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Re.: Final Report for the research paper presented at the Critical Questions in Education Conference, October 15th and 16th, 2012, Springfield, MO.

A. Paper entitled *"The Effect of Project-Based Learning on Students' Self-efficacy in Technology Integration Course*"

B. Research problem:

This study investigated the effect of project-based learning (PBL) on students' motivation and self-efficacy to integrate different technology strategies in teaching. Today's students are required to learn in a climate of continual technology change and innovation. To meet this challenge and prepare them for the future workplace, students are trained to be content experts, as well as highly skilled problem solvers, and team players. This is especially true for students in the field of education. Although many studies examined the effect of using project-based learning on students' knowledge acquisitions; there has been little research that has examined the effects of PBL to integrate technology in classroom environment on students' self-efficacy and motivation. Therefore, the purpose of this study is to investigate the effect of project-based learning on students' motivation and self-efficacy to integrate different technology strategies in an actual classroom environment.

C. Research procedure

This study used a mixed method to assess the effect of project-based learning on students' Self-efficacy and motivation. The instruction used in this study was a technology integration course offered to undergraduate students as part of training students in college of education on the integration of technology in different content areas. Participants were 48 undergraduate students seeking a degree in teaching and the project was offered to them as part of the final work. To assess the effect of this type of activity on students' self-efficacy and motivation, self-report questionnaires were administered to them before and after completing their final projects of technology integration applications in their content area. Mixed method analysis was used to assess students' personal efficacy beliefs as determinants of students' academic achievement.

D. Summary of findings

The present study found that the project-based learning (PBL) helps students acquire the knowledge and skills required in the workplace and prepare them for real-life problem solving.

Engaging students in this type of activities gives future teachers the opportunities to apply their content knowledge and teaching skills while working on authentic problems facing classroom teacher. Furthermore, PBL allows students to become actively involved in researching and learning from problem introduction, process reflection to solution implementation.

E. Conclusions and recommendations

Therefore and in order to prepare students for the 21st century school environment, this study recommend to create learning activities that help students develop content expertise, problem-solving, and collaboration to meet workplace challenges, such as project-based learning.