Guiding principles for the use of videoconferencing in ESL programming



Justine Light & Charlotte Beaubier Hana Imai Cameron Young

Introduction

The objective of this document is to provide support to ESL instructors and administrators undertaking to use videoconferencing in ESL programming. This includes programming offered entirely by distance, and also applies equally to a blended ESL offering. The intention of this document is to provide both specific guidelines; however, the document is not intended to replace professional development in distance delivery of ESL. A reference guide is provided at the end to offer further opportunities for reading in this area.

The guiding principles in this document were informed to a large extent by the research undertaken by Bow Valley College in their project, Bridges for Rural Immigrants, Phase 1 Report (2009). It has been developed in collaboration with the team at Bow Valley, which includes Hana Taleb Imai, Charlotte Beaubier, and Cameron Young, and is grounded in their insights and reflections gained while delivering ESL listening and speaking classes to remote rural sites in Alberta. In addition to this foundational content, a further review of the literature on best practices for videoconferencing was conducted and alignment of that work with widely accepted principles of second language teaching and learning is embedded throughout. These guiding principles aim to provide a mechanism for supporting, planning and evaluating the development and delivery of ESL programming via videoconferencing.

A review of the research, as well as the experiences of the Bow Valley Team, have led to the conclusion that support of the class through online asynchronous tools, such as wikis, websites, email etc can greatly enhance the learners' opportunities for language interaction and the social community built among the individuals in the course. These guiding principles are built around the assumption that such a dual delivery is in place. The document* is divided into the following sections:

Materials

Videoconferencing equipment and physical environment

Course development

Assessment

ESL pedagogy

Language Learning Outcomes

The Learner

The Videoconferencing Team

The instructor

The remote site facilitator

Technical support

Materials

- 1. Orientation materials are given to learners before the videoconference course begins; these materials explain the learning outcomes, expectations for participation and the time required to complete the course.
- 2. Orientation materials include links to all necessary information for course access and all online resources required to complete the course.
- 3. Details of the asynchronous tools to accompany the videoconference course are provided to learners.
- 4. FAQs on course content and videoconference technology are provided to learners and are updated regularly using novel and authentically generated questions.
- 5. The language level of all materials, registration, orientation, learning activities, etc. takes into account the language level of the participants.
- 6. Materials contain a study guide and or tutorials, at an appropriate language level that support learners in topic areas such as, "How to be an effective self-directed learner", and "Etiquette for interaction via videoconferencing."
- 7. All instructional materials (audio, video, print) are sent to remote sites, well in advance of course delivery.
- 8. The materials use language that is clear and concise; a glossary of technical, and videoconferencing terms is included for reference.
- 9. The language of the materials is free from bias.

Videoconferencing equipment and physical environment

- 10. Wherever possible, videoconferencing takes place in a dedicated space to enable consistent room set up.
- 11. Room size is an important consideration for videoconferencing, and a narrow room will mirror the width of the camera angle effectively.
- 12. Telephone access in each site is required to solicit assistance during possible technical breakdowns.
- 13. Technical breakdowns can occur with videoconferencing so instructors and remote site facilitators have a coordinated backup plan, and students' expectations for the technology are realistic.
- 14. Audio quality is high and where possible an echo cancellation system is used.
- 15. Placement of microphones and cameras is intentional to achieve optimal audio quality.
- 16. Testing of audio levels between sites, particularly where different systems are being used, ensures optimal clarity.
- 17. The screen view mode is set to continuous presence (also known as discussion mode) for smooth instruction and easy viewing by participants in all sites.
- 18. Videoconference bridge technology is owned by the host site for maximum flexibility in class scheduling and delivery.

Course Development

- 19. Planning for the delivery of videoconference classes is more complex than in a faceto-face setting, and so increased preparation time for teachers can be anticipated.
- 20. The greater the number of remote sites, the more complex the delivery planning with the associated impact on teachers' preparation time.
- 21. The pace of a videoconference class is slower than in a face-to-face setting, and this factor is accounted for in course development.
- 22. Course development and design takes into account the need to overcome the transactional distance in this mode of delivery.
- 23. Course development includes opportunities for the learners to interact before and after the scheduled videoconference class time in order to build community among the learners.

- 24. Videoconference ESL programming is piloted before being formally offered to ensure that the course is as effective as possible.
- 25. Ongoing program evaluation is undertaken to evaluate student satisfaction and the impact of the videoconferencing course on language gain.

Assessment

- 26. Assessment criteria are clearly stated in course outline.
- 27. Assessment criteria are referenced to the Canadian Language Benchmarks, in order to provide a common frame of reference for all stakeholders.
- 28. Summative Assessments are available to learners that are competency-based, authentic and linked to the stated language outcomes.
- 29. Summative assessments are available to learners that are valid and reliable.
- 30. Multiple opportunities are available for formative assessment.
- 31. Assessment of learners through videoconferencing is complex and time consuming and will require considered planning and sufficient time be allocated.

ESL pedagogical considerations

- 32. Language learning activities are meaning-based and interactive.
- 33. Language learning activities offer multiple opportunities for learners to interact with each other, the language, and the instructor.
- 34. Language learning activities provide opportunities to build upon the language skills that learners bring to the course.
- 35. Language learning activities provide opportunities not only for communicating meaning but also to focus on grammatical structures.
- 36. Language learning activities provide opportunities for oral and written production of the language.
- 37. Language learning activities use authentic language at a level that is within the comprehension of learners
- 38. Language learning activities are developed with learners' needs for elaboration and simplification anticipated ahead of time.

Language Learning Outcomes

- 39. Language learning outcomes align closely to learners' needs for settlement, employment and further study.
- 40. Language learning outcomes are clearly stated, achievable and measurable.
- 41. Language learning outcomes are based on models of communicative competence.
- 42. Language learning outcomes provide essential content to connect classroom language to the wider community and workplace contexts.
- 43. Language learning outcomes are referenced to the Canadian Language Benchmarks, in order to provide a common frame of reference for stakeholders.
- 44. Language learning outcomes are the basis of the development of communicative activities.
- 45. Language learning outcomes are established and subsequently link clearly to activities and assessments, in order to provide a clear understanding among learners of how elements of the course are integrated.

The Learner

- 46. Course pre-requisites ensure that learners who enter the program have a reasonable chance to achieve the learning outcomes.
- 47. The learner can realistically complete the course and achieve the learning outcomes in the time available.
- 48. Learners are supported in the videoconferencing learning environment by receiving protocols and cultural information about appropriate videoconferencing interaction.
- 49. Learners experience adequate return on the time and money invested in the videoconferencing ESL programming by achieving their goals efficiently.
- 50. Learners have the opportunity to evaluate the videoconferencing programming in terms of how well it met their learning needs and the technological components of the course.
- 51. Where possible, an opportunity for one face-to-face meeting of the learners and the videoconference team is facilitated to build connections and community among learners.
- 52. Optimal class sizes are determined for each site.
- 53. Social community building activities such as creating profiles, using the asynchronous tools for the videoconference class, support the development of the social presence of learners in the course.

54. Learners are encouraged to become experts in the use of the videoconferencing technology.

The Videoconferencing Team

- 55. Roles and responsibilities among the members of the videoconference team are defined prior to the start of the videoconference class.
- 56. Communication on the course originates from the host site and provides clear and timely information to the remote sites.

The Instructor

- 57. The instructor receives a full orientation to the technology to be used and to the nature of the videoconferencing learning context.
- 58. Instructor orientation includes an opportunity for mentoring by experts in videoconferencing .
- 59. The instructor provides opportunities for authentic, interactive language use by learners.
- 60. The instructor attends to the issue of student motivation by creating an interactive and engaging learning environment.
- 61. Instructors understand their role in creating communities of learners and the importance of creating social presence.
- 62. The instructor facilitates activities that enable learners to interact with the language, each other and the instructor.
- 63. The instructor is an effective moderator by establishing videoconferencing guidelines and raising awareness about cultural differences in videoconferencing communication.
- 64. The instructor establishes clear and realistic time parameters for activities.
- 65. The instructor sets clear guidelines for collaborative activities.
- 66. The instructor prepares for the possibility that different groups at different sites may complete activities at different times and has a contingency plan.
- 67. The instructor provides feedback on language in a variety of ways that is frequent, precise and individualized.
- 68. The instructor is aware of eye contact, body language and the need to include all site participants in the videoconferencing context.
- 69. The instructor offers a weekly summary of the videoconference class to reinforce learning, where possible.

- 70. The instructor establishes virtual office hours for contact with learners.
- 71. The instructor is supported in becoming a member of a videoconferencing teaching community for mutual support and professional growth through professional development, conferences and opportunities for networking.

The remote site facilitator

- 72. The remote site facilitator receives training in the videoconference technology.
- 73. The remote site facilitator is oriented to their role, including managing the technology, responding to basic questions, monitoring student activity and helping explain instructions to the learners.
- 74. The remote site facilitator is given a full orientation to the goals and activities of the videoconference class.
- 75. The remote site facilitator is recognized by the rest of the videoconferencing team as the primary source of remote site community knowledge.

Technical Support person

- 76. The technical support person is trained in the videoconferencing technology and is accessible during the delivery of the class.
- 77. The technical support person in the host site acts as a liaison between sites.
- 78. The technical support person has classroom experience, in order to provide the most effective assistance to teacher and students.

References

Anderson, T. & Rourke, L. (2005). Videoconferencing in kindergarten to grade 12 settings – A review of the literature.

ATESL Best Practices for Adult ESL & LINC programming in Alberta. ATESL. (2009).

Bow Valley College Bridges for Rural Immigrants Phase 1 Final Report. *Bow Valley College*. (2009).

Coventry, L. (1995). Videoconferencing in higher education [online]. Edinburgh: Herriot Watt University. Retrieved from www.agoc.ac.uk/reports/mmedia/video3/video3.pdf. March 3rd, 2010.

Halifax Immigrant Learning Centre. (2006). ESL videoconferencing Pilot, Final Report. HILC.

Heath, M.J. & Holznagel, D. (2002). Interactive videoconferencing: A literature review. Retrieved from http://neirtec.terc.edu/k12/resoruces/litpolicy.pdf. March 15th, 2010.

O'Dowd, R. (2000). Intercultural leaning via videoconferencing: a pilot project. *ReCall* 12, 49-61.

Pepper, C. Strategies for using videoconferencing technology in the K-12 classroom: A teacher's digital handbook. Retrieved from http://www.d261.k12.id.us/VCing/ March 31st, 2010.

Woods, T. (2005). Instructor and student perceptions of a videoconference course. *Lethbridge, Alta. : University of Lethbridge, Faculty of Education*. Retrieved from http://hdl.handle. net/10133/980 March 20th, 2010.

Appendix A

Etiquette for videoconference interactions (A few introductory ideas)

Voice should be clear and at an appropriate volume	5	If someone interrupts, allow them to finish to avoid confusion.
Avoid yelling	Address each other by name	Avoid side conversations
Body language should be exaggerated but slower than usual	Make eye contact with other participants by looking into the camera	Wear neutral color clothes to avoid video problems and distractions

Appendix B

Video Conferencing Classroom – Optimal setup considerations



The above diagram depicts the room where classes originate from.

Video screen 1

Displays a view of the remote classroom(s) to the students in the originating class. In newer installations, the video projector has been replaced with a large flat panel LCD screen.

Video screen 2

Displays a view of the remote classroom(s) to the instructor.

Camera 1

Camera 1 s used to capture images of students in the originating class. The preset camera positions allow the instructor to switch from a wide classroom view to close up views on individual students in the class.

Camera 2

Camera 2 is used to capture the instructor. The preset camera positions allow the instructor to be shown in any location at the front of the class as well as close up.

Desk Microphones.

Desk mounted microphones capture the audio from the room. The pick up is sufficient to capture both the instructor and students clearly. The microphones can be turned off or on as needed.

The audio from the remote classroom is played through ceiling mounted speakers. In the new classrooms, the desk microphones have been replaced with 2 Polycom ceiling mounted units.

Instructor computer/SmartBoard

The computer is used to display information (primarily PowerPoint presentations) on the Smartboard. The same information is displayed simultaneously on Smartboards in the remote classrooms. The instructor can also write on the Smartboard and have the text displayed remotely. The SmartBoards are connected through the network using Microsoft Netmeeting. The computer can also be play audio or video which can be seen/heard in both the originating and remote classrooms.

Room Attributes

The rooms used for video conferencing are narrow. The width of the room matches the angle of view of the video camera and minimizes the amount of panning that has to be done by the camera.

Lighting

In both the originating and remote classrooms, considerable expense and attention have been paid to lighting. The ceiling mounted lighting is designed to provide, bright shadow free illumination on both the teacher and students. There are no widows or other sources of extraneous light in the classrooms.

Décor

The décor is the classroom has been minimized to maximize video camera efficiency. The walls are painted a neutral blue, a color the camera doesn't have to sample, and there are no posters, pictures or bulletin boards within the view of the camera. In some cases the desks have been bolted to the floor to preserve the camera preset positions.

Climate Control

Low flow air condition was installed in the originating classroom because it was discovered regular air conditioning was interfering with the audio and video.

The remote classrooms do not require the same amount of hardware as the originating classroom. They only require one camera and one video screen.