punishment, and which is manipulative and effective; they should meticulously and patiently carry out management standardization, and consist in this, so as to enable students to understand that only those with "civilized words and elegant conducts" can be admitted by a civilized environment and can be one of the team. In <<The Essential 55 >>, it is required that children should be polite in communication with adults; whenever they answer a question, they should say "Yes, papa," "Yes, mama" and "Yes, teacher". If they just nod or use any other way to express "Yes" or "No", that's unadvisable. The author holds the view that students shouldn't initiate to ask for awards. Mr. Clark uses to sending some awards to those students with poor school achievements, but if those with perfect achievements ask for awards, he will refuse without hesitation. "I just try to let them know that, their endeavour in everything is not for award, but for themselves." "I would like to help children to finally learn to affirm the value of their own struggle." In order to help children to be self-consistent, Mr. Clark bought a set of outfits which he wished that each child would have a share at hand, and which includes a big etagere that can contain a notebook, filler, notebook, and ruler, etc. Mr. Clark laid all articles bought on the ground for photo-taking, and listed a bill. Three weeks before the school term began, he issued a photo and letter to each student. The day the school started, he carefully checked articles of each student, telling them when to use each article, he also put up a label and demonstrated for the students, etc. From then on, his students turned to be quite self-consistent. Mr. Clark then realized that, as a matter of fact, the children like consistency. Furthermore, it should be mentioned that, each year, Mr. Clark asked his former students what opinions their new teachers held about their performance. By this means, Mr. Clark may know clearly what disadvantages and success his teaching respectively has from a lateral side, so as to further correct and perfect his future teaching, and improve and guarantee quality of his education and teaching.

2.2 Details in management of school rules and disciplines

As for behaviors that violate school rules and disciplines, further classification of specific punishment is necessary. For instance, different punishment should be given for being late for class respectively one minute, three minutes and five minutes. Besides, any detail in the process of implementation should by no means be ignored, because neglect of implementation detail means disregard of rules and regulations, which will result in the fact that, students don't bear these rules and regulations in mind or put them into practice. Over time, a habit might come into being in the subconsciousness of students that they ignore rules and regulations of the school, and multiple costs have to be paid in order to change that situation. What's more, we would have to spend high expense in renovate disqualified "products", so all might be no more than "mending the fold after a sheep is lost". Therefore, strict implementation of each detail so as to make students realize the necessity of not being late in their subconsciousness, which is a discipline, a rule, and more a significant content of civilized and polite culture and faith. Running true to form and being customary to abiding by rules and disciplines can enable one to get in harmony with his team, and to become one of the team or a close member of it, but not to become a deserter who dissociates from the team. In the modern society, the preciseness that a refined social work division needs close cooperation of all procedures requires employees with strong team-cooperative consciousness, while cultivation of team-cooperative consciousness should be conducted in the training of daily abidance of rules and disciplines. Recognition and integration of team culture in a modern enterprise has respect to the play of employees' intelligence and the obedience of their employment, and to quality guarantee of their products and their rise and fall. Therefore, management of detail education in school rules and regulations is one of important foundations in the future career of students.

2.3 Details in work of a main teacher

Huo Maozheng, teacher of special grade in No. 2 Experimental Primary School in Beijing, her education of details is an exemplification. Even the most naughty student will get rid of his ill habit and make continual progress in her class. The root cause is her education and management of details. She is used to looking for "detailed" merits of students with a "magnifier", and gives them confidence. Psychology of educational practice indicates that, if we put a luciferous eye on

a certain point, then it might glisten; when we intensify this point, then it might get prominent; if we intensify this point with rationality, strength and correctitude, then it might release brightness and strengthen and enlarge its “capacity and volume”. Compared with course-instructors, it is more convenient for a main teacher to give education of details, and much easier to become an intimate friend of students. This can’t be realized without details, and as a main teacher, the author has much experience in the practical teaching.

2.4 Details in words of teachers

Words of a teacher are of great importance to students. For instance, if a teacher says to his students, “I am glad to have this chance, because I can discuss problems together with you with intelligence and active mind, which is an enjoyment for me.” This simple sentence will lay a steady and harmonious psychological foundation for the whole teaching, and, meanwhile, establishes a positive basis for harmonious relations between teachers and students. However, some teachers might say, “At first, I was supposed not to give you this class, yet the school master presses on me because your class is really poor”, which will disappoint the students. In practice, different expressions get totally different teaching results. Furthermore, some teachers say to their students, “It’s enough what you have learned, and more knowledge is too much for you”. In this case, students might hold the view that the teacher look down upon them, and they feel their self-esteem deeply hurt, then they will get pessimistic, rebellious or draw rein. If the teacher says, “as long as you try your best, and seize an appropriate approach, you can learn well. No one is born wise and learned”, which will fulfill students with hope. Then they will exert themselves, or at least mitigate their disappointment.

2.5 Details in teaching

In each aspect of teaching, teachers should pay attention to education of details. For example, in review of the previous language points, they should pay special attention to the selection of students’ concern, and lead their concern as a pointcut into the language points. If their concern is exactly an important language point, then the effect might be better. When introducing new courses, teachers should focus on students’ attention, and what they are in need of. Taking consideration of these details will get a good teaching effect. In the aspect of summary and conclusion, teachers should pay attention to the play of students’ ability of thinking, which will not only bring into play their initiative role, but will display what they gain. Besides, this can inspire their thinking imagination, creativity and expression ability, build up their language arts, and enrich their language skills.

In the book entitled <<The Essential 55>>, when all the students read aloud together, they should be totally preoccupied. “Each time I read for the children, I am always filled with affection, energy and expressive force, and I am completely devoted.” Mr. Clark also changed his voices according to different roles, and played actions of all kinds. “This approach fulfills the whole reading with pleasure, and meanwhile, informs students of the fascination of reading.” “If I discover a student doesn’t gaze at the page we are reading, or when I ask a student to continue to read and he doesn’t have the least idea of where we have read, then the name of the student will be written down on the blackboard.” This detail will enable students to develop the habit of concentrating and to improve their self-control ability. Habit is the second nature. Habit is also a strong power and it decides whether one succeeds or fails.

2.6 Details in homework

In the teaching with the entire class as an entity, knowledge of students, their thinking dimension, psychological demand orientation and their diligence are not at the same level. Therefore, when assigning a task (written task, discussion or debate), this actual detail should be taken into consideration, and requirements of different levels should be satisfied. This is not only education in accordance with individual differences, but can enable students with different levels to get improved in the same space and at the same time. Tasks with different or the same difficulty levels should get a variety of answers, which can not only extend scope of students’ thinking, but can exercise the depth of their thinking, enabling them to ponder over any problem and the life in a more capacious thinking space. Students can exchange what’s in their mind in a more relaxed and humanistic interaction; they can release and lessen their feelings without pressure and apprehensions in such an atmosphere in which “everybody can get what he needs” and which “is full of humanistic solicitude”; they can burnish a healthy inwardness on this platform of “warm competition”; they can find out their own ‘seat’ here and appreciate the essence of thirst for learning; one can walk towards the palace of knowledge without difficulty from here; respect and demand on learning is produced here. This is not only growth by learning, or learning and improving in growth for students, but more of learning happiness in the life.

3. Conclusion

What the current China is short of are not courageous strategists, but excelsior managers; not all sorts of managerial rules, but executors who carry out these rules. Emphasis on details and implementation of education and management of details is a sensible choice in face of prevalent flippancy and vehement competition. Detail is an important aspect which is related to teaching quality and training of qualified talents. Focus on details and perfection of details tend to reveal responsibility of a school towards education. Edification and cultivation of students’ humanistic spirit rests with each detail of teaching, with teachers’ attitude and approaches, and with daily life of students unconsciously.

We have always been advocating humane quality-oriented education, but what's the most important is to give the due respect to students in details. According to their different ages and different psychological characteristics, teachers should teach according to individual differences. Where it is ignored, teachers should inspire the learner autonomy and enthusiasm, and implement interactive communication in the process of teaching and learning, but not merely regarding students as machines that passively accept any knowledge. "Education is rooted in love", while love is usually revealed in subtlety.

Detail is everywhere in our life, and we should try to discover details with our attention, deal with details with a developmental thought, pay emphasis on details, and seek for greater perfection so as to improve the quality of our teaching. "Detail is a creation, a force, which indicates self-cultivation, arts and which conceals opportunities." Let's pay special attention to education of details, just as a proverb in the Occident, "God Lives in Details", and the saying in China "Great undertakings, must make on detailed", and "Love begets love". Education --- a project of vital and lasting importance. Detail of education is "a big show (detail)", and "an important show (detail)" from the perspective of the progress and development of a country, a nation and a society", without which nobody can go.

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Necessity of Grammar Teaching

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Abstract

Grammar is often misunderstood in the language teaching field. The misconception lies in the view that grammar is a collection of arbitrary rules about static structures in the language. Further questionable claims are that the structures do not have to be thought, learners will acquire them on their own, or if the structures are taught, the lessons that ensue will be boring. This thesis on comparative approach tries to make a brief analysis of necessity of grammar teaching before it gives a relatively objective description of its function and significance in language teaching. It argues that, grammar teaching is necessary in language teaching.

Keywords: Grammar, English language teaching, Necessity

1. Attitudes to grammar

Many language authorities have different attitudes to grammar. In 1622 a certain Joseph webbe, schoolmaster and textbook writer, 'No man can run speedily to the mark of language that is shackled---with grammar precepts.' He maintained that grammar could be picked up though simply communicating: 'By exercise of reading, writing, and speaking---all things belonging to Grammar, will without labour, and whether we will or not, thrust themselves upon us.'

Webbe was one of the earliest educators to question the value of grammar instruction, but certainly not the last. In fact, no other issue has so preoccupied theorists and practitioners as the grammar debate, and the history of language teaching is essentially the history of the claims and counterclaims for and against the teaching of grammar. Differences in attitude to the role of grammar underpin differences between methods, between teachers, and learners. It is a subject that everyone involved in language teaching and learning has an opinion. And these opinions are often strongly and uncompromisingly stated. Here, for example, are a number of recent statements on the subject:

'There is no doubt that a knowledge-implicit or explicit---of grammatical rules is essential for the mastery of a language.'

[Penny Ur, a teacher trainer, and author of *Grammar Practice Activities*]

'Grammar is not the basis of language acquisition, and the balance of linguistic research clearly invalidates any view to the contrary.'

[Michael Lewis, a popular writer on teaching methods]

But I will take an entrenched position to make up my own minds: grammar teaching is essential in language teaching field. Grammar rules like the molds of the parts of a machine, without them, workers can only stand by the iron---water. Similarly, English language learners who have been lacking in grammar rules instruction can neither use English language accurately to make a complete sentence, nor speak English language fluently on accuracy.

2. Necessity of grammar teaching

It is exact that putting grammar in the foreground in second language teaching, because language knowledge of grammar and vocabulary is the base of English language. Grammatical competence is one of communicative competence. Communicative competence involves knowing how to use the grammar and vocabulary of the language to achieve communicative goals, and knowing how to do this in a socially appropriate way. Communicative goals are the goals of learners' studying English language. So grammar teaching is necessary to achieve the goals.

2.1 Grammar teaching is essential

According to the dictionary definition, there are at least two senses of the word grammar, (1)[U] study or science of, rules for, the combination words into sentences(syntax),and the forms of words (morphology). (2) [C] book containing the rules of grammar of a language. Language teaching is generally concerned with the former---uncountable---meaning of grammar. That is, grammar as a system of rules (or patters) which describe the formation of a language's sentences.

Grammar is not simple a thing. It is something that---in certain condition ---happens. To use an analogy: an omelette is the product of a (relatively simple but skillful) process involving the beating and frying of eggs. The process and the product are clearly two quite different things, and we could call one *making an omelette* and the other *an omelette*. Similarly, the grammar is the result of a process. We need to maintain a distinction between the product and its process of creation.

To take the analogy one step further: to someone who had never seen an omelette being made, it might be difficult to infer the process from the product. They would be seriously mistaken if they thought that making an omelette was simply a case of taking a lot of little bits of omelette and sticking them together. So was the grammar. What you see and how it came to be that way are two quite different things. It would be naïve to suppose that the fluid production of a sentence like *If I'd known you were coming, I would have baked a cake* results from the cumulative sticking together of individual words or even of individual grammatical structures. The same goes for the way we learn languages. Inferring the process of language acquisition from its product (grammar) is like inferring the process of "omeletting" from the omelette. Or, for that matter, inferring the chicken from the egg.

The language teaching equivalent is: I, the teacher, will cut the language into lots of little pieces---called grammar---so that you, the learner, will be able to reassemble them in real communication. Thus: conjunction *if* +subject pronoun +past perfect (consisting of past auxiliary *had* +past participle), followed by nominal *that*---clause, consisting of---etc, etc. what happens, of course, is that learners take these little bits of grammar description and try to stick them together, and then wonder why they can produce sentences like *If I'd known you were coming, I would have baked a cake*. It ignores the fact that the product and the process are two quite different things. So grammar (the product) ought to be taught. During the teaching process, the learner will take care of the process and understand why they can produce sentences like *If I'd known you were coming, I would have baked a cake*.

2.2 Grammar is not acquired naturally; it needs be taught

It is true that some learners acquire second language grammar naturally without instruction. For example, there are immigrants to the United States who acquire proficiency in English on their own. This is especially true of young immigrants. However, this is not true for all learners, particularly the learners in China. We have no English surroundings. It is very difficult that studying English on our own. Though highly motivated learners with a particular aptitude for languages may achieve a degree of proficiency without any formal instruction, but whose English is far from accurate. An important question is that it is possible with grammar instruction to help learners who cannot achieve accuracy in English on their own. And more often 'pick it up as you go along' learners reach a language plateau beyond which it is very difficult to progress. To put it technically, their linguistic competence fossilizes. Research suggests that learners who receive no instruction seem to be at risk of fossilizing sooner than those who do receive instruction.

It is also true that learning particular grammatical distinctions requires a great deal of time even for the most skilled learners but another important question is that it is possible to accelerate students natural learning of grammar through instruction. As of the recent popular Communicative Approach, it has false ideas that thinking the grammar is acquired virtually unconsciously, and studying the rules of grammar is simply a waste of valuable time. But research finds that subjects who received grammar instruction progressed to the next stage after a two-week period, a passage normally taking several months in untutored development. Though the number of subjects studied was small, the finding provides evidence of the efficacy of grammar teaching over leaving acquisition to run its natural course.

Grammar instruction can help learners acquire grammar they would not have learned on their own, some research points to the value of grammar instruction to improve learners' accuracy.

2.3 Grammar is a collection of meaningful forms

Many people associate the term grammar with verb paradigms and rules about linguistic form. They think grammar is unidimensional and meaningless. However, grammar is not like this. It embodies the three dimensions of form, meaning and use. As can be seen in the pie chart in Figure 1, these dimensions are interdependent; a change in one results in change in another. Despite their interdependence, however, they each offer a unique perspective on grammar. For example, the passive voice in English clearly has its form. It is composed of a form of the *be* verb and the past participle. Sometimes it has the preposition *by* before the agent in the predicate: (1) *The bank was robbed by the same gang that hijacked the armored car*. That the passive can occur only when the main verb is transitive is also part of its formal description.

The passive voice has a grammatical meaning. It is a focus construction, which confers a different status on the receiver or recipient of an action than it would receive in the active voice. For example, the bank in sentence (1) is differently focused than it would be in the active sentence: (2) *The same gang robbed the bank*.

When or why do we use the passive voice? In such cases when the receiver of the action is the theme or topic, when we do not know who the agent is, when we wish to conceal the identity of the agent, when the agent is obvious and easily derivable from the context, when the agent is redundant, and so on.

To use the English passive voice accurately, meaningfully, and appropriately, the second language students must master all three dimensions. This is true of any grammatical structure.

2.4 Grammar is not a collection of arbitrary rules

Some people think that grammar is a collection of arbitrary rules. In fact it is not. While there is some synchronic arbitrariness to grammar, not all of what is deemed arbitrary is so. If one adopts a broad enough perspective, it is possible to see why things are the way they are. For example, the following sentences: (3) *There is the book missing.* (4) *There is a book missing.*

Grammar books will say that sentence (3) is ungrammatical because sentences with existential *there* almost always take an indefinite noun phrase in the predicate. Why? The reason is not arbitrary. *There* used to introduce new information, and the preferred position for new information is toward the end of a sentence. A noun phrase that contains new information is marked by the use of the indefinite article, *a* or *an*, if it is a singular common noun, as in sentence (4).

3. The cases for grammar

There are two kinds of attitudes to grammar: one, for grammar, the other, against grammar. My attitude is for grammar, it ought to be put in the foreground in second language teaching.

3.1 Grammar is the sentence—making machine

Part of process of language learning must be what is sometimes called item-learning -----that is the memorization of individual items such as words and phrases. However, there is a limit to the number of items a person can both retain and retrieve. Even travelers' phrase books have limited usefulness-good for a three-week holiday, but there comes a point where we need to learn some patterns or rules to enable us to generate new sentence. That is to say, it is grammar. Grammar, after all, is a description of the regularities in a language, and knowledge of these regularities provides the learner with the means to generate a potentially enormous number of original sentences. The number of possible new sentences is constrained only by the vocabulary at the learner's command and his or her creativity. Grammar is a kind of 'sentence-making machine'. It follows that the teaching of grammar offers the learner the means for potentially limitless linguistic creativity.

3.2 Grammar is the advance—organiser

The linguist Stephen Krashen makes the distinction between learning and acquisition. Learning, according to Krashen, results from formal instruction, typically in grammar, and is of limited use for real communication. Acquisition is a natural process: it is the process by which the first language is picked up, and by which other languages are picked up solely through contact with speakers of those language. Success in a second language is due to acquisition, not learning, moreover, he claims that learnt knowledge can never become acquired knowledge. However, the researcher Richard Schmidt kept a diary of his experience learning Portuguese in Brazil. Initially he had enrolled in formal language classes where there was a heavy emphasis on grammar. When he left these classes to travel in Brazil his Portuguese made good progress, a fact he attributed to the use he was making of it. However, as he interacted naturally with Brazilians he was aware that certain features of the talk---certain grammatical items---seemed to catch his attention. He noticed them. It so happened that these items were also items he had studied in his classes. What's more, being more noticeable, these items seemed to stick. Schmidt concluded that noticing is a prerequisite for acquisition. The grammar teaching he had received previously, while insufficient in itself to turn him into a fluent Portuguese speaker, had primed him to notice what might have gone unnoticed, and hence had indirectly influenced his learning. It had acted as a kind of advance organizer for his later acquisition of the language. I think this is also with learning English language.

3.3 Grammar teaching is the rule-of-law

Grammar is a system of learnable rules, it lends itself to a view of teaching and learning known as transmission. A transmission view sees the role of education as the transfer of a body of knowledge from those that have the knowledge to those that do not. Such a view is typically associated with the kind of institutionalized learning where rules, order, and discipline are highly valued. Many learners come to language classes with fairly fixed expectations to what they will do there. These expectations may derive from previous classroom experience of language learning. They may also derive from experience of classroom in general where (traditionally, at least) teaching is of the transmission kind. On other hand, their expectations that teaching will be grammar-focused may stem from frustration experienced at trying to pick up a second language in a nonclassroom setting, such as through self-study, or through immersion in the target language culture. Such students may have enrolled in language classes specifically to ensure that the learning experience is made more efficient and systematic.

4. Conclusion

The value of grammar teaching is important in English language teaching field. Grammar is the base of English language. It is not acquired naturally, but learning, it needs be instructed. Grammar operates at the sentence level and governs the syntax or word orders that are permissible in the language. It also works at the subsentence level to govern

such things as number and person agreement between subject and verb in a sentence. To grammar learning, some students may have a more analytical learning style than others, but if one hope to use English language accurately and fluently, it is necessary for him to receive grammar rules instruction. Grammar is not different from anything else, it is likely that students will learn at different rates.

In a short word, grammar teaching is necessary in English language teaching.

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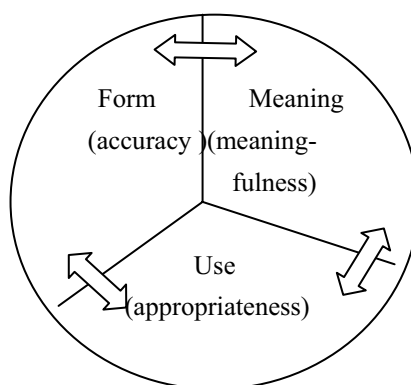


Figure 1



Routinizing Lexical Phrases on Spoken Discourse

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Abstract

This paper examines the effectiveness of routinizing lexical phrases to a group of second language learners. A group of proficiency class students were drilled or routinized with semi-fixed and fixed phrases which are commonly used in problem-solving group discussion. Basic frequency counts and interview were carried out to see improvement in learners' communicative ability and how the lexical phrases benefit them. The learners can use a number of phrases appropriately in several group discussions. Thus, the practice of routinizing lexical phrases which is based on the lexical approach can be applied in second language learning.

Keywords: Routinizing, Lexical phrases, Communicative ability, Group discussion

1. Introduction

In today's globalized world, everyone is surely aware of the importance in mastering the English Language. English is officially recognized as the international language for business and corporate communication and for university students, in particular, realize that they need to write and speak well in English in order to secure a good job after they graduate. This is especially true in Malaysia where English is the second language which is used widely in many working sectors especially in business correspondence with international companies.

However, after so many years spent in schools learning the language, the performance of Malaysian students, especially the Malays in the rural area, is still poor. Although some are competent, many others do not achieve acceptable level of competence even after they graduate from the university. The primary concern is the spoken language of the learners because for many occasions, they need to communicate well in English. Sadly, the Malaysians students fail to do this due to poor language proficiency.

So how do we overcome the problem? Perhaps one of the ways to improve the spoken language among Malaysian students is by adopting a new approach in language teaching and learning that is the lexical approach.

The lexical approach is the new kid on the block in language teaching and learning. This approach is flexible that it can be applied in either first or second language classroom. It makes use of prefabricated sequences or lexical phrases as primary units in language teaching. The lexical phrases are either complete or partially pre-assembled units which are treated as wholes. If the phrases are fixed in memory, they will be ready-made chunks which can be easily retrieved for fast language production. Thus, learners can easily use the phrases especially when they have inadequate linguistic resources to express themselves (Porto, 1998). Moreover, since the lexical phrases are stored as wholes and readily accessible, learners do not need to focus on grammar when using the phrases and they can shift their attention to features such as appropriateness, coherence and relevance and maintain the flow of conversation (Porto, 1998). Lavelle (2000) believes that the incorporation of seeing, hearing, writing, speaking and practising lexical in a language can increase learners' fluency and improve sophistication in English.

According to Foster (2001), an advocate of the lexical approach, students should be exposed to drilling or what she termed as 'routinizing' of lexical approach. Foster (2001) suggests the idea of routinizing the lexical phrases to language learners instead of applying the usual traditional way of teaching grammatical rules and regulations. The routinizing practice may help the learners to understand the use of the language outside classroom and prevent confining students' knowledge on only certain elements in the language. It is commonly known that the teaching of English language has been narrowed down to the use of idealized patterns in the ESL classroom which are rarely found and used outside the classroom. Students are often given examples of sentences that simply adhere to the formal rules such as "She goes to

school every day” and “ “He did not come to class yesterday” but not something like “Let’s take time for coffee” and “This is the moment of truth, time to start talking hard facts”. This is actually an unfair treatment of teaching language especially to the non-native speakers of English. In addition, Nattinger and DeCarrico (1992) believe that students should be routinized in using orchestrated language chunks or lexical phrases of varying length as routines and ritualizations are pervasive agents in language behaviour. Although by routinizing lexical phrases will make learners memorize only the intended phrases, the importance of grammar is not neglected (Nattinger and DeCarrico, 1992)

Kavaliauskiene and Januleviciene (2001) discuss the steps that they take when using lexical phrases in teaching ESP subject. First, they make students aware of the existence of Lexical phrases by developing learners’ strategies for dealing with unknown lexical items. Then they help the students to identify lexical phrases by making students analyze a number of authentic passages, each of which contain the target lexical items. Moreover, they suggest a follow-up to ensure acquisition of high frequency ESP lexical phrases, among others; first checking comprehension, that is through the use of fill in the blanks exercise; second providing more practice such as assigning students’ projects and group tasks, third, revision and consolidation whereby students are given various class activities (like matching pairs, role-play, pictorial schemata, oral presentation and writing summaries). The activities are carried out through lapses of time to ensure the learners permanently remember the phrases (Kavaliauskiene and Januleviciene, 2001). According to Foster (2001), routinizing lexical phrases in the classroom is deemed useful to enhance fluency. Thus, this throw some light on the writer to present this paper which will examine the effects of routinizing lexical phrases on a spoken discourse (associated with communicative ability in group discussion) among second language learners in a Malaysian tertiary institution.

The main objectives of this study are:

- (1) To analyze whether routinizing lexical phrases helps in improving communicative ability in group discussion.
- (2) To examine whether the number of lexical phrases of routinized lexical phrases increases in group discussion.
- (3) To investigate students’ perception in using the routinized lexical phrases in group discussion.

2. Methodology

This is a non-experimental and investigative study on UiTM students’ use of lexical phrases in group discussion.

The participants consisted of 21 UiTM Perlis campus undergraduates who were pursuing a diploma in science. The students were in their second semester and were taking Preparatory Course for MUET which was a second semester English proficiency course at the university. The participants on the whole could be categorized as having intermediate English proficiency.

As part of the proficiency course requirement, the students had to undergo a speaking test which consists of individual presentation (task A) and group discussion (task B). The two tasks were done consecutively. The lexical phrases used in group discussion such as “I think you’re right about that”, “I agree up to a point, but...”, “Could you be more specific” and “May I interrupt?” were routinized on the students. First, the students were divided into six groups. Then they were drilled with phrases used for asking for and giving information, expressing agreement/disagreement, asking/giving clarification and others in a duration of three weeks. The students were introduced and explained about the use of the phrases and repeatedly reminded to use the phrases in the group discussion. The students in their group of three or four must discuss on a topic for ten minutes. All the group discussion practices were similar to the actual test especially the third practice where they were given only two minutes to prepare for their response and 10 minutes for the discussion. In their group, they had to discuss three or four options/suggestions and find one best solution to overcome a problem (problem-solving task). In the duration of the three weeks time the students practiced their group discussion three times before their actual speaking test. The researcher recorded the number of lexical phrases used by the students, assessed the students’ communicative ability and handled an interview.

3. Results and discussion

To find out whether routinizing lexical phrases helps to improve the communicative ability of the students, the researcher observed their performance and compared the average marks of the groups’ communicative ability. The communicative ability of each individual was assessed based on UiTM group discussion speaking score guide which ranged from “0.5-does not show ability to communicate” until “3.0 shows ability to communicate very competently”. It was found out that the average communicative ability marks for the group which used many phrases was more than the groups which used less phrases. The highest average mark was 2.5 (=shows ability to communicate competently) (table 1)

Moreover, it is interesting to note that the most frequent use of lexical phrases during actual test were those on agreeing (table 2). This is perhaps due to the fact that the students wanted to be polite and showed respect of others’ point of view.

To find out whether the number of the routinized lexical phrases increases in the discussion, the frequencies were

recorded (table 3). The least number of lexical phrases used was during the 1st round. This practice was done when the students were just introduced to the phrases. The number increased to 48 when they were drilled with the phrases and reminded to agree and disagree in the discussion. However, the number dropped to 40 in the 3rd round. At this stage, students had to perform the discussion exactly like the actual test. They could not do well in the practice. They were panicked, had no ideas and could not communicate well. It seemed that this affected the number of lexical phrases used in the discussion. Surprisingly, the number of routinized phrases increased in the actual test that is 51. It was observed that the students could support well their arguments with relevant supporting details. They did not only focus on the content ideas but also were careful in uttering the phrases. Most of the students could perform and communicate well in the discussion, consequently used a lot of the routinized lexical phrases. It can be concluded that with adequate practice and enough ideas, students will definitely use the routinized lexical phrases.

To investigate the students' perception in using the routinized lexical phrases in group discussions, an interview was carried out on two of the groups. They were asked these questions; "Do the phrases help you in the group discussion?", "How does it help you?". These are the students' responses:

- Easy to interrupt
- Easy to give opinion
- Become more polite
- Give more confidence
- Feels comfortable
- Get more ideas
- Get the momentum to start arguing

Generally, students feel good when they could use the phrases especially among a few who were weak in the language. This is because they could be able to contribute in the discussion with the help of the lexical phrases. The phrases boosted their confidence and made them easy to give opinion, at the same time, prevented them from being hostile to each other. When using the phrases, they could take turn to speak and thus, maintained the flow of the discussion. They were also confident to speak because since many of the phrases were fixed ones, grammatical mistake could be avoided.

4. Conclusion

The findings of the study suggest that routinizing lexical phrases on students' spoken discourse can be an effective way to improve students' communicative ability. Students who used appropriate phrases can communicate well in group discussions. If routinizing lexical phrases is done in lapses of time, students can memorize the chunks and produce them in their language. In addition, exposing and routinizing authentic phrases in group discussions will benefit second language learners not only during their proficiency courses, but also in any future problem-solving task situation.

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Table 1. The number of lexical phrases and average marks for communicative ability

Groups	Lexical phrases	Communicative ability
Wan Adi's group	9	2.5
Harinnic's group	12	2.5
Athirah's group	9	2.37
Afiza's group	6	2.25
Fariha's group	10	2.3
Zulfadhli's group	5	2

Table 2. The frequency for different types of lexical phrases

Phrases	Frequency
To agree	21
To partly agree	9
To disagree directly	2
To disagree indirectly	5
To be neutral/not sure	0
To ask for clarification	6
To Give clarification	0
Others	8

Table 3. Frequencies of lexical phrases in group discussions

Group discussions	Frequency
During 1 st round	29
During 2 nd round	48
During 3 rd round	40
During actual test	51



Striving for Change: Introducing an Interdisciplinary Approach into the Urban Primary Schools of China

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Abstract

In the traditional Chinese curriculum, subjects are learned separately since students start their formal schooling. Students usually neglect the connection among different subjects, which, to some extent, restricts their way of thinking. In order to change the status quo, the focus of this paper is to explore the feasibility of introducing an interdisciplinary approach into the current curriculum of urban primary schools in China. Also, this paper predicts the problems when the interdisciplinary approach is implemented, and provides some suggestions and solutions for school leaders and teachers to adopt.

Keywords: Interdisciplinary approach, Curriculum reform, Implementation, Value

1. The problems of the conventional teaching & learning style in China

For decades long, the traditional Chinese curriculum organization has been dominated by the single subject design for decades. Sowell (1996) claims, "The obvious advantage (of this design) is that students studying a single subject learn the content of that subject and the methodologies that authorities in that subject develop and use to organize knowledge" (p. 55). However, even with the increasing specialization in separate subject areas, students often fail to see the connection among them, and store only fragmental knowledge in their heads. As A. Yang (1991) comments, "The subjects included in the curriculum plans are usually selected, organized, taught and evaluated separately without considering interrelations and interactiveness between one another" (p. 23).

Another major trait of the current Chinese curriculum is textbook-based teaching and learning. In China, the curriculum tends to focus on the selective and narrow knowledge of the textbooks. Mak (1998) has observed that textbook knowledge is the focus of Chinese classroom activities (p. 252-254). Many Chinese students simply have no choice about what to learn. Consequently, they are easy to lose their interests in the whole learning process.

2. The on-going curriculum reform and the feasibility of the interdisciplinary approach in the primary schools of China

Having noticing the existing problems in the current curriculum, the State Council is set to complete the curriculum reform in elementary and middle schools nationwide by 2004. 49 new courses in 20 subjects will be implemented in 27 provinces in the coming fall semester. The on-going curriculum reform puts a stress on quality education, which aims at fostering students' innovative capabilities and improving their practical competence. Also, the new curriculum intends to strengthen the links between different subjects as well as the connection between course content and students' real life (<http://www.edu.cn/20010831/200906.shtml>).

Another noticeable change in the Chinese curriculum reform is the great reduction of the students' workload. 39 textbooks have been banned in the primary and middle schools of China (<http://english.peopledaily.com.cn/english/200003/09/eng20000309L101.html>). With fewer assignments, students will have more time to engage in the interdisciplinary learning, which largely depends on students' active involvement and the development of their own problem-solving skills.

There are additional two reasons supporting the introduction of interdisciplinary curriculum in primary schools in China. First, students' active attitudes toward learning should be cultivated at the beginning of their formal schooling. Otherwise, they probably become passive knowledge recipients. Some life-long learning skills such as problem-solving and self-thinking skills should be developed as early as possible. Or such important learning capacities will be lost in the traditional teaching and learning style. Second, students in the Chinese primary schools don't have to face so much pressure and fierce competition as students in the secondary schools, where the time and efforts of both teachers and students are devoted to the preparation of National College Entrance Examination (NCEE). There, the adoption of a

new curriculum, which has not shown any evidence to improve students' scores in NCEE, will be hard to obtain approvals from the school leaders, and will certainly encounter great resistance from the secondary school staff members, parents as well as students themselves.

3. The rationale and distinctive features of interdisciplinary theory

Subject matter is widely regarded as the most popular basis for curriculum organization. The interdisciplinary instruction (also known as fused subjects) falls into the category of subject matter designs. But unlike a multidisciplinary approach, or correlated subjects, the individual identities of the courses are lost in an interdisciplinary approach. Campbell and Harris (2001) define an interdisciplinary approach as "connected ways of learning and content from more than one discipline by organizing the curriculum around a central focus" (p. 6).

The famous educationist Howard Gardner's well-known theory of multiple intelligences serves as a strong argument for an interdisciplinary approach. Clearly, this theory urges educators and teachers to try to link the eight intelligences within a curriculum focused on understanding, which is a primary focus of interdisciplinary instruction. A fundamental characteristic of the interdisciplinary approach is to involve students in comprehensive instructional units of study. Wood (2001) defines three unique features for such units: (1). Each interdisciplinary unit focuses on a central theme; (2). Students explore the central theme by using skills and techniques --- ways of knowing --- from a variety of disciplines; (3). The interdisciplinary method places equal emphasis on the mastery of process and content (p. 2).

4. The possibilities and concerns on the implementation of an interdisciplinary approach

To implement an interdisciplinary curriculum in the Chinese primary schools will definitely bring about considerable changes into the traditional curriculum mechanics, which has been compartmentalized into separate subjects or disciplines for a rather long time. Sowell (1996) reminds us that "any change to a different purpose would very likely require massive *professional development* efforts and considerable *communication* among teachers, students, administrators, and community members" (p. 81). "Three keys to changing the curriculum are time, flexibility, and resources" (Spies, 1997, p. 43).

4.1 Needs for Skills

First, the interdisciplinary teaching requires teachers to have an extensive foundation of general knowledge so that they can guide students through interdisciplinary studies. Second, teachers need to have a thorough background in the area of child development and be able to apply their cognitive and affective understanding in their curriculum planning. An awareness of students' individual learning styles such as their thinking and reasoning characteristics can help teachers implement their instruction more effectively for students at different developmental levels. Third, interdisciplinary instruction demands that teachers develop unit and lesson planning skills and classroom management skills. To be skilful planners, they must learn how to create lessons and units that interest and involve their students and how to provide the guidance that students need to pursue their inquiries. Equally important, teachers must learn to manage several different activities simultaneously for a great number of activities usually occur during the implementation of an interdisciplinary unit. Fourth, the interdisciplinary method calls for collaboration among teachers. No matter which option of school collaboration (direct collaboration or indirect collaboration) teachers choose to adopt, classroom teachers need to work cooperatively with professionals with differing informational backgrounds such as special area teachers in art, music, physical education or other experts out of the school environment (Bauwents & Hourcade 1995, p. 29-39). Thus, some necessary collaborative teaching skills become a must for interdisciplinary teachers to facilitate the whole interdisciplinary process, which will predicatively be a big challenge for Chinese primary school teachers who have long been accustomed to working separately in their own subject areas.

The interdisciplinary approach will be a brand-new curriculum approach for most Chinese primary school teachers compared to the traditional single-subject approach. Mastering the above-mentioned professional knowledge and skills deserves time and efforts. Otherwise, the lack of professional knowledge in this field will add great difficulty to implement the interdisciplinary instruction. In reality, there are two possible ways for the urban primary school teachers to gain the professional knowledge and skills for it. On the one hand, they can conduct a library survey in the school library to find books concerning the curriculum reform and the interdisciplinary teaching methods to read. They can also go to bookstores, especially the foreign language bookstores in their city to look for such books. On the other hand, they can actively engage in the pre-service and in-service trainings, which most Chinese primary schools provide for their teachers' professional development, to listen to lectures given by the education theorists in some Normal Universities.

4.2 Needs for Planning Time

Interdisciplinary units involve the teachers of different subjects in examining a topic, issue, or problem from a variety of perspectives. They need a great deal of time to plan the interdisciplinary thematic units. Campbell and Harris asserts (2001), "Administrators and teachers must face the reality that thematic curriculum development is time consuming if they want to reap the benefits of integration" (p. 29). They estimates that, "the time required for a curriculum planning

team to thoroughly research and develop a theme study is on the average 150 hours, with approximately 20 hours spent in team meetings and around 30 to 40 hours spent by each team member in independent work” (p. 28).

The best preparation for a new school year is summer time. Usually, the Chinese primary school teachers use the summer time to write their curriculum for the new school year independently, and submit it to the school leaders for review nearly one month before the beginning of the new school year. Now in order to effectively implement the interdisciplinary approach, team teachers need to devote their summer time to the intensive interdisciplinary planning. During the summer, interdisciplinary teams are expected to get to know each other, agree on common expectations for students, agree on common expectations for team members and identify individual roles for team members, check class lists, make introductory phone calls to parents and students for preliminary advocacy, decide what will happen the first week to set a positive tone, begin a team calendar of homework assignments and tests, and decide where, how long, and how often to meet during the coming semester. (Spies, 1997, p.43-46). Then, during the new semester, team teachers should plan regular team meetings to share what they teach from week to week, and communicate the reactions of that particular group of children. Based on their genuine understanding of the children’s emerging interests and needs, interdisciplinary teachers take the responsibility of constantly refining their curriculum to meet their students’ expectations.

4.3 Needs for Support

To ensure eventual success in any change in the curriculum, administrative, material, and financial supports are of indispensable importance.

Traditionally, in Chinese primary schools, teachers of different subjects teach the same class of students at different grade levels. These teachers may teach the same group of children as short as one semester or as long as the whole six-year primary school period depending on the school administrative manipulation. Each class has a head teacher who is in charge of everything in their students’ learning and in their daily life. Except teaching a particular subject, the head teacher is responsible for collecting reflections from students and teachers of other subjects, and often acts as the agent to facilitate the communication between students and teachers as well as the communication between different subject teachers. However, such communication is intermittent and inconstant. Most often, when they run into real problems, students and other teachers approach the head teacher to report the trouble, and want to get possible solutions from the head teacher. Usually, it is at that moment that the head teacher begins to notice this problem and make an investigation of it. This kind of organizational structure has given rise to high inefficiency in solving problems in primary school students’ learning in China.

Evidently, the interdisciplinary approach can avoid such communication inefficiency to a large extent. Interdisciplinary units involve different subject teachers working together constantly. Interdisciplinary teachers must be guaranteed sufficient planning time and meeting time in the school schedule. That is to say, the implementation of an interdisciplinary curriculum means to break the traditional primary school organizational arrangements, which is far from easy in the bureaucratic educational system of China. To conduct a curriculum reform in a Chinese primary school, you must get the permissions from both the school administrators and the officials in the local Education Bureau who is in charge of these affairs. If the school administrators and the officials cannot envision ways that school and state objectives can be met through interdisciplinary curriculum, they will hesitate to support implementing teachers. Furthermore, since the application of “One-child” policy in the late 1970s, the only child becomes “the little emperor” or “princess” in a Chinese family. Parents pay much more attention to their children’s education and their academic achievement than usual to ensure their future success. For many parents, this approach to learning may seem like too much fun and vastly different from the way they were taught. But if they cannot see strong evidence that this new curriculum approach is capable of improving their children’s academic performances, they will resist allowing their children to experiment with the new curriculum. When dealing with administrators, local officials, and parents, communication is the key. Implementing teachers should make good preparations for various kinds of unexpected questions and initial resistance from them.

Another concern for interdisciplinary teachers is the availability of resources. Students deserve great literature and require multiple sources of information at an appropriate reading level in order to do research on thematic studies. Therefore, the interdisciplinary teacher should check the available resources before committing to a particular theme. Basically speaking, the school library or the city libraries should be able to provide rich published resources of theme-related materials and guidebooks for interdisciplinary teaching. The students and teachers should have an easy access to the Internet both in school and at home, which proves to be an effective tool in search of valuable information. Or students and teachers can engage in online chat to exchange ideas or post their opinions on a website established for thematic studies. The interdisciplinary teacher also needs convenient media support. Telecommunication equipment, such as videos, television, projectors, should be available for class presentations upon request.

Sufficient numbers of quality resources are essential for thematic lessons and activities. This turns out to be the major reason why I suggest introducing the interdisciplinary approach only in urban areas. There is a huge discrepancy in

human and educational resources between urban and rural areas in China. In the vast rural areas, most people live in poverty. Rural parents are too poor to send their children to school, which mainly leads to high school dropout rates in these areas. Schools in rural areas are usually poorly equipped. Some primary schools in rural areas consist of mud brick houses built years, decades, or even centuries ago. Let alone other advanced educational equipment and material resources. But in the urban areas of China, schools are often found over-equipped. Urban parents earn much higher salaries than their rural counterparts. Both the urban families and schools are capable of affording the needed resources for the implementation of an interdisciplinary curriculum if they have been convinced of the effectiveness of the new curriculum to the children's academic development.

5. Values of an interdisciplinary approach to primary school students

For any change in a curriculum, the first challenging question the planner must answer is: What are the possible benefits to our students? In my understanding, the implementation of an interdisciplinary approach is able to solve some knotty problems Chinese educators and teachers face in the traditional curriculum, and, ultimately, bring advantages to our students in the following aspects.

5.1 Cultivation of autonomous learning skills

Instead of being passive recipients, when exploring unit themes, students often use knowledge and skills in different discipline areas to make plans, test their ideas, and make choices about their learning. They will not wait to receive their teachers' decisions and arrangements. In this way, students become more confident in their academic skills such as creative thinking, problem solving, and decision making, and grow as autonomous, independent learners, which is the expected goal of our education.

5.2 Reduction of students' workload

Chinese students are often found overwhelmed by homework and assignments. Parents complain that their children have no time to play. At times, students find that what they have learned in a Chinese language class appears later as the content of the Chinese history textbook. In an interdisciplinary approach, in order to avoid unnecessary redundancy and repetition, the team teachers check the school-wide curriculum map, and communicate with each other before they write a workable interdisciplinary plan. Students will benefit from a coordinated calendar of homework and tests.

5.3 Formation of a less biased viewpoint

In the conventional textbook-based curriculum, Chinese students are forced to accept the opinion of a single text-book as it is the only resource they can rely on. An interdisciplinary approach exposes students to a greater variety of information resources, which offer them a more rounded, less biased viewpoint, especially in the social studies and science subjects.

5.4 Benefits to students with poor grades

In most cases, there is a kind of hierarchy in a Chinese primary school system. Students with higher scores in exams receive praise in the class whereas students who have poor grades are given criticism and discrimination. Often, it is the former category that gains much of the attention from their teachers while the latter ones remain unnoticed for they do not stand out from the crowd. However, when the team teachers plan an interdisciplinary curriculum, they usually make a research on the diverse learning styles of each student. Teachers shift their focus from the usual stress on the logical-mathematical and linguistic intelligences to the development of students' multiple intelligences. They encourage shared, multiple views of each student. In so doing, more students with talents of different areas will get noticed from their teachers. It will do good to the all-round development of each student.

6. Conclusions

To sum up, in this paper, I mainly deal with the necessity and possibility of introducing an interdisciplinary approach into the urban primary schools in China. Admittedly, any change at the beginning stage of its implementation will encounter a variety of resistance and, even, rejection. It takes time for people to see its benefits and accept it. To initiate an interdisciplinary curriculum in the Chinese primary schools, the first task is to persuade our teachers to believe in the magic of the new curriculum, thus being willing to invest their time and energy to make the trial to strive for inspiring changes in the new curriculum.

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Printer William Printing Inc.
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ISSN 1913-9020

