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Extended Abstract

Designing and Implementing a Situated Learning Program and Determining its Impact on the Students' School Motivation and Academic Achievement

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Introduction

There is a growing concern in professional contexts about performance levels of new recruits and the existing staff. Although occupations are going to be more and more technical, university graduates often do not have enough ability to confront with workplace challenges (Kirschner 2001, Dalgran 2007). To solve the problem, some authors offer using Technology (Serano 2009). But the question which should be answered is: in using technology what approach should be taken and what key factors should be considered?

Herrington and Oliver (2000) offer situated learning approach. Situated learning means learning in an authentic work situation (Furstenau, 2007). Hals (2006), Ngayen (2006), Kneebone et (2006), Gulikers (2008), Unal (2010), Ketelhut (2006), Edwards (2008) and Anderson (2008) showed the importance of situated learning in education and learning. In designing situated learning program different approaches can be used.

Research questions

This study aimed at designing and implementing a situated learning program and determining its interventional effect on school motivation and academic achievement. The research hypotheses are:

1- Situated learning increases academic achievement.

2- Situated learning increases school motivation.

Methods

This study was an empirical research. A total of 34 junior psychology students at Tehran Payame Noor University, Iran who had enrolled in the "psychopathology" course for the first time and tended to participate in the study were selected as the sample group. Classes were randomly divided into the intervention and the control groups. Student's motivation was measured by the short form of McInerney and Sinclaire school motivation questionnaire. The questionnaire not only measures school motivation, but also intrinsic and extrinsic motivations. To determine academic achievement, a number of questions related to content were randomly selected from the university questions bank and were used in the pre- and post-tests. The same questions were used for both groups.

Lecture-based curriculum was held in university classroom. Initially, an introductory session was held between the students and the lecturer. In this session, the students got familiar with training process, obligations and tasks of the lecturer and themselves. Then, they were asked to complete pre-tests. After six weeks, a lecture-based classroom was held for students and post-tests were completed by them.

Situated learning program was designed according to the viewpoints of experts and background researches. An introductory session was held between the students and tutor and the students got familiar with training process, obligations and tasks of the tutor and themselves. The program was performed synchronously and asynchronously in electronic and non-electronic format. In this approach we considered authentic context, authentic activities, access to expert performance and modeling process, access to different roles

and perspectives, collaborative construction of knowledge, scaffolding and coaching in critical items, articulation to enable tacit knowledge to be made explicit, reflection and authentic assessment.

Results

Compared with the pre-test scores, a significant increase in the mean of academic achievement post-test scores in both lecture-based program and situated learning program groups was observed. The mean difference in pre and post-test scores of both groups was also measured. The results showed a significant increase in mean score changes in the situated learning group compared with the lecture-based program group. In other words, confirming the first hypothesis, compared with lecture-based instruction, situated learning increased students' academic achievement.

In confirming the second hypothesis, the findings showed significant differences in score changes of school motivation and intrinsic motivation between pre-test and post-test in situated learning group, and no difference was observed in extrinsic motivation. However, none of the motivational aspects, in lecture-based learning displayed significant changes between pre-test and post-test. Comparisons of Mean difference in pre-test and post-test of both groups showed that a significant difference exists between the intrinsic motivation and academic motivation variables. In other words, situated learning increased school motivation as well as intrinsic motivation of learners.

Discussion and conclusion

Consistent with the findings of this research, Anderson (2008), Ajjawi (2007) and Ngayen (2006) showed that situated learning improved school achievement. Smith (2010) believes that using technology improves academic achievement by improving the students' interactions and offering integrated learning. One of the features of situated learning is "collaborative problem based learning". Wiginia (2010) believes that in collaborative problem based learning problems can be viewed from different perspectives and it improves

learning. The fact that anybody's learning in the group depends on other members' success, encourages all groups to help each other and improves social learning (Wentzel, 2010). Unal (2010) believes that working with real information makes the learners understand the relationship between learning and application of knowledge and therefore, increases both learning and motivation. Several factors caused an increase in students' motivation in this study. For example: Wentzel (2010) believes that collaborative learning increases intrinsic motivation of learners. Urdan (2006) believes that positive reinforcement accompanied with tutors' supportive behaviors augments the students' responsibility for active learning and self-adequacy which increases the students' intrinsic motivation for learning. Another feature of situated learning is "Scaffold instruction". "Scaffold instruction" increases learner intrinsic motivation by encouraging both learner and tutor to take part in challenging activities (Urdan, 2006). Develotte (2005) believes that situated learning increased students motivation and commitment by working in authentic context. Richardson (1999) believed that finding professional identity increases intrinsic motivation. Shell (1997) also showed that situated learning increases motivation by creating the appropriate atmosphere for learning.

Although designing situated learning curriculum expends much time and money, it is a worthwhile approach to education. There were some limitations in this study. For example: limited access or inability of students to use a computer. In a study sponsored by *Jones knowledge.com* and *course share.com*, the most important barriers to e-learning were inadequate time for learning and lack of educational support (Bonk, 2003).

According to the results of this study, it is recommended to view situated leaning as a suitable training program and research in different aspects of its efficacy should continue.

Keywords: Situated learning, Academic achievement, School motivation.