Educational Strategies for a Changing World: Using Laptops to Improve learning and Teaching Practices

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Introduction

Education in an evolving world requires learners who are skilled and ready to advance their intellectual capabilities toward self-directed-learning. There is a global movement from teacher-centered learning toward student-centered and self-directed learning. The UAEU indulged this movement to improve the learning environment by adopting teaching and learning strategies that are based on technology integration in the classroom. One important component of this strategy is the full integration of laptops into the process of teaching and learning. The UAEU transition from a traditional learning environment to a computerized learning environment created a new education strategy that focuses on technology integration in the classroom and curriculum. A key step in that strategy implementation is the launch of the laptop project on a trial basis. The results of such integration are promising for expanding the laptop project to cover all university classrooms. The College of Food Systems was an important part of the UAEU strategic change process. The laptop project objectives are curriculum integration, shift from lecture-based to student-centered environment, life-long learning skills, asynchronous and synchronous communication skills, increased retention rate, team building and cooperation skills. This shift in learning strategy at both the UAEU and the College of Food Systems is related to some extent to the open learning environment theory that fosters cognitive development among undergraduate students. This paper will examine the UAEU overall strategy shift and emphasis will be given to learning improvement at the College of Food Systems undergraduate programs. Also, a brief theoretical exploration of the logical reasoning behind this shift in learning and teaching strategies will be justified adequately. Open learning theory principles will be examined in relation to the UAEU strategic shift in learning environment.

Purpose:

The purpose of this paper is to describe the UAEU educational strategy shift and to show evidence of success in the agricultural education programs as identified by using laptops in some courses at the College of Food Systems. Also, this paper seeks to provide some implications about how agricultural extension educators can benefit from the College of Food Systems experience as well as to learn some practical lessons and avoid pitfalls. The paper will shed light on the important role of open learning environment theory and how extension educators can benefit from it in educational program planning.

Method

The results of overall university pilot study survey will be used to guide the study discussions. The survey was administered to the UAEU students who used laptops in the classroom as a learning tool (N= 1435). The survey results will be discussed by students overall satisfaction level, survey results by college and survey results by course. Evidence of learning improvement will be presented as a result of the pilot study. Also, some important issues will be tackled based on my experience in teaching a laptop course such as positive and negative sides of using laptops in classrooms. My laptop course will be used as a practical example of how extension educators can integrate laptops into their training programs as a learning strategy. Necessary and appropriate statistics will be used as needed to illustrate important facts.
Conclusions:
Conclusions will be drawn from the pilot study results. A cornerstone conclusion of this study is using laptops in the classroom improves overall student satisfaction with the learning process. Another important conclusion is open learning environment theory could be used to design and implement agricultural extension programs.

Educational importance, implication and application:
The importance of using laptops in classrooms will be described in terms of improving learning, teaching, time and resources saved, and active and cooperative learning techniques. Implications for extension educators will be provided to show how extension educators can improve their teaching and learning skills using laptops. Application of laptops in the classroom will be satisfied by providing a real-life course taught by the researcher during fall semester at the College of Food Systems. Also, another course taught by a colleague in the College of Food Systems will be provided for extension educators as an additional practical example.