Developing Digital Competencies in Aboriginal Students through University-College Partnerships

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Abstract : This paper reports on a pilot project to develop a collaborative partnership between a community college in rural northern Ontario, Canada, and an urban university in the greater Toronto area in Oshawa, Canada. Partner institutions will collaborate to address learning needs of university applicants whose goals are to attain an undergraduate university BA in Educational Studies and Digital Technology degree, but who may not live in a geographical location that would facilitate this pathways process. The UOIT BA degree is attained through a 2+2 program, where students with a 2 year college diploma or equivalent can attain a four year undergraduate degree. The goals reported on the project are as: 1. Our aim is to expand the BA program to include an additional stream which includes serious educational games, simulations and virtual environments, 2. Develop fully (using both synchronous and asynchronous technologies) online learning modules for use by university applicants who otherwise are not geographically located close to a physical university site, 3. Assess the digital competencies of all students, including members of local, distance and Indigenous communities using a validated tool developed and tested by UOIT across numerous populations. This tool, the General Technical Competency Use and Scale (GTCU) will provide the collaborating institutions with data that will allow for analyzing how well students are prepared to succeed in fully online learning communities. Philosophically, the UOIT BA program is based on a fully online learning communities model (FOLC) that can be accessed from anywhere in the world through digital learning environments via audio video conferencing tools such as Adobe Connect. It also follows models of adult learning and mobile learning, and makes a university degree accessible to the increasing demographic of adult learners who may use mobile devices to learn anywhere anytime. The program is based on key principles of Problem Based Learning, allowing students to build their own understandings through the co-design of the learning environment in collaboration with the instructors and their peers. In this way, this degree allows students to personalize and individualize the learning based on their own culture, background and professional/personal experiences. Using modified flipped classroom strategies, students are able to interrogate video modules on their own time in preparation for one hour discussions occurring in video conferencing sessions. As a consequence of the program flexibility, students may continue to work full or part time. All of the partner institutions will co-develop four new modules, administer the GTCU and share data, while creating a new stream of the UOIT BA degree. This will increase accessibility for students to bridge from community colleges to university through a fully digital environment. We aim to work collaboratively with Indigenous elders, community members and distance education instructors to increase opportunities for more students to attain a university education.

Keywords : aboriginal, college, competencies, digital, universities