The Link between Competencies and Attitudes towards Computers in Teacher Education

Over the past decade, technology has rapidly changed the face of classrooms. It is widely understood that teachers need training in order to familiarize themselves with technology. Learning how to use computers will not only facilitate everyday classroom activities but will also enable teachers to teach students and help prepare them for a future in which computers will be omnipresent. In this context, teacher training is crucial.

The goal of the present study is to examine in detail the competencies that future teachers need to successfully integrate technology in the second language classroom and to examine the link between attitudes towards computers and these competencies.

Background

Work has already been done in identifying and categorizing the competencies needed by a teacher in order to integrate technology in the classroom (Perrenoud, 1998; Coughlin & Lemke, 1999; Haew & al., 2001; ISTE, 2000). Desjardins et al. (2001) in an attempt to organize all of these competencies resort to a four-category grouping. The first grouping is labelled technical competence. Teachers must be able to operate both computer hardware and software. The second grouping, informational competence include the ability to document work efficiently using technological tools such as search engines on the Internet and library databases. A teacher who has social competence will be able to interact with individuals or groups using technology. And finally, epistemological competence will enable a teacher to create or modify connections using technology in order to solve problems.

Webster’s dictionary defines attitudes as: complex mental orientations involving beliefs, feelings, values and dispositions to act in a certain way, that is, they are predispositions to react in a certain way to a given social object which then influence one’s behaviour toward the object

Research design

The participants in the current study were 186 university students enrolled in a teacher training program. Questionnaires were used to collect demographic data, information about computer use, competencies and attitudes.

Findings and discussion

The findings of the study fall into three broad categories: those that report on computer use by the students, those that describe students’ competencies and those that depict the attitudes of the future teachers. What emerges from these findings is the fact that students are aware of the importance of being capable of using technology but still have a tendency to use the computer as a toy. As well, the results indicate that the students feel better able to conduct information searches and use technology to communicate than they do performing technical tasks and using technology to solve problems. As a result, students whose competencies are more developed tend to have better attitudes towards using technology as well as integrating technology in the own classroom in the future.

Conclusion
If teacher education is not adapted to today’s realities, the gap in technological competence between teachers, and, more importantly, between teachers and their more technologically aware students, will widen. This will affect the integration of technology in the classroom and may have an impact on the motivation and the readiness of students for the future.

References

Desjardins, F., Lacasse, R., & Bélair, L. (2001). Toward a Definition of Four Orders of Competency for the Use of Information and Communication Technology (ICT) in Education. *Proceedings of the IASTED International Conference, Computers and Advanced Technology in Education*