

A rural education teacher preparation program: course design, student support and engagement

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Abstract

Attracting and retaining teachers for rural and remote areas is a pervasive global problem. Currently, teacher education in Canada is primarily delivered in face-to-face formats located in urban centres or satellite campuses. There is a need for relevant and responsive teacher education programs for rural pre-service teachers. Recognizing this need, one university has responded by creating a Community-based Bachelor of Education program targeting rural students who reside beyond the reach of these campuses. This paper explores the inaugural year of this innovative program, the only one of its kind in Canada.

Key words: rural education, Canada, teacher preparation, pre-service teacher education

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Attracting and retaining teachers for rural and remote areas is a pervasive global problem (Canter, Voytecki, & Rodríguez, 2007; West & Jones, 2007; Grant, 2010; OECD, 2017). Access to teacher certification opportunities for individuals in rural areas is limited (Grant, 2010). A demand for certified teachers in rural areas exists and yet potential pre-service teachers have little access to teacher education programs unless they move to an urban center or a satellite campus (Alberta Education, 2013). While some rural pre-service teacher education programs exist in countries like Canada, United States and Australia, most are limited to elementary and early childhood education (Becker, Gereluk, Dressler & Eaton, 2015). Current programs in Canada that target rural students require them to move to larger centers or satellite campuses to receive pre-service teacher education through face-to-face instruction. If aspiring teachers leave their rural areas to attend post-secondary institutions, 77% will not return to their communities (Dupuy, Mayer, & Morissette, 2000). Rural communities in need of teachers and rural students wishing to become teachers are at a disadvantage, due to the lack of educational alternatives.

This study began with the hypothesis that allowing Bachelor of Education students to stay in their communities may increase equity and access to potentially qualified individuals who might not otherwise be reached. As a result, a Community-based Bachelor of Education program was developed, aimed at attracting and retaining rural pre-service teachers. This program was set up as an online program with two face-to-face elements: two weeks of residence on campus each summer and local placements for practicums. This study presents the results of the first year of a study designed to answer our specific research question: What are the optimal design features of a community-based Bachelor of Education program designed to increase equity and access for rural teachers?

This study informs the field of higher education preservice teacher education, by exploring how the provision of a community-based BEd program can meet the needs of preservice teachers to train toward becoming teachers in rural communities and it specifically addresses concerns raised by educational stakeholders about the quality of such programs.

Literature Review

A demand for certified teachers in rural areas exists and yet, potential students have little access to teacher education programs. While some online pre-service education programs exist in countries like Canada, United States and Australia, most are limited to elementary and early childhood education (Becker, Gereluk, Dressler & Eaton, 2015). Current programs in Canada that target rural students require them to move to larger centers or satellite campuses to receive pre-service teacher education through face-to-face instruction (Alberta Education, 2013). If they leave their rural areas to attend post-secondary institutions, 77% will not return to their communities (Dupuy, Mayer, & Morissette, 2000). What is clear is that rural communities face a barrier in terms of hiring and retaining teachers.

A recent review of teacher education programs (Thompson & Gereluk, 2017) revealed that the majority of Canadian teacher education programs are urban-based programs located in central and southern Canada. Few teacher education programs are offered in northern parts of Canada, where population is less dense and widely dispersed given the geographical terrain and harsher climates. In eastern and central Canada, no teacher education programs (with the exception of one satellite campus in another urban centre) were housed outside of main campuses.

Quality online instruction in teacher education programs holds the potential to attract rural BEd students, and support rural teaching environments (Brown, 2014, Sang, Valcke, van

Braak & Tondeur, 2010; Lambert & Gong, 2010; Koch, Heo, & Kush, 2012). Despite the findings from these previous studies, some administrators and policy makers remain staunch in their rejection of the validity of such programs (Huss, 2007; Faulk, 2010). The result is administrators in charge of hiring have expressed their reluctance to hire students graduating from online programs (Faulk, 2010; Huss, 2007).

To further complicate matters, other research indicates that university instructors may be resistant to provide online instruction (Chelliah & Clarke, 2011; Downing & Dymont, 2013). The debates about the ability to provide quality provision of online instruction remain unresolved. There is strong resistance to the notion that teacher education can be delivered effectively in any format other than face-to-face instruction (Thornton, 2013). These complexities were considered during the design phase of the program, in order to ensure that not only did students receive a high-quality teacher training program, but equally importantly that the program was perceived to be high quality by administrators who make hiring decisions in rural school districts.

Methodology and data sources

Case study method

This study examined a newly launched pre-service teacher preparation tailored to those living in rural areas of Alberta, Canada using case study method. Case study offered the opportunity to “study complex phenomena within their contexts” (Baxter & Jack, 2008, p. 544). Qualitative case study involves the “process of careful reflection as new ideas are integrated into thinking, changes are made to practice and the consequences of that change are evaluated” (Harland, 2014, p. 1116) and has been gaining credibility as a research methodology in recent

decades (Yin, 2013). Harland (2014) points out that case study lends itself to the study of phenomena in the higher education context, providing an appropriate and relevant framework for researchers to better understand and reflect on issues within that context (p. 1121).

Data sources

The setting for this research is a newly launched Community-based BEd program at one university in Alberta. The participants are the students from the first year's cohort (n=18) and their instructors/program administrators (n=5). Data were collected through a demographic survey; focus groups with students; and interviews with instructors. In addition, the research team conducted a document analysis of institutional program documents (i.e. online and paper-based), as well as course documentation (i.e. course outlines, timelines, readings, assignment descriptions). This document analysis augmented the other data analyses in order to understand which program design features were optimal in meeting student educational needs.

Results

This paper shares three key results from our analysis of data from the inaugural cohort:

Finding One: Collaborative course design enhanced the student experience

Experienced instructors who had previously taught courses online and expressed commitment to the program were recruited to teach the inaugural cohort. Their work involved collaborative instructional design where course instructors understood their individual role in the larger program, as well as how their courses related to others in the program.

Finding Two: Student support programs were developed to address emerging needs

Early in the program, program administrators identified that students required support with writing. To address this need, a program was developed to mobilize services available through the on-campus writing centre. The services provided by the writing centre were

previously available only to on-campus students, and a key result of this program was the expansion of these services to community-based students.

Finding Three: Using synchronous learning technologies to increase student engagement

Students reported that several features of the initial program design were key in engaging them in their learning. These included: summer workshops to provide onboarding and introduce them to the fall online courses, the hiring of a director of Student Experiences for the program, and face-to-face classes to launch the program and allow them to meet as a group. Instructors responded to emerging needs as well. They identified that increasing the amount of synchronous interaction within online courses helped to decrease student anxiety and increase engagement. As a result, more synchronous interaction was added to the program in the form of Adobe Connect meetings and Skype calls.

Significance

Requiring students to relocate, and training pre-service teachers at satellite campuses only limits potentials pre-service teachers' access to teacher education. Online instruction holds the potential to reach these students in their communities. This research is significant as it works to establish the optimal design features of a responsive online rural teacher education program and adds to our understanding of how equity and access in the field of teacher education.

Conclusion

The main objective of this study was to identify and understand the optimal design features of a community-based Bachelor of Education program designed to increase equity and access for rural teachers. The first-year findings of our study indicated that having instructors collaborate on course design benefitted the overall program design. For students, adding specific and responsive student supports was an intervention that was incorporated into the program

design mid-stream. It proved to be a critical element of the program design, as students needed to feel supported through their learning in ways that extended beyond their courses. Finally, the program design evolved to include more synchronous communication with students, which helped to decrease student's anxiety and help them feel more comfortable and engaged with their learning.

With the exception of the collaborative course design, the interventions of increasing student support and adding supplementary synchronous learning opportunities were unanticipated elements of the course design. There are early indications that these interventions have bolstered the quality of the learning experience for the students, which in turn, may also help to build the program's overall reputation of quality and excellence, leading to improved job prospects for these students once they graduate as qualified teachers.

References

- Alberta Education. (2013). *A transformation in progress: Alberta's K-12 education workforce 2012/13*. Edmonton.
- Amiel, T. & Reeves, T.C. (2008). Design-based research and educational technology: Rethinking technology and the research agenda. *Journal of Educational Technology & Society*, 11(4), 29-40.
- Becker, S., Gereluk, D., Dressler, R., & Eaton, S. E. (2015). *Online Bachelor of Education Programs Offered in Colleges and Universities Throughout Canada, the United States, and Australia*. Calgary: University of Calgary.
- Brown, A. L. (2014). Implementing active learning in an online teacher education course. *American Journal of Distance Education*, 28(3), 170-183.

- Canter, L. L. S., Voytecki, K. S., & Rodríguez, D. (2007). Increasing online interaction in rural special education teacher preparation programs. *Rural Special Education Quarterly*, 26(1), 23-27.
- Chao, T., Saj, T., Tessier, F. (2006). Establishing a quality review for online courses. *Educause Quarterly*, 29(3), 32-39.
- Chelliah, J., & Clarke, E. (2011). Collaborative teaching and learning: overcoming the digital divide? *On the Horizon*, 19(4), 276-285.
- Downing, J. J., & Dymont, J. E. (2013). Teacher educators' readiness, preparation, and perceptions of preparing preservice teachers in a fully online environment: An exploratory study. *The Teacher Educator*, 48(2), 96-109.
- Dragon, K., Peacock, K. Norton, Y., Steinhauer, E., Snart, F., Carbonaro, M. et al. (2012). Digital opportunities within the aboriginal teacher education program: A study of preservice teachers' attitudes and proficiency in technology integration. *Alberta Journal of Educational Research*, 58(2), 263-285.
- Dupuy, R., Mayer, F., & Morissette, R. (2000). *Rural youth: Stayers, leavers and return migrants*. Ottawa, Ontario.
- Faulk, N. (2010). Online teacher education: What are the results? *Contemporary Issues in Education Research*, 3(11), 21-28.
- Grant, A. C. (2010). Tearing down the walls: creating global classrooms through online teacher preparation programs. *Distance Learning*, 7(2), 37-41.
- Hai-Jew, S. (2010). An instructional design approach to updating an online course curriculum. *Educause Quarterly*, 33 (4), 29-40.

- Herrington, J., McKenney, S., Reeves, T. & Oliver, R. (2007). Design-based research and doctoral students: Guidelines for preparing a dissertation proposal. In C. Montgomerie & J. Searle (Eds). *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2007* (pp. 4089-4097). Chesapeake, VA: AACE.
- Huss, J.A. (2007) Tri-state study: Administrator attitudes toward online teacher preparation programs: Are principals logging on - or logging off? *IEJLL: International Electronic Journal for Leadership in Learning*, 11. Retrieved from <http://iejll.synergiesprairies.ca/iejll/index.php/iejll/article/view/659>.
- Koch, A., Heo, M., & Kush, J.C. (2012). Technology integration into pre-service teacher training. *International Journal of Information and Communication Technology Education*, 8(1). 1-14.
- Lambert, J., & Gong, Y. (2010). 21st century paradigms for pre-service teacher technology preparation. *Computers in the Schools*, 27(1), 54-70.
- Mueller, J., Wood, E., Willoughby, T., Ross, C., & Specht, J. (2008). Identifying discriminating variables between teachers who fully integrate computers and teachers with limited integration. *Computers & Education*, 51(4), 1523-1537.
- Organisation for Economic Co-operation and Development / Organisation de Coopération et de Développement Economiques (OECD). (2017). *Country roads: Education and rural life: Trends shaping education spotlight 9*. Retrieved from <http://www.oecd.org/edu/ceri/spotlight9-CountryRoads.pdf>
- Sang, G., Valcke, M., van Braak, J., & Tondeur, J. (2010). Student teachers' thinking processes and ICT integration: Predictors of prospective teaching behaviors with educational technology. *Computers & Education*, 54(1), 103-112.

Thompson, M. B., & Gereluk, D. (2017). *Research brief: Pre-service teacher education availability in rural Canadian communities*. Retrieved from

<http://hdl.handle.net/1880/51805>

Thornton, H. (2013). Middle level professors' perspectives regarding online teacher education. *Middle School Journal*, 44(4), 30-39.

West, E. & Jones, P. (2007). A framework for planning technology used in teacher education programs that serve rural communities. *Rural Special Education Quarterly*, 26(4), 3-15.

Appendix: Presentation slides



2017 AERA Conference

A rural education teacher preparation program: course design, student support and engagement

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Sunday, April 30, 2017

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Research Issues

- Current teacher education programs in Canada do not adequately serve rural populations.
 - B.Ed. Programs mostly in urban centres
 - Satellite programs still require students to leave their communities.
- When aspiring teachers leave rural areas to attend post-secondary institutions, 77% will not return to their communities (Dupuy, Mayer, & Morissette, 2000)

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Participants

- First year cohort of the newly launched Community-Based B.Ed. Program (n=18)
- Instructors in the program (n=5)

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Research Question

- What are the optimal design features of a community-based Bachelor of Education program designed to increase equity and access for rural teachers?

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Data sources

- Demographic survey
- Focus groups with students
- Interviews with instructors
- Document analysis of institutional program and course documents

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Finding 1

- Collaborative course design enhanced the student experience.
 - Logistical collaborations: curriculum mapping, master semester schedule of synchronous lessons, assignment due dates
 - Curricular Collaborations: finding ways to align key learning objectives with place based education and the particular rural locality

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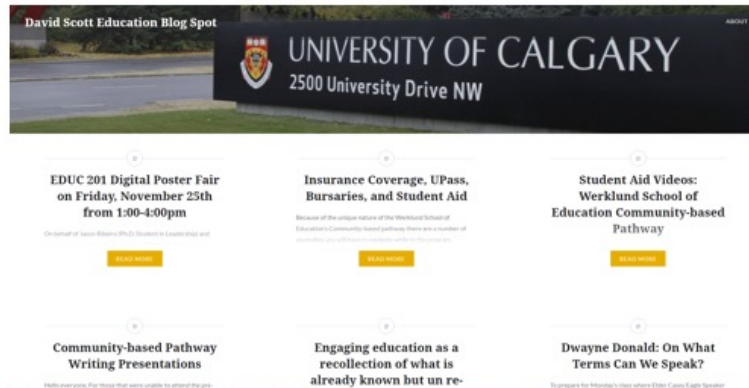


Finding 2

- Student and instructor support programs were developed to address emerging needs

“I started a blog so I had some strategies for doing some of the assignments. A lot of it has been reaching out to particular students....

We need to...
demystify
academic
writing.”



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Finding 3:

- Using synchronous and asynchronous learning technologies increased student engagement.

“I think I have replicated the multi modality that I have used in the face-to-face classes.”



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Significance

- Online teacher education holds the potential to reach students in their own communities.
- Builds community capacity with a “home grown” solution (Alberta Education, 2013).

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