Nursing students' opinions regarding project based learning

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Abstract

Research was planned to figure out opinions of the nursing students on project based learning approach. Research was realized with qualitative method in type of descriptive phenomenology. The work group consisted of 4th grade volunteer students inscribed to the course of Education at Nursing at a nursing graduate school, in spring semester 2010-2011 (N:146) During the research, oriented sample method was used. Among the data, student presenter features were gathered in the Information Form whereas, their opinions about project based learning were gathered by using Semi-Structured Interview Form. Following questions took place in the Semi-Structured Interview Form concerning the levels of project based learning: How did .... level contributed to you in terms of individually and professionally? What are the most challenging and pleasuring points in .... level? The data was analyzed by qualitative (content analysis) and quantitative (frequency) data decoding techniques. Students introductory features' frequency and percentage was calculated with SPSS 16.0 packaged software. While 94,5% of the participating students were females, among them, 24,7% were 21 years old, making the average 22.92±2.53. 31.5% of them graduated from super high school. 67.8% of the students never took place in a project. In the research, common view is that even though students struggled at some points, it is a contributing learning approach. In line with these conclusions, project based learning might be regarded as an approach improving individual and team work, creative and critical thinking, problem solving and decision making skills of nursing students.

Keywords: project based learning; nursing education; nursing students' opinion; method.

1. Introduction

In our days, structurification of education should make students; gain skills of access to knowledge, internalize basic notions, develop problem solving talents and it should make apprehend to make conclusions from theoretical
knowledge, thus rendering students to be multi-skilled, participative, caring as an integral (Akçin, 2006; Tasocak, 1997; Zorbaz & Çeçen, 2009). In order to make students gain aforementioned features, project based learning approach, which provides students to learn while doing and experiencing, earning importance (Ay, 2010; Demirel, 2004; Demirtas, 1999; Gülbahtar & Tinmaz, 2006; Ira, 2004; Kalayci, 2008; Önen et al, 2010; Yurtluk, 2003; Zorbaz & Çeçen, 2009).

Project based learning can be defined as an approach aiming to solve the problems via individuals or small groups, making student active rather than passive, investigating, reaching to information and using it to solve problems during the process of learning-teaching, making one think independently and provoking student to be more creative (Akçin, 2006; Moti & Abigail, 2004; Moursund, 1998; Schmidt & Fisher, 1992; Zorbaz & Çeçen, 2009).

In order project based learning to reach its goal, following facts bear importance; creation of groups, identification of the problem to be handled or the work to be done, specification of the work programme, aims and objectives, synthesis of knowledge, determination of teaching methods & techniques and items, reportage, presentation and evaluation of the project (Akçin, 2006; Anonymous, 1999; Aytekin & Rasan, 2001; Bilen, 2002; Demirel et al, 2001; Gürol, 2004; Hesapçıoglu, 1998; Kaptan & Bozkurt, 2002; Önen et al, 2010; Özden, 1999; Moti & Abigail, 2004; Saban, 2009; Sönmez, 1999; Tasocak et al, 2004). Related researches point out that project based learning provides improving; individual and group working skills, life skills, technology using skills, cognitive process skills, self-governing skills, attitudes, tendencies and beliefs (Ay, 2010; Çiftçi, 2006; Demirhan, 2002; Girgin Balki, 2003; Gürol, 2004; Korkmaz, 2002; Önen et al, 2010; Özden & Özçoban, 2004; Yılmaz, 2006; Yurtluk, 2003; Zorbaz & Çeçen, 2009). While project based learning researches are limited at higher education levels (Ay, 2010; Kalayci, 2008; Önen et al, 2010), there are none in the field of nursing.

2. Methods

2.1. Aim

Research was planned to figure out opinions of the nursing students on project based learning approach. Following question's answer was sought:
- What are students' perception of levels of project based learning process?

2.2. Design

Research was realized with qualitative method in type of descriptive phenomenology.

2.3. Participants

The work group consisted of 4th grade volunteer students inscribed to the course of Nursing Education at a nursing graduate school, in spring semester 2010-2011 (N:146) During the research, oriented sample method was used.

2.4. Data collection

Among the data, student presenter features were gathered in the Information Form whereas, their opinions about project based learning were gathered by using Semi-Structured Interview Form. Following questions took place in the Semi-Structured Interview Form concerning the levels of project based learning:
- How did …. level contributed to you in terms of individually and professionally?
- What are the most challenging and pleasuring points in …. level?

2.5. Data Interpretation

146 students participated to the research and everyone's opinion was taken into consideration. The data gathered from the Semi-Structured Interview Forms where students wrote their opinions were analyzed by the researchers
with content analysis – a method of qualitative data. The basis of content analysis is to organize and interpret similar gathered data within the framework of precise notions and themes in accordance with the literature. With this purpose, aiming to provide the validity of the present views, each opinion in each paragraph was put down on paper by every researcher and later on, every paper was gathered in order to prepare a list of focused points/titles/subjects of the students. Gathered opinions were firstly conceptualized, then, relevant to these concepts, logically organized and explicative themes were determined. In order to analyze and compare various meanings in the themes, main themes regarding the aim of the research were developed depending on the responses from interview forms of the students. Thus, information more detailed and thoroughly than the qualitative analyze was tried to obtain (Yıldırım & Simsek, 2004).

2.6. Data analysis

The data was analyzed by qualitative (content analysis) and quantitative (frequency) data decoding techniques. Students introductory features' frequency and percentage was calculated with SPSS 16.0 packaged software (Özdamar, 2001; Yıldırım & Simsek, 2004).

2.7. Ethical considerations

Permission was received from the directorate of the nursing graduate school. Participation was based on volunteering. Research's aim and information about the questions on the form was told to participating students and written consent was taken.

2.8. Limitations

This research is limited with students of a nursing graduate school and can not be generalized to all nursing students.

3. Results

In the research nursing students' opinions concerning project based learning approach was investigated.

3.1. Students' introductory characteristics

While 94,5% of the participating students were females, among them, 38,4% were 22 years old and 24,7% were 21 years old, making the average 22,92±2,53. 31,5% of them graduated from super high school. 67,8% of the students never took place in a project.

3.2. Students' opinions regard project based learning

3.2.1. Formation of groups

While forming the groups, students stated that they cared; to get close with familiar friends, to pick friends who they worked together before, to get involved with the ones who had sense of responsibility and to league together with friends who shared the same fields of interest.

Some of the students stated that;
“I chose friends who I can get along.”
“I paid attention to the ones who I can collaborate and have sense of responsibility.”
3.2.2. Determination of the subject

Students pointed out that this level; provided them to think versatile and extensive, contributed their general information and development of respecting to other views, give the opportunity to brainstorm and analyze, exchange information and to hear interesting ideas. However, besides these positive contributions, students expressed that they slogged at finding sources, couldn't easily reach to a consensus and had hard times while deciding at this level.

Students' statements;
“I gained skills concerning making team work, listening and evaluating different opinions and debating in a civilized way.”

3.2.3. Determination of aims and objectives

Most of the students expressed that they were content concerning comprehending the importance of aim-objective determination and working in plan and that they could establish subject and aim correlation. Lastly, they stated their content views about collaborating with group members and working under the guidance of consultant instructor. However, they stated that they struggled while determining and listing objectives, establishing a consensus and synthesizing. Students' statements;
“I learned that I have to learn the aim and objectives of my research before I do my research.”
“Determining an aim taught me how to follow a path while researching a subject.”

3.2.4. Literature review

At this phase, students reviewed the literature concerning their subjects. During this review, most of the students stated that they developed in terms of literature review and data gathering but had difficult times finding sources.

Students' statements;
“I believe that I earned skills concerning source review and being picky after determining an aim.”

3.2.5. Preparing content plan

At this level, taking aims and objectives into account, students prepared a content plan benefiting from the literature relevant to their subjects. During these studies, most of the students stated that they learned basic rules for preparing a content plan, however, they also expressed that this phase was the most challenging and the most difficult part was to set down the titles.

Students' statements;
“I learned how to prepare a content plan while planning an education.”

3.2.6. Synthesizing information– Preparing a report

At this level, students reported their projects, synthesizing information in accordance with their content plan. During these studies, most of the students stated that they progresses in choosing knowledge, but still, they struggled.

Students' statements;
“We were able to distinguish the necessary information in literature and constitute the project by synthesizing.”
“In terms of integrate the knowledge, reporting was useful.”

3.2.7. Presentation

Most of the students stated that this level served their development in presentation and augmented their self-confidence. Most of them expressed that they got excited while presenting and struggled to control their excitement, however, they enjoyed getting feedback, presenting and effective participation.

Students' statements;
I think this level was useful both individually and professionally for the future presentations that we'll realize in our professional lives.

I learned to express myself and defend my ideas during the presentation.

4. Discussion

The research designating the opinions of nursing students about project based learning is important as it will provide enough information to instructors to know the students' points of view. The aim in project based learning is to make student solve problem, think critically, develop their decision making skills and creativity, prepare a report and turning it into a presentation and earn them the skills for collaborating and presentation (Akçin, 2006; Ay, 2010; Demirhan, 2002; Gülbahar & Tinmaz, 2006; Önen and friends, 2010; Moti & Abigail, 2004; Moursund, 1998; Wolk, 1994).

While project based learning is performed individually, with all class or by group studies, it is important to form the groups in accordance with students' requests for the students to commence with desire. In his research, Kalayci (2008) established that in project based learning, will to study augments when amity levels of students are taken into consideration while formation of groups. Participating students in the research stated that they cared to choose people from their own friend groups. This result can be interpreted as to set students free when determining group members, in order to increase their wills and motivations.

Determining subject is the phase for the student to choose a subject interested in which would contribute student's individual, professional and intellectual progress and develop his/her creativity problem solving and decision making skills with his group members (Akçin, 2006; Tasocak et al., 2004). As well in literature, it is stressed that during project based learning critical thinking and respecting to other views develop among students (Akçin, 2006; Ay, 2010; Demirhan, 2002; Gülbahar & Tinmaz, 2006; Önen and friends, 2010; Moti & Abigail, 2004; Moursund, 1998; Wolk, 1994). Most of the students in research expressed that while determining project subjects, they gave place to different views of the group members and common interest fields. In accordance with this conclusion, one might state that project based learning make students more aware concerning critical thinking, decision making skills and take different views into account.

Most of the students in research expressed their struggle in writing aims and the reason for this is their lack of information in aim-objective writing, however, at the end of the process, they comprehended the importance of aim-objective writing. This conclusion can be evaluated as such; students did not get an education concerning aim-objective detection/writing though, project based learning is an effective approach which determines and removes aforementioned lacks. Literature review is an complex phase which is constituted by information gathering, knowing the searched information, using the information sources or knowing the ways of profiting these. In literature review; books, journals, statistics, proclamation books, newspapers, reports, thesis, encyclopedias, expert opinions and internet might be the primary sources (Akçin, 2006; Gülbahar & Tinmaz, 2006; Önen et al., 2010; Moti & Abigail, 2004; Moursund, 1998; Tasocak et al., 2004). In the research, students expressed that they improved in source review concerning their project subjects and gathering information, however, the most struggling part for them was the access to these sources. This might be considered as a contribution of project based learning to improvement of information literacy skill which should be found in contemporary individuals enabling access to information and evaluating it.

Content planning is the phase where the answer to “what to teach” question to reach to determined aim and objectives and listed as headings. With the content plan prepared in this context, arrangement of subjects/headlines to be taught are in question. (Demirel, 2004). Content plan should be prepared by taking advantage of the sources gathered by group members in accordance with the project topic (Akçin, 2006; Gülbahar & Tinmaz, 2006; Moti & Abigail, 2004; Moursund, 1998; Tasocak et al., 2004). During these studies, most of the students stated that they learned to prepare a content plan but still, they struggled in this phase. In line with this result, one can state that students have lack of experience and knowledge in preparing a content plan and they need guidance and project based learning is a chance to determine and remove these lacks.

One of the other aims of the project based learning is to make students synthesize an information and prepare a report in line with it by providing improvement in high level thinking skill. Information synthesis is the phase in...
which a student synthesizes an information gathered from source reviewing in accordance with the headlines determined in content plan and taking basic principles of information synthesizing. Whereas, reporting is the phase in which synthesized information is put in to report taking spelling rules into account (Akçin, 2006; Gülbahar & Tinmaz, 2006; Moti & Abigail, 2004; Moursund, 1998; Tasocak et al., 2004). Participating students in the research expressed that they struggled in synthesizing information and reporting it, however, despite this difficulty, they found this phase useful in terms of integrating information and elaborating a report. This result can be interpreted as project based learning’s contribution to gaining experience in high level thinking and elaboration of report.

One of the aims of project based learning which results with a product is to converse an elaborated report into a presentation and to improve presentation skills. Presentation is the phase where the project meets the audience. What is important in this phase is that learner should apply the fundamentals (share of aim and objectives of the project topic, mastering a subject, effective utilization of education methods and techniques, providing active participation etc.). One should not forget that an effective presentation depends on good planning and active team work (Akçin, 2006; Gülbahar & Tinmaz, 2006; Moti & Abigail, 2004; Moursund, 1998; Tasocak and friends, 2004). Participating students in the research expressed that project based learning contributed to their presentation skills and augmented their self-confidences. Furthermore, they enjoyed getting feedback from their friends and instructors and these feedback contributed their improvement. Project based learning can be profited as it procures students to realize the features which they need to possess and carrier planning.

5. Conclusion and suggestions

In the research, common view is that even though students struggled at some points, it is a contributing learning approach. In line with these conclusions, project based learning might be regarded as an approach improving individual and team work, creative and critical thinking, problem solving and decision making skills of nursing students.

Suggestions:

- While practicing project based learning approach, while planning, instructors should take student characteristics, their qualities and environmental conditions right along with fundamental principles.
- Project based learning approach should be practiced in other fields of higher education and comparative studies should be effectuated.
- Experimental studies which compares project based learning approach with other student-centered approaches should be made.

References


