Teachers as Learners and Instructors using ICT: Reflection on a University Course (Poster)

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Abstract

This study explored how teachers use ICT from two perspectives: as university students and as schoolteachers. The course adopted the following four major principles of using ICT for teaching and learning derived from behavioral learning theory, cognitive learning theory and social learning theory (Bransford et al., 2000; Brown et al., 1989; Vygotsky, 1978): 1) Learning is contextual; 2) learning is a social process; 3) learning is an active process; and 4) reflective practice plays a central role in learning. The course integrated face-to-face meetings and online learning supported by a website. The participants were engaged in a range of assignments, such as searching electronic databases and journals; writing and presenting theoretical abstracts on using ICT in education, finding and testing learning materials that integrate ICT tools, and preparing an ICT-based learning unit aimed at their students in school. Data were obtained by documenting class activities, summarizing eight semi-structured interviews with pairs of teachers; analyzing participants' remarks in the course online forum; obtaining statistical data on the teachers' use of the course website; and administrating pre-and- post-questionnaires on the use of ICT for learning and teaching in the university and in school. Finding indicted that at the beginning of the course, many teachers reported that they used just a word processor or spreadsheet for school purposes. This picture changes significantly at the end of the course. For example, at the end of the semester, there were a total of 373 messages in the forum. The largest number of teachers' messages dealt with the subject of simulation (98 messages) and distance learning (100 messages). Other subjects the participants frequently mentioned in the course forum were adapting the use of ICT to teaching the mandatory curriculum, and the effect of ICT on social interaction in class, such as teamwork, pupil-pupil or pupil-teacher relations. Moreover, while at the beginning of the course, the forum was used chiefly for 'gathering together' and informal talks, at the later stages it became a means of professional discussions among the participants. The findings indicated that the majority of the participants improved significantly their skills in using computers and the Internet as university students or for personal needs. Yet, the participants were skeptical or less confident about accelerating the use of ICT for teaching in class because of the pressure to 'deliver' a given subject matter or the limited ICT resources available in the school.

Keywords: ICT, teachers, school, university.

References

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