A key to fulfilling the promise of technology in education is by helping university students become knowledgeable and confident. For those entering the teaching profession, working with students who do not fully understand technology may assist in the development of these skills. It is also important to keep in mind that Teacher Candidates (TCs) learn better in a school setting (Smarkola, 2007). At the University of Saskatchewan, a pilot group was organized in order to introduce Teacher Candidates to an authentic setting for the application of technology and to learn more about developing technological competency in teachers. The pilot was based on two needs in teacher education: experience teaching with technology and exposure to a variety of learners. The action research project included an exploration of how and in what ways teacher candidates were able to integrate technology within a high school setting. The focus was unique in that the student group selected was the English as an Additional Language (EAL) program at Walter Murray Collegiate (Saskatoon). The approximately 90 EAL high school students were from a variety of countries including Somalia, Germany, Pakistan, Afghanistan, China, Nepal, and others. These high school students represented many cultures, first languages, and learning styles but most had little or no exposure to technology. In fact, more than half had little or no formal education as a result of spending large parts of their lives in refugee camps.

A motivating factor behind the program was to engage learners in authentic ways (Wilson and Schwier, 2009). To steer the TCs along a path or map out every aspect of their learning was not the goal. They were given access to learners and support but not a set of instructions. They were encouraged to discover on their own, usually through trial and error, how to be successful working with students that they had never encountered previously or might not have a chance to work with in the traditional teacher education program. There also existed the belief that by working with other cultures there was an opportunity to broaden knowledge of strategies and skills. In Saskatchewan a rapid increase in immigration is changing the make-up of schools. Traditionally First Nations awareness was the most important issue for teachers new to the profession. Now EAL and becoming more understanding of other cultures has taken on increased significance.

At the start of the program TCs met as a group to share, co-plan, and teach at least once a week in the school. TCs spent time with the students to see what interested them and where technology could best be used. Most applications of technology involved discovering Internet resources and creating multimedia projects. Workshops
were delivered to show students how to determine what was true and what was false on the Internet. Students were introduced to video and still cameras and shown how to edit and create projects to share with others. The one area where the students were competent was Facebook. The high level of confidence with social networking was used to encourage students to try other technologies.

Empowering the students using technology was a major outcome. More than with any other group in the school, the technology benefitted the EAL students as it allowed them to tell their stories. They were able to use images, voice, music and video to share their unique experiences. The technology was also important for assisting other students and teachers at the school in understanding the lives students had left behind. Showing a website or creating a video gave control to the EAL student as they shared and then described life in a refugee camp in Kenya or a favourite sport like Takraw. Connections were also made with others outside of the classroom. The success of the pilot project was enhanced as EAL students took what they had learned or created home to parents, siblings and extended family members.

Involvement in the program had a profound effect on the TCs. The impacts were as practical as being better at understanding accents or having a broader knowledge of living conditions around the world. They became skilled at attending to the needs of students who may not have many people willing to listen to their stories. They all reported an increase in confidence when working with students from other cultures and an increase in their technology skills. They were not completing assignments for grades; they were working on real projects with real students.

Specifically how has this program supported the promise of progress in education? The pilot tried to approach teacher education differently. We wanted to give the TCs the ability to grow in ways they had not previously. They learned about EAL, boosted their confidence in the classroom, made connections with students from other cultures, and improved their understanding of the application of technology through the experience. The high school students expanded their knowledge of technology and had the opportunity to work with a committed group of role models. The TCs felt valued. They were able to support students who really needed their time and what they had to offer. The first pilot group was kept together to form the foundation for an internship group. The skills and ideas developed in the technology pilot helped the group to be more effective interns and hopefully in the future, better-prepared teachers. The program focus remains learning about technology, but it is also important to maintain a lasting social impact within the classroom. Through our efforts we hope to be graduating teachers who are more comfortable and knowledgeable with the technology and the learning needs of students, not just individuals who are able to pass on information.


References:


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