

Project Based Learning in Literature: The Teacher's New Role and the Development of Student's Social Skills in Upper Secondary Education

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This study is adapted from a thesis study, PhD (2016).

Abstract

The present research examines the project method, as it is met at the new curriculum of literature in the first Grade of Greek high schools and the effectiveness of it and of the teacher's role at the development of social skills, of students with low level. At first it is made an effort to measure that level at the beginning of the literature lessons, by giving to 381 students a questionnaire to answer about themselves and to their 13 teachers a questionnaire to answer about their student's social skills. The investigation was made with methodological triangulation. We observed at the beginning and at the end of the semester the 42 students who were found to have low level of social skills. Also we interviewed their 13 teachers about the way they organized their lessons. Moreover we interviewed the 42 students about the role of their teachers and if the teachers helped them to increase their social skills. At the end of the semester we gave the same questionnaire both to the 42 students and their teachers (post-tests). The comparison of the pre and post tests and the data processing of the observations and the interviews, show an increase of student's social skills. Those results are important because of the following reasons: first of all the majority of the investigations examine the results of project method at the "territory" of cognition and not at the "territory" of social skills and secondly the majority of the investigations focus on the social skills of disabled children.

Keywords: curriculum, high schools, literature, project, social skills

1. Introduction

In recent years, there has been an increasing demand for the development of effective teaching methods to improve children's social competences in class. At this article we espouse this demand, as we believe in the social skill's necessity in one's life.

The concept of key competence originated with the adoption of the Lisbon Strategy in 2000 and it resulted in the European Reference Framework (European Commission, 2006, 2012). That Framework defines eight key competences: 1) communication in the mother tongue, 2) communication in foreign languages, 3) mathematical competence and basic competences in science and technology, 4) digital competence, 5) learning to learn, 6) social and civic competences, 7) sense of initiative, 8) cultural awareness and expression.

In general, social skills (the sixth of the above list) may be defined as "*socially acceptable learned behaviors that enable a person to interact with others in ways that elicit positive responses*". The acronym CARES can be used to identify five majors clusters of social skills—cooperation, assertion, responsibility, empathy and self control—that have been shown to be valued by parents and teachers (Gresham et Elliot, 1990).

Project-based learning is one of the most commonly used methods to activate those skills. Specifically Buck Institute for Education (BIE), a US not-for-profit organisation which helps teachers implement project-based learning in US schools, defines project-based learning as: "*a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to a complex question, problem, or challenge*" (BIE, 2003).

Additionally, most of the European Member States are beginning to implement policies that move their school systems towards curricula, which include competences and active learning through project based learning. One such example is the Greek Curriculum of Literature lesson, in the first Grade of Greek Lyceio (high school-upper secondary education), which Curriculum have been introduced recently, in year 2010-2011.

2. Literature Review

Based on evidence gathered over the past years, project-based learning appears to be effective model for producing gains in the development of social skills. It offers a wide range of benefits to students. Some of these benefits can be listed as below:

- a) Grouping students of all academic levels, mixing the males and females, the athletes, the popular, and the socially awkward, breaks down the social structure of “cliques” often found within schools and leads to higher self-esteem and better communication skills (Overby, 2011).
- b) Students, working both individually and cooperatively, feel empowered when they apply critical thinking to solve problems. In this productive work, students learn and strengthen their work habits and throughout this process, students learn new knowledge, social skills and positive attitudes (Tretten & Zachariou, 1995, p. 8).
- c) Student activity revolves around a complex series of interactions (between team members) and draws on a range of key transferable skills such as communication, planning and team working (Savin-Baden, 2007).

Moreover, the teacher’s role is less that of an instructor who transmits information and organizes activities for practice and more that of a guide and a facilitator (actually it is a critical role). Projects require that teachers know their learners’ interests. Teachers must listen when learners become excited about a topic, and start asking questions. Facilitating project-based learning requires the kind of leadership skills that allow teachers to help a group of learners to move in the direction that they want to go, without getting defensive when students decide they like their own ideas better. It is of great importance if teachers possess a tolerance for ambiguity, some skills in helping learners negotiate conflicts and enough self-confidence not to give up when a project peters out or refuses to come together (Morgan, 1983; Frank, Lavy, & Elata, 2003; Frank & Barzilai, 2004; Stauffacher et al., 2006; Lehmann et al., 2008; Otake et al., 2009).

3. Method

3.1 Sample-Participants

This study was conducted to investigate the contribution of Project Based Learning (PBL) in the development of student’s social competences/skills and the contribution of teacher’s role in the development of student’s social competences/skills. At the beginning the subjects of the study consisted of 381 High school students (224 girls και 157 boys) with a mean age of 16 years, in 13 schools (18 classrooms), selected from 50 High schools in a Greek county called Magnisia. The schools were selected randomly. Also at the beginning the sample consisted of the 13 teachers (11 women and 2 men) of literature in the same 13 schools. To those 381 students and their 13 teachers, were distributed on October 2014, a pretest, a social skill assessment scale (three scale Likert type/39 questions for the students and 30 questions for the teachers), called SSRS (Social Skills Rating System), by Gresham and Elliot (1990), which was exactly translated in the Greek language. Then we came up with 42 students (26 girls and 16 boys) with low level of social skills. Those 42 students was our final sample to be observed.

3.2 Research Tools-Instruments

After giving the questionnaires to 381 students and their 13 teachers and coming up with 42 students with low level of social skills, we collected the data by using the following instruments. First of all we performed 2 semi-structured observations (for 45 minutes, with a form which was developed by the researcher) of the 42 students, at the beginning of the semester (November 2014) and at the end of the semester (March 2015), in order to investigate the difference at the level of social skills, after being taught Greek literature for 5 months, with the project method.

Subsequently, at the end of the semester we interviewed the 13 teachers in order to investigate the way they applied the project method at their lessons (the way they organized their lessons) and we interviewed also the 42 students in order to gather their opinions about their teachers role and specifically their opinions about being helped by their teachers to increase the level of their social skills. The interviews of the students and the teachers were semi-structured.

The questions of the teacher’s interviews were constructed by the researcher and were based on the basic didactic principles of the project method (such as the interdisciplinary, the child-centeredness, the discovery

learning, etc.). The questions of the student's interviews were based on Belmont's, Skinner's Wellborn's and Connell's TASC-Questionnaire (teacher as social context), which investigates teacher's involvement (8 questions), teacher's provision of structure (8 questions) and teacher's provision of autonomy support (8 questions) in classroom and which was exactly translated in the Greek language. The researcher added 4 new questions about their teacher's techniques for teaching social skills throughout their lessons. All the questions were open-ended.

In addition, at the end of the semester was given a post test to the 42 students and to their 13 teachers, actually it was given the same translated Social Skills Rating System-scale (SSRS) of Gresham and Elliot. We then analysed quantitatively (comparison of the means) the data collected from the pre-tests and the post-tests (in order to investigate the difference at the level of student's social skills not only qualitatively but quantitatively too).

Seeking for evidence for the reliability and validity of the test and conducting the EFA analysis related the test structure (Seker, 2013). We came up with the following: First of all, the validity for the teachers questionnaires was 41.57% of total variance and for the students questionnaires was 42.24% of total variance. Also, for the teachers tests the Kaiser Meyer-Olkin (KMO) sampling adequacy result was found as .63 and the Bartlett test result was found as <0.01 , and for the students tests the Kaiser Meyer-Olkin (KMO) sampling adequacy result was found as .89 and the Bartlett test result was found as <0.01 , it was revealed that were valid (Malhotra, 1993). In continue, the reliability was examined with Cronbach's α , both for the teacher's and the student's questionnaires and it was revealed that the tests were reliable (Malhotra, 1993) and the results are presented at the following Tables (1 and 2):

Table 1. Reliability of teachers subscale

Components	α
Cooperation	.807
Assertion	.777
Self control	.820

Table 2. Reliability of students subscale

Components	α
Cooperation	.628
Empathy	.739
Assertion	.641
Self control	.649

Moreover we examined the repeatability, by giving the questionnaires to 5 teachers and 50 students at the beginning of the research, twice over two weeks. We used the factor of Intraclass Correlation Coefficient and the results both for students and teachers questionnaires are presented at the following Tables (3 and 4).

Table 3. Teachers questionnaires

Components	ICC
Cooperation	.294
Assertion	.258
Self control	.312

Table 4. Students questionnaires

Components	ICC
Cooperation	.101
Empathy	.223
Assertion	.151
Self control	.157

4. Results-Findings

In the present study, our primary focus was to determine whether a student with low level of social skills, can be benefited by project based learning and by the upgraded teacher's role, or not. Then we made the processing of the data gathered by interviews and observations. We grouped the answers by the number of the students that manifested specific skills. The results have shown that the level of social skills of the sample students was enhanced (increased) considerably. Specifically all the cases (hypothesis) of the research were verified as it can be noted from the following:

Qualitative analysis of First Research Question (with 4 subcategories): *“the cooperative activities and the use of ICT, enhance the social skills of children with low level”*.

✓ Analysis of the First subcategory: *“the cooperative activities and the use of ICT, enhance the social skill of collaboration of children with low level”*.

During the first observation we observed that the 42 students did not participated at all to their teamworks. After five months of literature lessons with the project method, during the second observation we observed that the 42 students more or less participated in the collaborative activities at the laboratory of informatics. They seemed to be helped by the knowledge they had about the use of electronic computers (P.C) and by the fact, that they had common objectives with their classmates within the teams (they belonged).

✓ Analysis of the Second subcategory: *“the cooperative activities and the use of ICT, enhance the social skill of empathy of children with low level”*.

After five months of literature lessons with the project method, during the second observation we observed that the 42 students more or less improved their empathy skills. They seemed to be able to understand the feelings of their classmates and to express in an easier way their feelings. They were helped by the fact that they had a common task with their classmates, to find information in Web and to create a common artifact. The participations in those activities gave them the opportunities to know each other within the teams better.

✓ Analysis of the Third subcategory: *“the cooperative activities and the use of ICT, enhance the social skill of self-control of children with low level”*.

As far as it concerns the observations of the self control skills, we did not have enough evidence/clues to verify that case, as we did not come up with serious conflict situations during the lessons, when we performed the observations. So the students we observed were mostly calm, but shy too.

✓ Analysis of the Fourth subcategory: *“the cooperative activities and the use of ICT, enhance the social skill of assertion of children with low level”*.

After the performances of the two observations we came up with the conclusion that 35 of the 42 students started during the second observation at least one conversation with his/her classmates. They seemed to be helped by the common use of the P.C during the collaborative activities, as the topic of the conversations was relevant to technology and the use of P.C.

Qualitative analysis of Second Research Question (with 4 subcategories): *“the teacher with his/her emotional role throughout project based learning enhances the social skills of children with low level”*.

✓ Analysis of the First subcategory: *“the teacher enhances the social skill of collaboration of children with low level”*.

By analyzing the student's answers, after the end of the interviews (which were performed without audiovisual means, for ethical reasons), we came up with the conclusion, that teachers all around the high schools, we included in our sample, helped their students with low level of collaboration skills, to enhance these skills, by

praising orally them every time they participated in teamworks and every time they started civilized debates with their classmates. This conclusion was based on the answers of 37 students, who claimed the above assumptions.

✓ Analysis of the Second subcategory: *“the teacher enhances the social skill of empathy of children with low level”*.

By analyzing the student’s answers, after the end of the interviews (which were performed without audiovisual means, for ethical reasons), we came up with the conclusion, that teachers helped their students with low level of empathy skills, to enhance these skills, by telling-narrating them social literary histories, by starting a conversation with students around these histories and around the emotions dominated in these emotional histories. For example in one high school the teacher’s narration of the literary story of Papadiamantis Greek novel, called “Father in house” and the following conversation in class about the feelings of the poor child-hero, who was orphan, moved a female student of our sample and she stated (during the interview), that she became more interested in hearing others feelings-emotions.

✓ Analysis of the third subcategory: *“the teacher enhances the social skill of self-control of children with low level”*.

By analyzing the students answers, after the end of the interviews, we came up with the conclusion, that teachers helped their students with low level of self control skills, to enhance these skills, by being models of composure, by being always polite and good listeners for their students, throughout the project-literature lessons.

✓ Analysis of the Fourth subcategory: *“the teacher enhances the social skill of assertion of children with low level”*.

By analyzing the students answers, after the end of the interviews, we came up with the conclusion, that teachers helped their students with low level of assertion skills, to enhance these skills, by “protecting” shy students and helping them express freely their opinions and their thoughts. For example in one high school, one teacher appointed the creation of a written calendar, so that every membership of the teams, to have the chance to note there, how many times he/she started discussions. In this way, the teacher tried to “impose” justice at the “dealing of the speech”.

Moreover, according to the following Tables (5 and 6), it is determined that there is significant difference between the means of the scores obtained from pre-tests and post-tests of SSRS (social skills rating system). The Statistical analyses were computed using SPSS (11.0) and specifically the one-way analysis of variance (One-Way ANOVA). The numerical results (Mean, Standard Deviation, F, Sig-p) of the analyses are presented subsequently.

Table 5. Differences of means of teachers scores (pre- and post-tests)

Social skills	MEAN	SD	F	P (sig)
POST-TEST				
Cooperation	11.85	4.15	6.42	0.013
Assertion	9.38	3.48	6.98	0.011
Self control	10.47	3.53	4.61	0.035
PRE-TEST				
Cooperation	9.40	4.69		
Assertion	8.26	3.78		
Self control	8.64	4.25		

Table 6. Differences of means of students scores (pre- and post-tests)

Social skills	MEAN	SD	F	P (sig)
POST-TEST				
Cooperation	10.1	3.6	5.7	0.010
Empathy	11.3	3.7	4.23	0.027
Assertion	9.38	3.48	4.98	0.016
Self control	9.6	2.94	4.95	0.012
PRE-TEST				
Cooperation	7.6	3.2		
Empathy	10.3	4.3		
Assertion	8.26	3.7		
Self control	8.52	3.69		

We can understand, by studying the above tables, that there was a significant difference and an appreciable increase in the Means of the social skills scores (both of the teacher's and student's scores). Specifically in teacher's scores the most significant difference was for self control social skill (watch Table 4) and in students scores the most significant difference was for cooperation social skill (watch Table 5).

5. Conclusion-Discussion

With the use of methodological triangulation we came to the conclusion that social skills of students with low level, can be increased when students are being taught with the project method. Our research field were 18 classes of first Grade of 13 Greek High schools, where the lesson of literature was being taught according to the new Curriculum, with the project method, since 2010-2011 (Number of Greek Law 1562/27-6-2011, second Gov Vol).

We came to the conclusion that some researchers views on the benefits of Project Based Learning (PBL), in the social learning (and not only in the cognitive learning), were absolutely accurate. First of all Brinia's (2005, p. 79, p. 85) opinion about PBL being beneficial for shy and isolated (secluded) students and for their social integration in classrooms and in teamworks, as these students participate in cooperative activities, was confirmed.

The same happened with the view of Nedelcho Ivanov Nedelchev (2014). He took the view, that the engagement to ICT technology throughout projects, helps introvert students gain confidence, as their effort is estimated by their classmates. In addition, Mayers and Cobbs (2000) theoretical and empirical proposal for teachers beneficial roles during PBL, was confirmed. They expressed the feelings that teachers by being socio emulated and by observing the rules in class, direct students to social learning.

Also, Kubtiako and Vaculova (2011, p. 69), argued that teachers role is determinant for the success of PBL, and that's absolutely true, as by interviewing the 13 teachers (of our sample) we came to conclusion that their harmonization with the requirements of PBL, was actually determinant for the success of the literature lessons and the application of the new project based Curriculum. The specific teachers followed the didactic principles of interdisciplinary, discovery learning, collaboration, etc., and helped in this way the shy students to be included in teamworks easier.

At this point we should mention the limitations of this research which are relevant to future repetition by others researchers so the validity to be increased and to the extension of the number of the participants, to be more representative.

Finally, we hope that the results of this research may help the teachers to cope with the difficulties and the problems of their difficult work and challenging task, inside the classrooms, with main purpose the promotion of PBL and the improvement of the quality of the education in general.

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