

Using videoconferences to diversify classrooms electronically.

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Abstract:

In this article the authors make a case for videoconferencing as a way to diversify middle and secondary classrooms. Through a description of the setup of a videoconference between American pre-service teachers and Moroccan undergraduates, the authors attempt to demystify the use of videoconferencing in middle and secondary education. The authors conclude with suggestions for middle and secondary educators who wish to use videoconferencing as a way to incorporate greater diversity and multicultural education in their classrooms.

Keywords: distance education | high school | education standards | technology | video conferencing | classroom diversity | diversity | secondary education

Article:

Moroccan female: I have a question for the American students. How many people speak Spanish?

(Two hands raise)

How many people speak French?

(Two hands raise)

Arabic?

(No one raises their hand)

This exchange between American and Moroccan students is significant for a couple of reasons. First, it highlights the general indifference many Americans often feel toward globalization and non-Western cultures, particularly when compared to the Moroccans, all of whom spoke multiple languages, including English, in addition to their native tongue. Second, it occurred face-to-face and in real time even though the two groups were more than 4,000 miles apart and separated by an ocean.

Unfortunately, these types of transcultural experiences are not typical in American classrooms. Despite calls for cosmopolitan citizenship in middle and secondary education (e.g., Merryfield and Subedi 2006; Nussbaum 2002; Parker 2008), teachers who are committed to instructing from diverse, global, and interdisciplinary perspectives are too often hampered by geographic or space restrictions in their schools and classrooms. The good news, however, is that advancements in technology have made overcoming these limitations much easier. This article focuses specifically on the use of videoconferencing, a form of online communication in which participants communicate with each other face-to-face and in real time.

Videoconferencing has become increasingly prevalent within the business world, but it has yet to be widely embraced in educational contexts. Recent scholarship has advocated the use of videoconferencing as a way to broaden students' civic education (Berson et al. 2006; Dressman et al. in press; Maguth, Yamaguchi, and Elliot 2010; Waring 2008), but there is little evidence to suggest that many middle and secondary educators in the United States have attempted to incorporate videoconferencing into their curriculum. There may be many reasons for this lack of experimentation; for example, teachers may not be aware the technology for videoconferencing exists, they may have misconceptions about the perceived difficulties and costs of setting up videoconferences in their classrooms, or they may not see the relevance in using technology in this way. This article attempts to address all of those concerns through a description of a project we facilitated in which pre-service teachers in Illinois videoconferenced with college students in Morocco using Skype™ technology. While the cross-cultural experience that students on both sides of the Atlantic received was profound, the focus of this article is on the process by which the videoconference took place in the hope that middle and secondary educators throughout the United States can better understand the relative ease by which we were able to directly link two groups of students who were separated both geographically and culturally. By following the same basic steps, any educator could create a similar experience for their students, regardless of whether he or she wanted to connect to individuals in another nation, state, city, or school (readers who are interested in the technical aspects of how we set up the conference can refer to the Appendix).

The Project

In 2007, as part of his course on teaching in a diverse society, the second author decided to have his pre-service teachers participate in a cross-cultural exchange with students in Morocco as part of an ongoing focus on cultural literacy and world literature (Dressman et al. in press). Prior to entering academia, he had spent a significant amount of time in Morocco and had traveled back on several occasions, which is how he developed the relationship with the Moroccan professor whose students would also take part in this project. In previous semesters, the second author had his students participate in asynchronous cross-cultural exchanges with Moroccan students using threaded discussion boards and e-mail, and despite research suggesting that asynchronous communication has the potential to greatly enhance cross-cultural understanding (Black 2009; Merryfield 2000a, 2003; O'Dowd 2003), it had been the second author's experience that these

asynchronous exchanges had been limited by the impersonal nature of e-mail and discussion boards, particularly the length of time it often took for students to feel comfortable enough with each other to develop a truly open dialogue. He hypothesized that a face-to-face experience would break down these cultural barriers faster and lead to a more productive dialogue, which was the impetus for trying a videoconference between the two nations.

For the videoconference, the second author and two undergraduate research assistants flew to Morocco to help facilitate, along with a Moroccan professor of English, the experience from the Moroccan side. The first author, who at the time was a graduate research assistant, stayed in Illinois to proctor the American side of the conversation. Using Skype and a fairly simple technological setup, which we explain in greater detail in the Appendix, we were able to engage the two classes in a real-time, face-to-face dialogue in which the students were able to discuss their feelings on religion, American and Moroccan politics, perceptions and misconceptions of each others' nations, and a variety of other topics that greatly expanded the transcultural understanding of the students in both classes.

As expected, the videoconference started somewhat formally, with students on both sides of the Atlantic unsure of how to perceive the individuals staring back at them through the overhead screen. Yet, in less than an hour, the cultural formality had broken down, and the two classes were interacting with each other as if they were classmates in the same room, a process that would have most likely taken weeks through e-mail or discussion boards. The resulting discussion was an intense, occasionally confrontational, but ultimately powerful and moving experience that forced students to confront existing stereotypes and consider diverse points of view. For example, in an exchange over the role of media on Americans' views of Islam, an Illinois student confessed, "All I know of Islam is what I see on the news," to which a Moroccan student countered, "The media tried to make a terrorist out of every Muslim after 9/11. How can we teach students to be more critical of the media?" The two groups of students engaged in this type of critical, semistructured discussion for more than an hour with only moderate assistance from the facilitators.

By the end of the videoconference, all of the students involved seemed to have enjoyed the experience, and in separate debriefing sessions after the cameras had been turned off, students in both nations admitted that they had learned a considerable amount from the experience and that their perceptions of the other nation had changed drastically as a result of the conference. In addition, the students marveled at the technological aspects of the project; several of the Illinois students admitted afterward that they had been skeptical of the technical quality of the videoconference, but were amazed that, for the most part, the experience felt like the participants were in the same room and not in two classrooms separated by an ocean.

Discussion

While our cross-cultural exchange with the Moroccan students was a powerful learning experience that our students will not soon forget, we also realize that most middle and secondary teachers are unlikely to have the types of personal connections needed to recreate an experience of this magnitude. Instead, we provided the description of our project to give readers an example of the possibility created by videoconferencing in the classroom. On a smaller scale, middle and high school teachers can create similar types of learning experiences with their students by connecting them to individuals in other states, cities, schools, or classrooms—any environment that allows students to interact with others that may be outside of their cultural norm.

Videoconferencing can be a powerful and innovative way to bring diverse perspectives into the classroom in all academic disciplines. For example, consider the pedagogical benefit of having history students in the United States talk to students in Europe and compare how certain historical topics, such as World War II, are depicted in the textbooks used in different nations. Such an activity would be a critical way to expose students to the idea of historical interpretation while debunking the stereotype of American military and moral supremacy that permeates throughout textbooks used in the United States (Loewen 2010). Language arts teachers could use this same approach to discuss literature that contains global or cultural themes. It is easy to imagine the differences in interpretations between American students and students from other nations when reading a novel that features historical or religious themes, such as *Siddhartha* (Hesse 1951) or *The Good Earth* (Buck 1931). In addition, videoconferencing offers untold benefits to foreign language teachers by allowing students to converse with native speakers, many of whom probably also speak English. While we do not have space to list every possible benefit of transcultural learning, there is an ever-growing push toward global approaches in all academic disciplines, and videoconferencing allows greater access to diverse cultures than ever before.

Why, then, are videoconferences not used more often in middle and secondary education? Certainly, one potential problem is that teachers may not feel they have the necessary connections to engage in this type of teaching. However, as global education gains more traction in the United States, more resources are becoming available for teachers who wish to extend instruction beyond their classroom walls. Educators are increasingly turning to the Internet to make connections and foster relationships with like-minded colleagues throughout the world. For example, two organizations, the Global Education Collaborative (<http://globoeducation.ning.com>) and ClassChats.com (<http://classchats.com>), provide free social networking sites for teachers looking for project collaborators throughout the United States and in other areas of the world.

However, even if educators cannot make connections with colleagues overseas, transcultural learning can still occur. Opportunities for team teaching and interdisciplinary learning can exist even within one's own school district. Videoconferencing could be an easy way for district colleagues to collaborate on an interdisciplinary unit or even for teachers to swap teaching responsibilities with their classes based on individual strengths, areas of expertise, or personal

experiences. Merryfield (2000b) has found that many educators who value global approaches to education come to their classrooms with a wealth of personal experience that comes from traveling or living in diverse geographic or cultural locations. Teachers can find these colleagues within their schools and districts and use them as a resource. Most individuals would welcome an opportunity to share their experiences with students, and videoconferencing offers a way to do that from the comfort of their own classrooms.

Moreover, finding like-minded colleagues throughout the nation or one's home state is easier than ever before. All content disciplines have annual conferences at which teachers can network with other educators throughout the country. Imagine the possibilities that could come from teaching a cultural topic like the Civil War through a videoconference of students from high schools located in cities above and below the Mason-Dixon Line. Even if teachers cannot attend a national conference, many states have their own conferences that meet on a regular basis at which connections could be made. Oftentimes, localities within the same state have very different cultural perspectives. One could easily imagine the educational benefit of discussing a variety of topics among students in urban and rural schools or schools with considerable cultural and ethnic diversity and schools that are predominately white.

Perhaps another reason videoconferencing is not being used in middle and secondary classrooms is the perception that trying innovative ways of using technology in the classroom involves considerable technical expertise or that the results of using technology do not justify the amount of preparation needed to successfully carry out a particular project. One of our aims in this article is to show teachers who may be hesitant to try this type of project due to a lack of confidence in their own technical abilities that using technology to connect groups of students halfway across the world could be done through readily available technology that one can find at their schools or purchase at a relatively inexpensive cost. None of the equipment needed to run a videoconference is difficult to use, and much of it (e.g., the Internet, LCD projectors) teachers typically use on a daily basis. Even if teachers are intimidated by or unfamiliar with Skype or the use of webcams, there are certainly people in every school who could assist with setting up this type of project. In many cases, students have considerable experience talking online via the use of webcams, and they could help run the videoconference.

For us, the amount of work we put into this project was definitely worth the reward. In the nearly three years since the videoconference, many of the students who participated have cited the experience as one of the most memorable of their educational careers. Videoconferencing offers a unique way to incorporate multiple perspectives into classrooms while maintaining the personal touch needed to make meaningful connections for students. As technology continues to improve, it is our hope that more middle and secondary teachers and students will be able to implement videoconferencing projects in their classrooms as a way to supplement ambitious instruction.

Appendix: The Project Setup

In the weeks preceding the videoconference, the authors worked together to test the technological components that would act as the link between the students in Illinois and Morocco. First, we decided on Skype as the medium for the conference. There are a variety of programs available for videoconferencing, but we chose Skype because it is free (it can be downloaded at <http://www.skype.com>), easy to use, and it works with both Macs and PCs. Once Skype is downloaded, one only needs two webcams (one for each side of the conversation) and microphones in order to successfully run a videoconference. We were able to buy webcams with microphones already installed for approximately \$40 a piece, but most schools nowadays have that type of equipment available for teachers to use for free. After the webcams and microphones are connected to the computer, the program runs a short compatibility program to test their effectiveness and then you are ready to Skype.

Of course, as any teacher who has been burned by technology in the past knows, it is always best practice to do a couple dry runs prior to the actual event. We first tried Skyping between each other's homes, and we experienced no problems; the quality of both the sound and video were excellent. Fortunately, we then decided to practice in the actual classroom where the videoconference was to take place, and to our dismay we could not sustain an active feed between the classroom and our house. With the plane tickets to Morocco already purchased, we began to panic and wondered whether this project would actually get off the ground. After a couple hours of troubleshooting, we realized that the wireless connection at the university was not strong enough to hold the video feed, but if we used an Ethernet cord hooked directly into the computer, we were able to communicate as desired.

Soon thereafter, the first author and the two undergraduates left for Morocco. A couple days before we were scheduled to do the videoconference we tried another practice session and achieved mixed results. At a basic level, this initial videoconference worked; we were able to see and talk to each other, but the audio was choppy on the American side and it was hard to sustain any lengthy dialogue. After even more troubleshooting, we realized that the problem was related to the Internet strength on the Moroccan side, and plans were changed to use a different classroom with a more stable Internet connection for the real conference.

On the day of the videoconference, all of our efforts paid off. After a few initial failed connections, we were able to securely link the two classrooms with clear audio and video feeds. In order to achieve the face-to-face simulation, both classrooms had their webcams pointed toward their respective students, and the computers in each classroom were hooked to LCD projectors that displayed the image of the other class on the overhead screen. In a sense, the overhead screen acted like a window through which students could see the participants in the other class, and the resulting dialogue quickly became more intimate than had we just used an audio feed or if students were writing back and forth via a synchronous chat. During the videoconference, students took turns speaking into the microphone, and the facilitators often asked speakers to stand up so that the participants from the other nation could identify who was asking a question or making a comment.

Based on our experience, the following are a few simple troubleshooting tips that may help teachers who are having trouble using Skype in their classrooms for the first time.

1. Always check the stability of the Internet connection. Wireless connections are not ideal for videoconferences; try to use a landline if possible.
2. Always run the Skype video and sound check on your own computer, even if you have used Skype before on that computer. This short system check ensures that your microphone and webcams are working properly.
3. Prior to the videoconference, do a series of dry runs between the two sites, if possible. If not possible (as was the case for our conference), try a few dry runs from your site to troubleshoot any potential problems that might arise on your end.
4. During a videoconference, it is helpful to have a mutual third party that is not connected to the videoconference on Skype in case there are technical problems with the video or audio feed during the conference. If that happens, and the connection cannot be reestablished quickly, both sides can try to connect to the third party to try and pinpoint which end of the videoconference is not working. This way, the side of the videoconference that is working does not have to unnecessarily troubleshoot and potentially create additional technical problems.
5. During the videoconference, if there is difficulty hearing the other side, try moving the location of the microphone before making any other technical adjustments. Depending on the strength of the microphone, students may have to physically come to the microphone to speak rather than speaking from their seats. Of course, having the microphone in a central location maximizes its range.
6. Whenever possible, be able to reach the other side of the conference via phone or other type of synchronous communication (i.e., instant messenger) so that any technical difficulties can be fixed as quickly as possible.
7. Of course, no matter the amount of preparation, there is always a chance that problems will arise on the day of the event. If technical difficulties occur, it is important not to get discouraged. Your students will be appreciative that you chose to try something innovative, and in most cases, you can troubleshoot the problems and try again at a later date.

REFERENCES

Berson, M. J., Bolick, C. M., Waring, S. M. and Whitworth, S. A. 2006. "Collaborative learning environments across the internet". In Research on enhancing the interactivity of online learning, Edited by: Wright, V. H, Sunal, C. S and Wilson, E. K. 149–74. Greenwich, CT: Information Age.

- Black, R. W. 2009. Online fan fiction, global identities, and imagination. *Research in the Teaching of English*, 43(4): 397–425.
- Buck, P. S. 1931. *The good earth*, New York: Pocket Books.
- Dressman, M., Journell, W., Babcock, A., Weatherup, N. and Makhoukh, A. In press. Toward technology-mediated transcultural education: Learning from a discussion of politics and culture between American and Moroccan students. *International Journal of Social Education*,
- Hesse, H. 1951. *Siddhartha*, New York: Bantam.
- Loewen, J. W. 2010. *Teaching what really happened: How to avoid the tyranny of textbooks and get students excited about doing history*, New York: Teachers College Press.
- Maguth, B. M., Yamaguchi, M. and Elliot, J. 2010. Researching, producing, and presenting: Students' use of technology for global advocacy in the social studies. *Social Education*, 74(2): 105–6.
- Merryfield, M. M. 2000a. Using electronic technologies to promote equity and cultural diversity in social studies and global education. *Theory and Research in Social Education*, 28(4): 502–36.
- Merryfield, M. M. 2000b. Why aren't teachers being prepared to teach for diversity, equity, and global interconnectedness? A study of lived experiences in the making of multicultural and global educators. *Teaching and Teacher Education*, 16(4): 429–23.
- Merryfield, M. M. 2003. Like a veil: Cross-cultural experiential learning online. *Contemporary Issues in Technology and Teacher Education*, 3(2): 146–71.
- Merryfield, M. M and Subedi, B. 2006. “Decolonizing the mind for world-centered global education”. In *The social studies curriculum: Purposes, problems, and possibilities*, Edited by: Ross, E. W. 283–95. Albany: State University of New York Press.
- Nussbaum, M. C. 2002. “Patriotism or cosmopolitanism?”. In *For love of country?*, Edited by: Cohen, J. 3–17. Boston: Beacon.
- O’Dowd, R. 2003. Understanding the “other side”: Intercultural learning in Spanish-English email exchange. *Language Learning and Technology*, 7(2): 118–44.
- Parker, W. C. 2008. International education”: What's in a name?. *Phi Delta Kappan*, 90(2): 196–202.
- Waring, S. M. 2008. “Teaching democracy to digital natives”. In *The electronic republic? The impact of technology on education for citizenship*, Edited by: VanFossen, P. J. and Berson, M. J. 161–72. West Lafayette, IN: Purdue University Press.