

# Students' Evaluation of Frame Factors and Teaching Process: Implications for Educational Leadership

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## Abstract

Students are seeking university education that may help them enter in the job markets and they are selecting universities which meet their own standards. The idea of economic self-sufficiency and commodification of higher education have also depicted students as fee paying customers and universities are switching from teacher-centered to student-centered approaches for attracting and retaining students. To explore the situation in local universities, the study investigated perceptions of students about frame factors and teaching process in terms of administrative frames, curriculum frames, teacher attributes, learning facilitation, and quality of feed-back as sub-scales. How students were viewing these factors; which factors were relatively stronger; which universities were performing better or otherwise; and what implications of these conditions educational leaders may face were the main questions answered in the study. A spectrum of 600 students taken 25 from each of the sample department of three public and two private universities of Lahore selected on 30% stratified random sampling technique constituted the sample. Data were collected through self-constructed survey scale which was found reliable at 0.9150 Cronbach's alpha. Principle Component Factor Analysis extracted five factors namely administrative frames, curriculum frames, teacher attributes, learning facilitation, and quality of feed-back. Mean scores and correlations were calculated for these sub-scales. One-Sample t-test, Independent samples t-test, and one-way ANOVA were employed for significance and variance analysis. The study concluded that students were not fully satisfied with the administrative frames, curriculum frames, teacher attributes, learning facilitation, and quality of feed-back available at sample universities. Teacher attributes were relatively stronger whereas quality of feed-back was at the lowest count. The situation in public universities was little better as compared with private sector universities. This situation reflects unsatisfactory performance of local universities in terms of

administrative frames, curriculum frames, teacher attributes, learning facilitation, and quality of feed-back. Rigorous initiatives on the part of educational leaders to improve upon the situation included in the major recommendations.

**Keywords:** Administrative frames, Curriculum frames, Teacher attributes, Learning facilitation, Quality of feed-back, and Educational leaders

## 1. Introduction

Education is a social process (Banks, 2010) and every society provides its individual with the tangible as well as intangible components of environment where the process of teaching and learning takes place. Describing these components as frame factors, “the frame factor theory describes the process of formulation, transformation and realization of knowledge within educational settings” (Lundvall & Meckbach, 2008:347) that takes place as a consequence thereof as shown in figure 1.

Insert Figure 1 here

These frame factors exert forces on teachers as well as learners who become able to evolve patterns of their resultant behavior (Bernstein, 2003). The author noted that teacher strategies about content, delivery protocol, assessment code, and interaction with students and students’ strategies about participation, acquisition, and realization all are governed by frame factors. Similarly, Imsen (1999), Lundgren (1999), Sohail and Daud (2006), and Lundvall and Meckbach (2008) also described frame factors as components of the teaching-learning environment that establish the structure of teaching process and serve as factors which are beyond the control of teachers who formulate their teaching strategies and patterns of interaction in line with the frames available to them. Frame factors and teaching process together set the level and type of students’ learning that reflect the knowledge, skills, and attitude the students do acquire (Imsen, 1999).

This sequence establishes a direct relationship between frame factors, teaching process, and students’ learning. It can be assumed then that the quality of students’ learning depends largely upon frame factors and teaching process and the current study investigated this impact.

## 2. Review of literature

Frame factors, that constitute the first element of frame factors, teaching process, and students’ learning triangle, are explicitly described by the frame factor theory of teaching for which the spadework was done by Dulhof (1969) whose student Ulf P. Lundgren (1972) completed the task. Dahllof (1969:60) noted that “frame factors have in common that they set a certain time and space limit for that part of the teaching process which takes place at school”. Whereas Lundgren (1973) described them as measures that state/organization takes for regulating time and space; manipulate them above the level of teachers and pupils; and express a power vested in the particular state/organization. Being outside the control of the teacher, the frames limit the teaching-learning process that is affected by political, economic, and social structures of society, which can be considered as frames (Nesbit, 2000). Different researchers provided different typologies of these frames. However, most important of all these frame factors is time (Broady & Lindblad, 1999) whereas others include space, class size, objectives defined by the syllabus, and dominant conceptions of course content, ability grouping, and the way knowledge is assessed and demonstrated (Linne, 1998; Gustafsson, 1998; and Broady & Lindblad, 1999) and all these frames affect teaching.

According to Lundgren (1999), teaching is not based merely on the discretion of the teacher. It is limited by the forces of organizational and curriculum frames. Organizational frames or measures provide the tangible components employed in the teaching process. Whereas the curriculum frames, besides providing the textual materials, establish the goals to be achieved through teaching. In this way, these frames delimit the teaching process and teachers perform accordingly. These frames also through light on the relationships established between the frame factors and the variables of the teaching process and learning outcomes as highlighted in the figure 2 below.

Insert Figure 2 here

This paradigm expresses a tradeoff between the independence and restriction a teacher may face in the classroom during the teaching process. It is neither full independence nor full restriction. The impact of frame factors on the teaching process is very clear that they just limit the possible variations in the process (Lundgren, 1972). Similarly, the author has explained that the paradigm also determines the sequential flow of factors involved and obviously, it is one-sided and the full description of this relationship between frame factors and teaching process could be viewed in the figure 3.

Insert Figure 3 here

The Frame Factor Theory explains another very important aspect of the classroom dynamics. The 'steering group' influences the relationship between the frame factors and the teaching process variables in line with the magnitude of time available. The paradigm of the relations existing between frame factors, steering group and teaching process variables could be viewed in the following figure 4.

Insert Figure 4 here

Teaching process involves activities carried out by teachers both inside as well as outside the classroom. These activities are divided into three phases namely pre-instruction, instruction and post-instruction (Imsen, 1999). In pre-instruction phase, the teacher plans about the content to be delivered, strategies to be adopted to deliver the content, physical facilities to be used, and technology to be incorporated. In the instruction phase, teacher sizes up the class and manages stimulus-response interaction patterns. For post-instruction phase, the teacher evaluates his/her performance in terms of type and level of learning acquired by students, provides feedback to the students, and reshape planning if needed. These phases actually address teacher attributes, learning facilitation and quality of feedback provided by the teacher (University of Sydney, 2001; Wong & Fitzsimmons, 2008). Whatever the nature of frame factors and teaching process is, students are always the direct affectees. Therefore, they are becoming the center of planning in higher education. Barr and Tagg (1995), Nasseh (1996f), Carrier, Collins, and Jones (2000) Gallie and Joubert (2004), Nagy (2006) Sohail and Daud (2006) reported a big shift in the focus from teacher-centered- the instruction paradigm, to student-centered or- the learning paradigm, in teaching and learning at university level. The assumption that most of the students possess qualities to deal with the situation, they are self-motivated to go through the units of study, and could initiate interaction with the academics (Wong & Fitzsimmons, 2008), have become the basis of this shift. James Cook University (2001) claimed that both students and staff equally share the responsibility for a good education to benefit from a collaborative learning environment with students as future professional colleagues. Levin (1993) also reported a paradigm shift in the concept of educational productivity where education is taken as something that students essentially do for themselves, supposedly, with the help of teacher. The author argued that students are the key factors in shaping learning outcomes. Doyle (2008) noted the decisions about making sense of the world, doing or not doing anything, come to class or not, the degree of seriousness to be shown and the level of interest to be taken, to pay attention in class or not, and to focus on grades or not, all as the mere discretion of the students. Students are purchasing education and selecting classes and their areas of specialization just like selecting commodities from a market (Lawrence & Sharma, 2002). The literature (Michael, Sower, & Motwani, 1997; Baldwin & James 2000; Gursoy & Umbreit, 2005; Henderson-King & Smith, 2006) declared them fee-paying customers, that is why institutions are giving value to their opinion and striving to attract and retain them (Franz, 1998). The value of students' opinion is important in the higher education field. The direct relationship between the faculty members' rewards and the number of students who opt to attend their classes and the concept of commodification of education legitimize students' evaluation of their teachers (Lawrence & Sharma, 2002). Because of this drive, innovative teachers have started reshaping their teaching philosophy as student-centered (Sahu, 2002). Henderson-King and Smith (2006) reported majority of students' population in higher education belonging to working class background and university degree is a road to job security and financial self-sufficiency for them. That is why, students' skills for being successful in the job market, is the point universities have to incorporate in their process and develop mechanism to provide all necessary information to help students for deciding their options (Dearing, 1997).

The current study was an effort to apply the frame factor theory of teaching in the university settings to explore students' evaluation of frame factors and teaching process in the universities in terms of administrative frames, curriculum frames, and teacher attributes, learning facilitation, and quality of feed-back as sub-scales; compare students' evaluation of frame factors and teaching process in terms of administrative frames, curriculum frames, and teacher attributes, learning facilitation, and quality of feed-back as sub-scales; compare students' evaluation of frame factors and teaching process on in terms of gender, degree program, discipline, university and sector as independent variables; and discuss implications of this evaluation for educational leaders.

### 3. Research methodology

At the outset, three public and two private universities were selected on 30% stratified random sampling technique. The 10 (i.e. 1/3) faculties of sample universities, and 24 (i.e. 1/3) departments of sample faculties were randomly selected. At the end, 25 students from each department (i.e. total 600 students) were taken in the sample. A review of Lundgren (1972), Lundgren (1999), Broady & Lindblad (1999), Imsen (1999), University of Sydney (2001), Sohail and Daud (2006), and Lundvall and Meckbach (2008) and Wong & Fitzsimmons,

(2008) provided the items of survey. A focus group of teachers at the Department of Business Education finalized the items for piloting process that resulted in the deletion of three items. The instrument based on 5-point Likert scale was found reliable at 0.9150 Cronbach's alpha. Principle Component Factor Analysis extracted five factors namely administrative frames (8 items), curriculum frames (7 items), teacher attributes (8 items), learning facilitation (6 items), and quality of feed-back (8 items). The responses were quantified as 5 for strongly agree; 4 for agree; 3 for partially agree; 2 for disagree; and 1 for strongly disagree regarding students' evaluation of frame factors and teaching process. The study assumed that higher the level of this agreement of students, the lesser would be the intensity of implications for educational leaders and vice versa. Mean scores and correlations were calculated for these sub-scales. One-Sample t-test, Independent samples t-test, and one-way ANOVA were employed for significance and variance analysis.

#### 4. Results

The respondents included 283 (47.2%) males and 317 (52.8%) females. These were from Sciences 160 (26.7%); Business 315 (52.5%); and Education 125 (20.8%) disciplines. Among these, 65 (10.8%) Graduates; 522 (87%) Masters; and 13 (2.2%) were PhD students. University contribution was like this: University of the Punjab 225(37.5%); Lahore College for Women University 150 (25%); Govt. College University 125 (20.8%); University of Central Punjab 50 (8.3%); and Superior 50 (8.3%). The public private split was 500 (83.3%) and 100 (16.7%) respectively. Principle component factor analysis extracted five sub-scales having their alpha values in acceptable range as given in table 1 below and appendix A:

Insert Table 1 here

The correlations between AF, CF, TA, LF and QF as factors and the whole scale are given in table 2.

Insert Table 2 here

The correlations between administrative frames, curriculum frames, teacher attributes, learning facilitation, and quality of feedback are weaker as compared to their correlations with the total scale and this situation further signifies these factors. Mean scores for the five factors that range from 3.540 to 3.210 as shown in table 3 are below 04, the agreement point at the rating scale.

Insert Table 3 here

Teacher attributes got the highest mean (3.540) whereas the quality of feedback (3.210) was at the lowest position. However, situation of curriculum frames was almost similar to quality of feedback and teacher attributes resemble learning facilitation. In gender category there was no significant difference in the opinion of males and females except in administrative frames where females were less satisfied as compared with male students. In degree program analysis master and PhD students were more satisfied with administrative frames as compared with graduate students. Master degree students were more satisfied with curriculum frames too as compared with graduate and PhD students. Graduate and master degree students have shown more satisfaction over teacher attributes and quality of feedback as compared with PhD students. There was no significant difference of opinion among the respondents over learning facilitation. In discipline category students from sciences were more satisfied over administrative and curriculum frames as compared with those from business and education and over learning facilitation and quality of feedback as compared with education. There was no significant difference of opinion among respondents from all disciplines over the teacher attributes. University analysis revealed that students from Lahore College for Women University (LCWU) were more satisfied against those from Punjab University (PU) and Superior University (SU) over administrative frames, curriculum frames, and teacher attributes; against those from University of Central Punjab (UCP) over teacher attributes; and against those from SU over learning facilitation. Students from Government College University (GCU) were more satisfied against those from PU, SU, and UCP over administrative frames, curriculum frames; against those from SU over teacher attributes and learning facilitation; and against those from PU over quality of feedback. Otherwise there was no significant difference of opinion among respondent over sub-scales in university category. Sector analysis showed that public sector was better than private sector in administrative frames, curriculum frames, teacher attributes, and learning facilitation. However, there was no significant difference of opinion among respondents over the quality of feedback in this category.

#### 5. Discussion

The very first objective of the current study was to explore students' evaluation of frame factors and teaching process in the universities. The findings of the study revealed that the state of affairs regarding administrative frames, curriculum frames, and teacher attributes, learning facilitation, and quality of feed-back was not good as the mean scores for all of them were below 04 which was the point of agreement at the rating sclae. This

tendency may reflect the sub standard of frame factors and teaching process in universities at the one hand and dissatisfaction of the students on the other. These findings are consistent with Lundgren (1999); Lawrence and Sharma (2002); Sahu (2002); Gursoy and Umbreit (2005); Khan (2005); Nagy (2006); Sohail and Daud (2006); Wong and Fitzsimmons (2008); Ali (2008) and Doyle (2008). The second objective of the study was to compare students' evaluation of frame factors and teaching process in terms of administrative frames, curriculum frames, and teacher attributes, learning facilitation, and quality of feedback. The findings depicted that in the unhealthy state of affairs, the case of teacher attributes (3.540) and learning facilitation (3.452) is little better. The position of administrative frames (3.351) and curriculum frames (3.289) is in the middle and quality of feedback (3.210) is counted least. It means that teachers possess inferior skills and are not facilitating students for learning in real sense of the term and they are unsuccessful in providing quality feedback to students (Khan, 2005; Ali, 2008). Similarly, the state of affairs of administrative and curriculum frames is unsatisfactory in the universities (Lawrence & Sharma, 2002; Sahu, 2002; Sohail & Daud, 2006). The third objective was to deal with the demographics of the respondents. Female students are less satisfied as compared with males over administrative frames and the situation speaks on failure of the university administration to address the problems of female students, the majority block and make family friendly policies, a world-wide trend in higher education to facilitate the dominant segment of the university clientele (Nagy, 2006; Sohail & Daud, 2006; Henderson-King & Smith, 2006; Russell, 2006; Halici & Kasimoglu, 2006). The degree program analysis revealed that students from graduate programs are most worried. One possible cause of this tendency could be the mismanagement of these programs as this is a new trend in the higher education sector especially in Pakistan and universities need comprehensive planning to accommodate and develop this segment of their clientele (Russell, 2006; Halici & Kasimoglu, 2006). The relative dissatisfaction of PhD students over the teacher attributes and quality of feedback is noteworthy. PhD is the highest level of learning that involves teaching as well as research competencies of teachers (Neumann, 1994). The findings reflect an unhealthy situation in the most important segment of higher education (Government of Pakistan, 1998).

The discipline analysis too revealed a similar situation where students from business and education are more worried. One possible cause of this trend could be the heavy investment of universities in sciences and compromising with business especially with education discipline. This discrimination among the students may reflect unhealthy human resource management in universities (Russell, 2006; Halici & Kasimoglu, 2006). The university analysis seems to establish the proactive approach of newly established public sector universities where the situation of frame factors and teaching process is better than the old ones. This trend gets support from Ali (2008) and charges heavily to the supremacy of old universities in the market. The demographic analysis also revealed that the situation of frame factors and teaching process at public sector universities is still better than private sector universities. It means that if LUMS and LSE are excluded, the performance of rest of the private sector needs improvement. At the end, the fourth objective of the current study was to discuss implications of students' evaluation of frame factors and teaching practice for educational leaders. The concept of campus less universities is fast growing owing to the development of online learning (Brown, 2000; Wilson & Stacy, 2004). Similarly, Seah and Edward (2006) reported the drastic change from traditional to offshore or transnational university teaching. Magagula (2005) too described the growing marketing campaign of most modern universities as a threat against the universities of developing countries. Such type of literature speaks of the treats our universities are facing in attracting and retaining the students in near future. The findings of the study revealed the unsatisfactory situation of frame factors and teaching process in Pakistani universities. This trend may reflect the planning and implementation inefficiency of the higher educational leaders and the situation demands improvement in the frame factors and teaching process to face the threats from foreign competitors. If situation is not improved, this may lead to the collapse of higher education system.

## 6. Conclusion and recommendations

The situation of frame factors and teaching process of universities is unsatisfactory as evaluated by students who are the fee paying customers. The further analysis has revealed that in this unhealthy state of affairs, the condition of teacher attributes and learning facilitation on the part of teachers is little better. Administrative and curriculum frames are rated in the middle and this situation too is not good as students are not happy. The quality of feedback provided to students by university teachers, is lowest rated that reflects the lack of faculty skill and motivation to play their mandatory roles. Female students who constitute the major component of customers of universities are more worried over the situation of frame factors available to them. Similarly, majority of respondents were from business discipline that too along with those from education seems to be worried about the state of affairs regarding frame factors and teaching process. Another astonishing aspect of this situation is the lowest level of students' satisfaction in graduate and PhD programs. The situation at newly established public

sector universities is found little better as compared with old ones and when compared with private sector, the performance of public universities is better. LUMS and LSE were not included in the sample, hence they are not being compared and that is a limitation of this study. The situation described above is alarming and needs special consideration of the higher education leaders. If they would not take the remedial measures, their survival could be in danger in the presence of initiatives of established players. After exploring the ground realities, the next step is how to improve upon this situation? For this purpose, educational leaders need to revisit their planning process. Serious initiatives need to be taken for continuous faculty development and an effective system of evaluation of all such steps. The curricula should be revised and market orientation be ensured in line with the latest trends in higher education. Programs should be reorganized and the status of corporate university may be acquired to attain economic self-sufficiency that would help educational leaders to provide state of the art administrative and curriculum frames necessary to boost up the teaching process at universities.

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Table 1. Principal component factor analysis of development skills rotated by varimax with Kaiser normalization

Constructs	No of Items	Alphas	Range of Loadings
Administrative Frames (AF)	8	0.852	0.672 - 0.5590
Curriculum Frames (CF)	7	0.856	0.720 – 0.517
Teacher Attributes (TA)	8	0.838	0.714 – 0.557
Learning Facilitation (LF)	6	0.847	0.696 – 0.624
Quality of Feedback (QF)	8	0.848	0.701 – 0.551

Table 2. Correlation of sub-scales with the total scale for frame factors and teaching process

Sub-Scales	CF	TA	LF	QF	Total Scale
AF	0.623**	0.591**	0.537**	0.562**	0.797**
CF		0.578**	0.541**	0.527**	0.803**
TA			0.655**	0.624**	0.845**
LF				0.647**	0.837**
QF					0.812**

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

Table 3. One sample t-test for sub-scales

Sub-Scales	Mean	SD	df	t-test
TA	3.540	0.737	599	17.95*
LF	3.452	0.805	599	13.76*
AF	3.351	0.640	599	13.42*
CF	3.289	0.763	599	9.29*
QF	3.210	0.651	599	7.899*

\*p<0.05



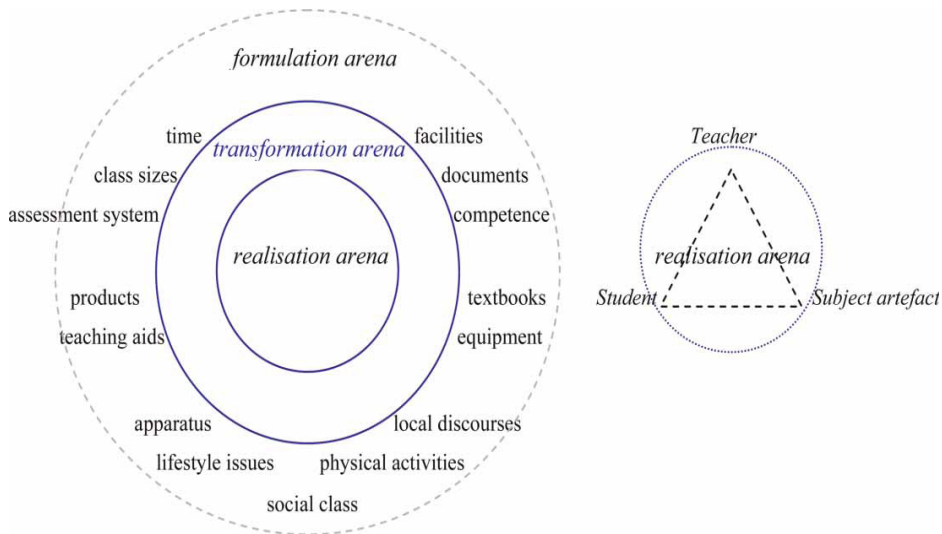


Figure 1. Formulation, transformation and realization of knowledge within educational settings  
 Source: Lundvall and Meckbach (2008:349)

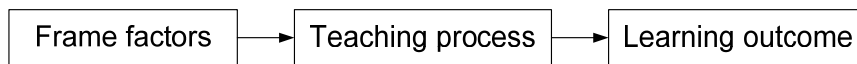


Figure 2. Paradigm of the general approach and the outlines of a model  
 Source: Lundgren (1972: 12)

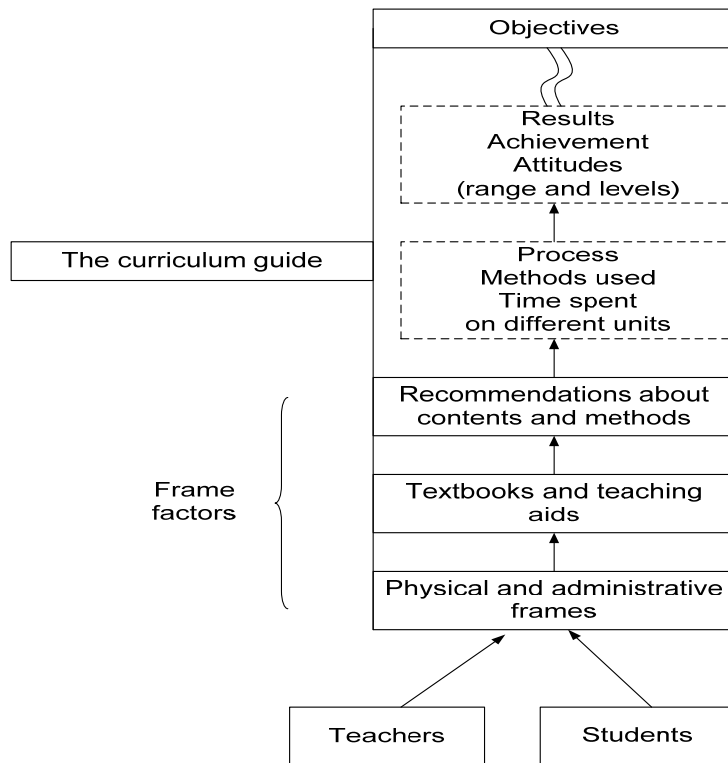


Figure 3. Paradigms of the relations between frame factors, curriculum, teaching process and learning outcomes  
 Source: Lundgren (1972: 41)

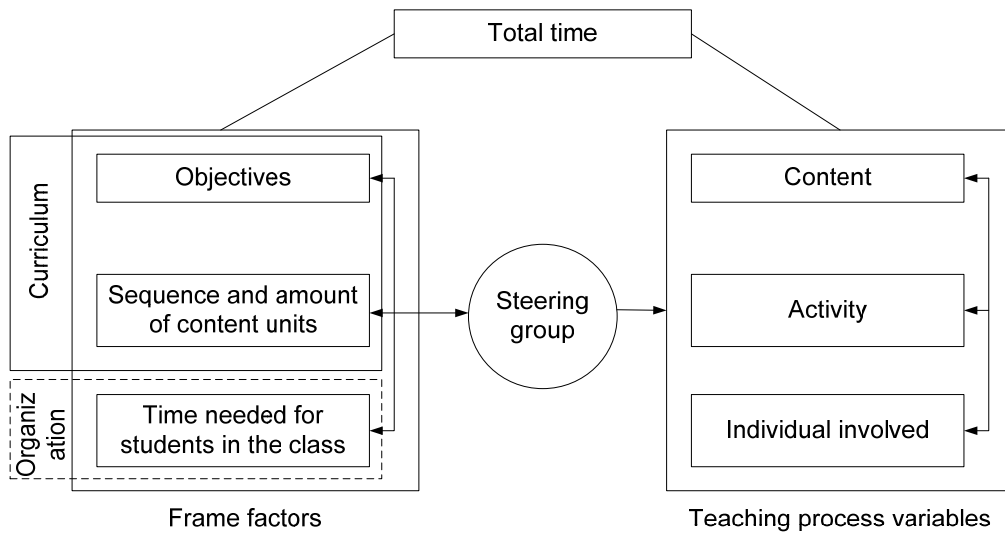


Figure 4. Paradigms of the relations existing between frame factors, steering group and teaching process variables

Source: Lundgren (1972: 43)

## Appendix A

Factors	Statements	Loading	Alpha
<b>Administrative Frames</b>	Learning quality	0.672	0.852
	Teaching-learning environment at the department	0.670	
	Computer and IT facilities	0.597	
	Classroom facilities.	0.567	
	Teachers availability	0.565	
	Supervision by the departmental head	0.563	
	Department building	0.559	
	Number of class students	0.559	
<b>Curriculum Frames</b>	Practical work opportunities	0.720	0.856
	Students' priority in that subject	0.624	
	Duration of one class	0.614	
	Departmental system of students' evaluation	0.593	
	Number of classes per week	0.569	
	Provision of subject outlines	0.528	
	Involvement of students in curriculum decisions	0.517	
<b>Teacher Attributes</b>	Teacher's job-market experience	0.714	0.838
	Teacher's helpfulness	0.704	
	Teacher's enthusiasm	0.685	
	Teacher's behavior	0.680	
	Teacher's personality	0.672	
	Teacher's knowledge of related disciplines	0.607	
	Teacher's knowledge in his/her field	0.585	
	Teacher's fairness	0.557	
<b>Learning Facilitation</b>	Encouragement of students for critical thinking	0.696	0.847
	Teacher's explanation of topics	0.686	
	Encouragement of students for interaction	0.670	
	Teacher's creation of conducive classroom environment	0.661	
	Methodology to improve students' understanding	0.647	
	Teacher's classroom management	0.624	
<b>Quality of Feedback</b>	Teacher's responsiveness to queries	0.701	0.848
	Teacher's own research in teaching	0.630	
	Assignments usefulness	0.600	
	Teacher's advice according to individual needs	0.591	
	Time for returning back students work	0.586	
	Teacher's assessment measures	0.574	
	Professionalism in teacher-students relationship	0.568	
	Teacher's instructions clarity	0.551	