



Videoconferencing in K-12 classrooms supported through the cascade model of teacher professional development

Doug Reid

Education Research
Wayfinder Education Group

Nathaniel Ostashewski

Centre for Distance Education
Athabasca University

The Video Conferencing Regional Leads Network (VCRLN) is an initiative to advance the use of video conferencing in K-12 schools in the Canadian province of Alberta. The network has grown and from its beginning phases and advanced its mission in unanticipated directions from its inception. This poster will present the progression of the VCRLN identifying the challenges involved with keeping a growing professional development network thriving. The cascade model of professional development will be emphasized with specific focus on the roles of the members of this network.

Keywords: videoconferencing, k-12 classrooms, cascade model, professional development

The context

Video conferencing (VC) is a relatively new teaching and learning innovation (Lim & Freed, 2009). In the province of Alberta in Canada, VC has been used to support education for a number of years. A key obstacle to the implementation of VC in K-12 classrooms involves the argument Luck (2009) has put forth that the introduction of new technologies such as VC involves a change in professional practice. Therefore, a support system called the Video Conferencing Regional Leads Network (VCRLN) was put into place to assist teachers to learn more about VC and to provide teacher professional development in as equitable a manner as possible across the province. The intended outcome of the VCRLN was to construct a geographically distributed team of teachers across the province to provide training, resources and support for all teachers in Alberta using video conferencing technology. There were four types of need that were identified for the VCRLN to support teachers in their professional practice. These teacher support needs were: technical expertise, teacher preparation, effective practices with VC, and relationship building. To meet these needs, the VCRLN eventually evolved into an organization with a Provincial Coordinator, Provincial team members, Regional Leads and Course Delivery Mentors.

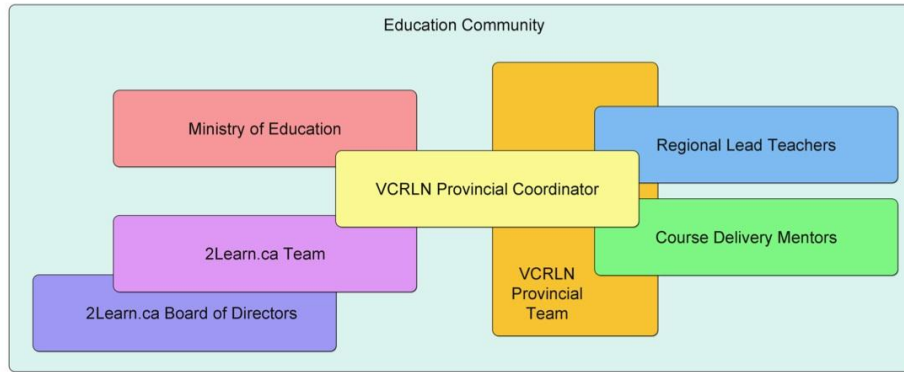


FIGURE 1: Final model of the VCRLN (Video Conferencing Regional Leads Network)

Discussion of the cascade model

The VCRLN was structured on a cascade model of professional development where teacher professional development support “trickles down” from a centralized organization to pockets of local support. Originally, the VCRLN was made up of Regional Lead teachers and a Provincial Coordinator. The Regional Lead teachers provided support to teachers within their professional development region across school jurisdictions. This support included technology expertise, pedagogical examples, resources & organizational assistance. The Provincial Coordinator guided the efforts of the Regional Lead teachers and liaised with external organizations to determine where the VCRLN needed to offer in terms of assistance to teachers.

As the VCRLN evolved, a team of teachers worked at the provincial level with the Provincial Coordinator to provide support to the Regional Lead teachers in the field and to manage VC events, teacher to teacher collaborations and VC activities for teachers. Also, a type of specialized Regional Lead teachers came into being to support teachers using VC to delivery courses at a distance. These Course Delivery mentors deal entirely with teachers who are teaching via VC to students around the province. This shift in services demonstrates the ability of a small provincial network to adjust to the needs and demands of teachers in the field.

At its high point, the VCRLN matured into a successful example of how the cascade model of professional development could operate across a large geographic area. The local nature of support allowed the network and its component pieces to evolve to meet the needs of educators in Alberta. This evolution in the cascade model started at a single Provincial Coordinator working with Regional Lead teachers and developed into a Provincial Coordinator, a Provincial team, Regional Lead teachers & Course Deliver Mentors.

References

- Alberta Education (2008). *Videoconferencing Programs to Support Student and Educator Learning: A Summary of Final Reports*. Edmonton, Alberta: Stakeholder Technology Branch. <http://education.alberta.ca/media/823921/phase2vcextendedfinalsummaryreport.pdf>
- Anderson, T. (2008). Is Videoconferencing the Killer App for K-12 Distance Education? *Journal of Distance Education*, 22(2), 109-123.
- Borko, H. (2004). Professional Development and Teacher Learning- Mapping the Terrain. *Educational Researcher*, 33(8), 3-15.
- Desimone (2009) Improving Impact Studies of Teachers’ Professional Development: Toward Better Conceptualizations and Measures. *Educational Researcher*, 38 (3), 181-199.
- Hayes, D. (2000). Cascade Training and Teachers' Professional Development. *ELT Journal*, 54(2), 135-145.
- King, C. & Kullman, C. (2007a). *Constructivist and Collaborative Perspectives on Building A Provincial Network in Support of Teaching and Learning Using Videoconferencing in Alberta*. In C. Montgomerie

- & J. Seale (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2007* (pp. 2059-2066). Chesapeake, VA: AACE.
- King, C. & Kullman, C. (2007b). *Integrating Videoconferencing into K-12 Teaching and Learning Using the SuperNet*. In R. Carlsen et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2007* (pp. 1561-1568). Chesapeake, VA: AACE.
- Lim, J., & Freed, S. (2009). We have the videoconference equipment installed, now what? The Qualitative Report, 14(3), 433-453. <http://www.nova.edu/ssss/QR/QR14-3/lim.pdf>
- Luck, J. (2009). Fusing Technological Design with Social Concerns: A Socio-technical Study of Implementing Interactive Videoconferencing. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2009* (pp. 2006-2015). Chesapeake, VA: AACE.
- Villegas-Reimers, E. (2003). *Teacher Professional Development: An international review of the literature*. Paris: UNESCO, International Institute for Educational Planning.

Author contact details:

Doug Reid
Education Research
Wayfinder Education Group
drdougreid@gmail.com

Nathaniel Ostashewski
Centre for Distance Education
Athabasca University
nostashewski@me.com

Please cite as: Reid, D. & Ostashewski, N. (2010). Videoconferencing in K-12 classrooms supported through the cascade model of teacher professional development. In C.H. Steel, M.J. Keppell, P. Gerbic & S. Housego (Eds.), *Curriculum, technology & transformation for an unknown future. Proceedings ascilite Sydney 2010* (pp.795-797). <http://ascilite.org.au/conferences/sydney10/procs/Reid-poster.pdf>

Copyright © 2010 Doug Reid & Nathaniel Ostashewski.

The author(s) assign to ascilite and educational non-profit institutions, a non-exclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to ascilite to publish this document on the ascilite Web site and in other formats for the *Proceedings ascilite Sydney 2010*. Any other use is prohibited without the express permission of the author(s).