ADDRESSING MIXED LEVELS IN COURSES USING INFORMATION TECHNOLOGY

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"You can't always get what you want…sometimes…you get what you need."[1]

For the last two years, I have been working on a research project funded by the Entente Canada-Québec exploring synchronous and asynchronous communication between classes. For those unfamiliar with these terms, remote synchronous communication involves using technology to communicate in real time, either in writing or as a videoconference. Asynchronous communication is messaging via chat, e-mail, or some other medium with a delay between exchanges. Using these features can enliven classrooms in many disciplines, but, as you will see in this article, its success requires sound planning.

This article is an invitation to teachers to reach out to their colleagues to work together to share their pedagogical experiences as information technology becomes an increasingly important part of the learning experience. Teamwork among different Cégeps can help individual teachers understand and ultimately benefit from new pedagogical paradigms that technology has engendered.

THE INITIAL PROBLEM

In 2003, when the course entitled English in Business was being developed at Cégep du Vieux-Montréal, members of the language department identified a major problem: there weren't enough students in the program to create more than one group. This meant that the group would have students whose language levels ranged from level 101 to 103, which meant from beginners to bilingual individuals. No other English-language course at Vieux-Montréal is as diverse in terms of skill levels and, over the years, no teacher in the department has completely overcome the difficulties that such a mix entails.

There have been a variety of attempts to resolve the issues caused by this diversity, including the use of different grading scales for the same assignment, dividing the class into different skill groups, and essentially teaching two or three separate courses as well as creating mixed-skill teams and assigning teaching tasks to more advanced students. The course remains one of the least desirable in the department. Teacher reaction to being assigned the course has varied from outright refusal to acceptance of the structure, including the limitations it represents for students at all levels.

IDENTIFYING A POTENTIAL RESPONSE TO THE PROBLEM

After writing a number of columns for Profweb about the Entente Canada-Québec's research grants[2] and preparing for a column that was to appear in May 2011, I realized that I had a possible research project myself, trying to create a virtual class in which a number of teachers at different Cégeps could create multiple virtual cohorts to deal with the diversity of second-language skill levels in these classes. A number of teachers were intrigued enough to consider participating. For one thing, the project offered a potential solution to a problem that was common throughout the college network. For another thing, the grant provided funding to give each participant release time for the additional preparation required to participate in the project.

The reality of having teachers take part in a virtual group, however, proved to be more complicated than I had originally imagined. A number of factors arose as impediments to participation: The business-administration program had a number of concentrations, which, at Cégep du Vieux Montréal, were *Techniques de comptabilité et de gestion, Conseil en assurances et en services financiers,* and *Gestion de commerces.* Not every teacher felt that they would have the flexibility from their college administration or department to modify their course plans to create a virtual course with a class in a different concentration from the one my class was addressing. The times for these courses are often fixed within the concentration's schedule. Not every teacher felt that they would have the flexibility to change when class would be held. No one felt that they would be able to move their course from one semester to another.

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[1] Loosely taken from the Rolling Stones song "You Can't Always Get What You Want" composed by Mick Jagger and Keith Richards.

[2] Bruno Geslain, "The Canada-Québec Entente - Your Support for Pedagogical Innovation," on Profweb (December 3, 2007) [www.profweb.qc.ca/index.php?id=3183&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

As the 2012 winter semester approached, I had a partner offering a similar class at a college in the greater Montréal area. In harmonizing our course plans over the 2011 autumn semester, I discovered a wealth of interesting elements to put into my class, which included the following:

- **Focus on developing a business plan as a final project.**

- **A final presentation modeled on** *Dragons' Den* **with a panel of English-language businesspeople.** *Dragon's Den* **is a CBC program on which entrepreneurs have to pitch their ideas to a panel of successful businesspeople with the goal of receiving financing and mentoring from them. Both teachers felt that synchronous conversations between the two classes would be an important part in preparing for this activity, which would allow students to take part in conversations at their own level.**

- **A much more flexible grading schedule that assigned specific percentages to assignment types, such as group conversations, rather than committing beforehand to a specific number of tasks in each category.**

On my end, I was able to acquire the cooperation of the CCDMD[3] to use their Adobe Connect[4] server for our synchronous conversations. I also coordinated a number of technical meetings with staff at both schools in order to ensure the best performance of the conferencing software. Even at these meetings, a potential problem with bandwidth was mentioned. In retrospect, I realized that I should have worked a lot more closely with the technical staff of my school and kept them abreast of the difficulties that I was experiencing.

▶ **GETTING STARTED**

I will never forget the first time that I had to manage an online conversation using Adobe Connect. We had coordinated a speaking task based on a video, so students had an outline of the topics that they were supposed to cover.

Speaking over loud background noise, I felt totally powerless communicating with little video pictures of students with whom I had no relationship. We made our introductions, but some groups never got beyond that, fascinated with the technology and hamstrung by its problems. One of my partner's students from this class, however, wrote her a letter months later thanking her for the experience because she had been hired by a company with offices across the country based on her experience with online teleconferencing, even though her English was not that good. This experience illustrates the

importance of integrating the skills of the ICT profile promoted by the IT Representatives' Retwork into the curricula of college programs.[5]

In the four weeks before the student boycott, there was time to learn that students perceive an experimental course using information technology as being valuable until it doesn't work. Students were very enthusiastic about online conferencing until they weren't. There were problems: The feedback on our conferencing system using Adobe Connect was at times too loud for useful conversation. The background noise on the recordings sometimes made grading difficult, but my partner found it fun and interesting to have the recording to refer to when students questioned their grades or actual participation. There was no simple solution to improving the sound quality of the videos. The easiest improvement of all was done that first year: I deactivated my own microphone on the Adobe Connect interface. I found out that opening several virtual classrooms on my computer and keeping the microphone open in each created feedback.

Many other improvements, however, depended on modifications to course structure. Technology was indeed driving changes in class procedures. Towards the end of that semester, I began adjacent seating of students in the same discussion. Other discussions were not as disruptive and the face-to-face aspect eased the transition into a virtual environment. Both my partner and I asked students to turn off their microphones when they were not speaking. I tried to get students to have their conversations outside of the lab on cellphones that I would record on Skype. Unfortunately, my partner informed me that her college banned the use of cellphones even for academic purposes.

Perhaps the most important technologically driven change to the course structure was to schedule discussions over a two-week period. In the lab, advanced students at both schools met, while less advanced students had a different assignment. There was a lot less ambient noise, and this arrangement allowed us to change the weekly discussion topic in order to

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[3] The Collegial Centre for Educational Materials Development (CCDMD)—subsidized by Québec's Ministère de l'Éducation, du Loisir et du Sport and managed by the Collège de Maisonneuve—is a centre for producing digital resources and printed documentation for the use of teaching staff and students throughout Québec's college system.

[4] Readers can find out more about this product at [www.adobe.com/ca/products/adobeconnect.html].

[5] Nicole Perreault, "You're Already Contributing to the Development of Your Students' IT and Technology Skills" on Profweb (October 22, 2012) [www.profweb.qc.ca/index.php?id=4102&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

allow less advanced students to have a simpler topic the following week. Some students found this unfair and suggested that we use the same conversation at both levels and grade accordingly. There were rarely easy answers to the problems that arose, but, in this case, I actually felt that this procedure was more adaptive to the vast range of student abilities. By this point, however, students who were not doing well found the technology an attractive excuse for their own difficulties with the curriculum.

Conversations still lacked clarity at times, but, by the middle of the Winter 2012 semester, the conversations were beginning to show the promise of the original concept. We also used Adobe Connect to broadcast guest-speaker presentations to the other school. As with the conversations, each event allowed us to improve.

SUGGESTIONS FOR ENHANCING TEACHING

At some point, I realized that asynchronous communication needed to become an important part of student exchanges. Students were used to chatting in French and could transfer their knowledge of the procedure to English with little difficulty. They also had access to these resources during the week, so that homework assignments could be created to foster writing skills. Writing assignments could be created to tie in to themes for later discussion in class. In general, there were few downsides to blogging, other than the lack of interactivity for a supposedly communicative skill.

The flexibility of asynchronous resources really hit home when I saw the Profweb story about the J@anus Project,[6] a virtual course between Vanier College and Cégep de Sept-Îles. When I covered the NewsActivist[7] website for Profweb, I began to realize that the site had potential for my virtual classes. NewsActivist is a blogging site that allows students to post from one class to another. Our students used it to blog on a number of topics and comment on posts with the other class during the 2013 winter semester. My partner and I were free to vary assignments as we needed to, and students got writing practice, garnering reactions from their peers from several groups and feedback from their teachers in a controlled manner. We sent students comments on their posts using the tracking feature in Word. When we ran into problems, the NewsActivist administrator was around to tweak the site architecture to make the posts easier to access for students and to grade for teachers.

One of the interesting dimensions that NewsActivist has brought to the project comes from its humanities origins. In order to conform to the site's community-service orientation, my partner and I built our course around ethical business for the 2013 winter semester. This allowed us to interact with a larger audience of students using NewsActivist at an English-language college in Quebec and at colleges in the United States. After the course, a number of my students' comments mentioned that ethical business was something that had not been covered in their other courses. There was a positive reaction to learning something new, yet germane to their program, in their second language. But yet again, the technology was driving the teaching.

BUILDING GRAMMAR AUTONOMY FOR STUDENTS THROUGH INFORMATION TECHNOLOGY

I have also been experimenting with automated grammar correctors trying to encourage more autonomy in student writing. Virtual Writing Tutor[8] and the grammar checker from Word signal errors. My partner suggested that students use Grammarly Lite as she felt that it caught more mistakes than VWT. My students gave an oral presentation on these errors. For my part, I flipped my classroom by sending the class online quizzes created with CCDMD's Netquiz[9] containing cloze exercises based on the writing of the student that was to present each week. Cloze exercises are quizzes in which students are asked to choose between several possibilities at a given position within a sentence. Having faced the same choices as the original author, students came to class with an awareness of their classmate's errors before the presentation was given.

LEARNING FROM DIFFICULT EXPERIENCES

On April 12, 2013, I received an email from my partner telling me that she had received a letter signed by a majority of her students asking to opt out of the experiment. As she wrote in her letter, "Not only do I feel that we have failed in

6 Nathan Loewen, "Dissemination is the Key," Profweb (April 23, 2012) [www.profweb.qc.ca/index.php?id=4017&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

7 Gabriel Flacks, "Meandering Between Curriculum and Website," Profweb (October 22, 2012) [www.profweb.qc.ca/index.php?id=4101&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

8 These online grammar checkers for English are available at [virtualwritingtutor.com/] and [www.grammarly.com/].

9 More information about Netquiz is available at [www.ccdmd.qc.ca/eng/catalog/netquiz-pro-4].

the project, but I realize how much time has been wasted in trying to make something work that is a wonderful idea in theory, but, in reality, hasn't been what we had hoped."

Although discouraged, I was heartened by the reaction of my students. They were really surprised. One of my students sent a heartfelt apology to my partner for having fooled around during a conversation that she had moderated. The group seemed to pull together at a critical time in the preparation of their final projects. Looking back, I realize that the synchronous conversations, which had been so difficult, were only a part of what was happening in the class. The time had come to use other resources, even had the classes continued to work together. I also realized that the problem with the conversations was technical, not pedagogical. Teaching goals were being achieved.

Very quickly, other resources that had seemed secondary assumed a more important role. As planned, I got students to begin working on their business-plan drafts on TitanPad,[10] an online platform for group document authoring. Once the work on TitanPad was advanced, the texts were posted on NewsActivist for review by a humanities class at Champlain College's Saint-Lambert campus to critique the ethical component of my students' business plans.

This advice from the Champlain students was invaluable. Not only were they able to offer constructive criticism about content, they could give feedback as native speakers that had much greater effect than any comment I could make. Perhaps the best illustration of this was when one of the Champlain students wrote that, while she realized that the authors were writing in their second language, misspelling a word in the title was unforgivable if the team seriously hoped to succeed in their marketing plan.

Students also began using technology for their assignments and in my classroom. The oral grammar presentation discussed above was submitted as a video by two of my students who were too timid to speak in front of the class.

> *Cégeps can help individual teachers understand and ultimately benefit from new pedagogical paradigms that technology has engendered.*

◗ ENDING ON A HIGH NOTE

The semester's end was a very pleasant surprise. Perhaps because of all the student-centered activities that had been incorporated, perhaps because of the novelty of learning

about ethical businesses, or simply perhaps this was a very good group, the final projects were innovative and, with the exception of the most advanced group, pushed the abilities of the participants to new heights. The two Dragons, an Anglican minister for the ethical component and a "green" dry cleaner for the business side, provided real feedback. Most students worked very hard on their final projects and made important gains in reading, writing, and speaking over the semester.

The most important gain of all, however, was in confidence. One girl told me that it was the English class every Monday that had gotten her through a very difficult semester. In really ungrammatical English, another student wrote a note to tell me that he knew he had a long way to go to be good in English, but he would never be afraid to speak it again. Building the speaking confidence of our students is an important goal of the course.

The successful use of information technology requires planning both pedagogically and technically. Teachers must commit to thoroughly testing their tools before using them, whenever possible. When not possible, you have to have a Plan B! The involvement of the school's technical services is critical.


THINGS TO CONSIDER

- **Can technical services increase bandwidth to the lab when required?**
- **What platforms and software do participating schools have in common?**
- **Can a technician be on hand when needed?**
- **What resources are available from IT partners?**

Often these decisions involve the school's administration, which needs to be made aware of the project's existence and the flexibility required by a teacher undertaking such a venture. The teacher needs to inform both technical services and the administration of their requirements well in advance.

◗ CONCLUSION

Information technology can be used by a teacher to create a learner-centered classroom that can engage students at different levels, allowing learning to occur at a number of levels.

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[10] Titanpad lets people work on one document simultaneously. More information is available at [titanpad.com/].
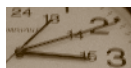
Having students of greatly varying skill levels in the same class is a more common phenomenon than I had imagined and it happens in many fields. I believe that incorporating IT tools is best achieved when teachers work closely together to share knowledge and effort. Creating a virtual cohort, which was the original premise in my project, is not necessarily the best or only solution.

> *Teacher reaction to being assigned the course has varied from outright refusal to acceptance of the structure, including the limitations it represents for students [...].*

My partner in this project and I, indeed, formed a community of practice, a group of people working together to improve their knowledge about a particular field or profession. More formal communities of practice are being created in many Cégeps in the English system for reasons such as helping teachers adjust to teaching in active learning classrooms.[11] This structure allows for the sharing of knowledge and the common development of skills.[12] Currently, Vanier College, Dawson College, and John Abbott College are all using multidisciplinary communities of practice to help teachers cooperatively improve their mastery of information tech-nology. These communities of practice, however, require someone to function as a moderator.[13] The Entente Canada-Québec grant has given me the time to moderate a small community of practice. For one thing, NewsActivist has cre-ated a moderated forum for teachers to exchange knowledge within their platform called "The Teachers' Room." This year, teachers that I am partnering with are working to create a structure that will endure and help teachers in multilevel second-language classes to use technology as a tool to help all of their students succeed for years to come. ◗

MARTIN, J. "Pourquoi développer des communautés de pratique virtuelles (CoP) pour les enseignants?", Profweb, Quebec College Crossroad for IT Integration (April 2, 2012) [www.profweb.qc.ca/fr/actualites/chroniques/pourquoi-developper-des-communautes-de-pratique-virtuelles-cop-pour-les-enseignants/index.html].

SPARKS, J. "Actively Learning Active Learning Everywhere", Profweb, Quebec College Crossroad for IT Integration (September 30, 2013) [www.profweb.qc.ca/index.php?id=4315&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

WHITTAKER, C. "Building Great Communities of Practice Together", Profweb, Quebec College Crossroad for IT Integration, (December 2, 2013) [www.profweb.qc.ca/en/publications/stories/building-great-communities-of-practice-together/index.html].

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REFERENCES

FLACKS, G. "Meandering Between Curriculum and Website", Profweb, Quebec College Crossroad for IT Integration (October 22, 201) [www.profweb.qc.ca/index.php?id=4101&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

GESLAIN, B. and L. PAUL. "Des projets TI innovateurs soutenus par l'Entente Canada-Québec", Profweb, Quebec College Crossroad for IT Integration (May 2, 2011) [www.profweb.qc.ca/index.php?id=3812&L=0&cHash=d00cc0968b8832fdea9fa0364fa5161c].

LOEWEN, N. "Dissemination is the Key", Profweb, Quebec College Crossroad for IT Integration (April 23, 2012 [www.profweb.qc.ca/index.php?id=4017&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

[11] James Sparks, "Actively Learning Active Learning Everywhere," Profweb (September 30, 2013) [www.profweb.qc.ca/index.php?id=4315&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

[12] Joëlle Martin, "Why Develop Virtual Communities of Practice for Teachers," Profweb (May 28, 2012) [www.profweb.qc.ca/index.php?id=3991&L=1&cHash=71d4bf14f8a086e40ee301aa90afabf2].

[13] Chris Whittaker, "Building Great Communities of Practice Together", Profweb, (December 2, 2013) [www.profweb.qc.ca/en/publications/stories/buildinggreat-communities-of-practice-together/index.html].