Quality and Excellence in Virtual Teaching Environment: The Teacher at the Forefront of Change in Adjusting the Education System to the 21st Century
(Poster)

Hadas-Malca Hacohen
Bar-Ilan university; Achva Academic College of Education; Givat-Washington College of Education

Abstract
The pedagogy required for teaching in the virtual environment is multi-faceted. Viewing the literature research and accumulated experience using ICT in teaching in the world and Israel points to the need for appropriate pedagogy in terms of teacher's role, teaching models, task planning, organization of environment, control of teaching facilities, etc. to ensure quality and excellence in teaching in the age of ICT (Allen, 2007; Andrews & Haythornthwaite, 2009; Chou, 2008; Guri-Rosenblit & Gros, 2011; Kanuka, 2006; Or, 2001; Ruffini, 2008; Saba, 2000; Salomon, 2000a; Salter, 2002; Steen, 2008).

The research here examines the following: 1. Will the extent of assimilation of pedagogical strategies in the virtual teaching environment affect students’ satisfaction and achievements? 2. Which pedagogical strategy is the most important one and has the greatest effect on students’ satisfaction and achievements in the virtual environment?. Investigation of the satisfaction and achievements variables is based on models of evaluation of online courses (Gilroy, Long, Rangecroft & Tricker, 2001; Kirkpatrick, 1975 in Kruse, 2002; Piccoli, Ahmad & Lves, 2001) and the inclination of researchers in the domain to measure success of an online course based on "satisfaction" and "achievements" (Allen, Bourhis, Burrell & Mabry, 2002; Arbaugh, 2000a, Arbaugh 2000b; Carrell & Menzel, 2001; Kim & Bonk, 2006; Swann et al., 2000).

Participants in the research were 315 students from 23 different online courses from various disciplines and different academic degrees. To examine the research questions, we constructed a questionnaire appropriate for evaluating teaching in the virtual environment. The questionnaire was based on theories, and research and applicative knowledge, and includes three measures which represent three pedagogical strategies that were found to
affect the quality of teaching in the virtual environment: 1. “personality, knowledge, and experience of the online instructor”, 2. “planning and organization of constructive and cooperative activities and the building of a virtual group” and 3. “organization of the learning environment that supports the online student” (Cronbach’s Alpha = .940). The purpose of the questionnaire is to examine the degree of successful assimilation of the pedagogical strategies in the virtual environment of an online course in consideration of the students’ “achievements” and “satisfaction”. The questionnaire participants were asked to rate their agreement to an item on a Likert scale (from 0 to 5).

The research results show that in courses having a higher extent of assimilation of pedagogical strategies, the students’ satisfaction with the instructor and the online course was higher than in courses where this assimilation was lower. It was also found that out of the three pedagogical strategies that were found to affect the quality of teaching in the virtual environment, the strategy that includes the “personality, knowledge, and experience of the online instructor” affects the other strategies and the student’s achievements and satisfaction with the instructor and online course.

These findings place the teacher at the forefront of change in adjusting the education system to the 21st century. Based on the findings, it seems that providing ICT lesson plans, teaching materials and advanced technological equipment, as is done today, will not contribute significantly to the advance of ICT in teaching. The key to the success of teaching in the virtual environment is in what will make the teacher knowledgeable and experienced in using this teaching method. Therefore, in addition to contributing research knowledge in this area, the contribution of this work is also in providing practical recommendations to advance the teacher in teaching in an age of advanced network and technologies.

Keywords: pedagogical strategies, virtual teaching environment, online instructor, online course, satisfaction, achievement.


