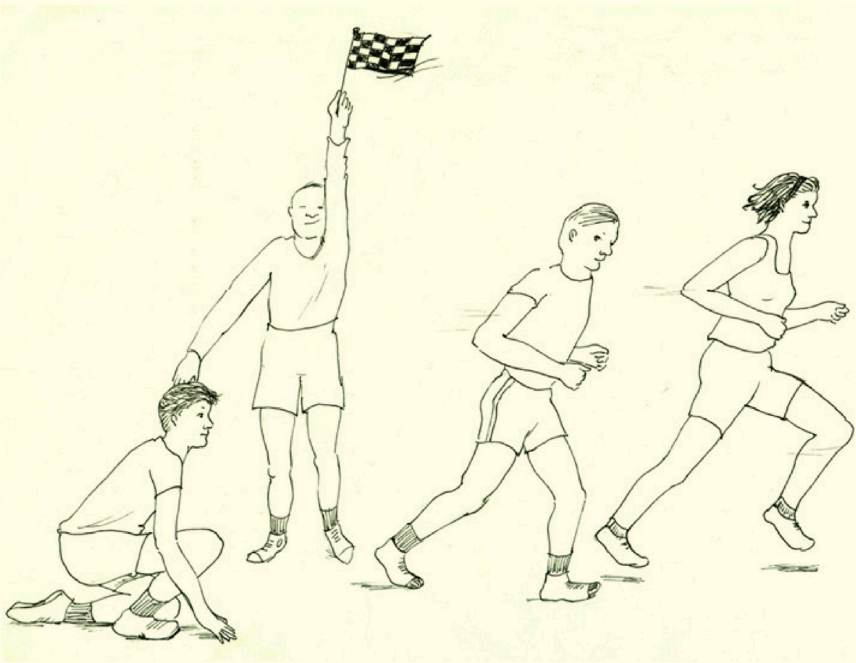


CASE STUDY 2 BEATING THE CLOCK



Case Characteristics

Table 4: Characteristics of the subject matter expert

Gender	Rank	Reason	Time	Availability	No. of sessions	K/ Design	K/ DE	GO/ SO
F	AST	0	1	1	6	1	2	2

Gender: female

Rank: AST = assistant

Reason: 0 = organisational

Time-to-delivery: 1 = course already begun or is about to begin

Availability: 1 = minimally available (1-15 hrs)

Number of sessions = 6

Knowledge of Design 1 = low level

Knowledge of DE: 2 = has never offered distance courses

General Obj. /Specific Obj.: 2 = GOs only

Case 2 is similar to Case 1, with three differences: the professor is a she, not a he; the course start date is one and a half months away, instead of four to six; and the number of working sessions ended at six.

This professor already had a course syllabus and had taught this course once before on campus. Considering the fact that she had approximately one and a half months before the course was to begin, the professor anticipated our not being able to meet very often. Consequently, we decided to get down to brass tacks. For my part, I felt it would be best to be non-directive and try to restrict my involvement to answering her questions.

Judging by these first two cases, it looks like I am in for ongoing “rapid design,” a euphemism for not having enough time to do the job right. Under normal circumstances, a designer can expect six months to redesign a course, and even that is a short amount of time. Ideally, a year is not too long. To check my reasoning, I consult with several fellow designers at other dual-mode universities; they confirm that having at least two terms to design a course is not a luxury. So I’m thinking, if these cases are in any way representative of what’s to come in this dual-mode university, my design prototype will likely have to continue to evolve and evolve quickly to adapt to what thus far seems to be “the way things are” (quoting the movie Babe).

Session 1: This time, instead of asking the professor to go through the congruency and method presentations on her own, I sat with her for about

half an hour, during which time I presented her the design approach I envisaged. She seemed relatively interested in my explanations about course planning, the steps I was proposing and the stages to be followed but, at the same time, I also felt anxiety on her part to get at designing her course.

I followed up by asking her if she had seen the presentations, which she had. She didn't have any specific questions about them. We began our work by conducting a global analysis of her course syllabus, positioning it inside the program of which it is a component. Like the professor in Case 1, she had not seen the syllabi of the other courses in the program and did not know what the objectives were for the other courses. She agreed to obtain copies of these syllabi, to ensure that her course objectives did not overlap with those of any of the other courses.

After further study of her course syllabus, I noted it was designed along the same lines as the model current among faculty in her department. It was basically a course summary presenting the usual elements found in a syllabus of this type: the course title, professor's coordinates, a general description of the course, its purpose, its general objectives, its contents (in the form of thematics), student performance assessment guidelines and, finally, a list of bibliographical references. The subjects to be studied were subdivided into book chapters or separate readings, but the syllabus provided no idea of how students would progress week-by-week through the course.

The very first task I proposed we undertake was to identify the subjects to be studied and the associated resources to be used in each week of the course. By removing the first class (during which the professor usually only has time to discuss the syllabus with students and, perhaps make some introductory remarks about the course), then reading week (spring or fall break) and finally exam week from the schedule, there remained only twelve weeks. We then allocated reading material for each of these twelve weeks, avoiding assigning students too much or too little in each. After doing a rough distribution of the readings, we revised her general objectives (which were grouped at the beginning of her syllabus) and distributed them throughout her syllabus, one or two per week.

Afterwards, the design process became rather random. She told me that her immediate concern was developing the initial learning activities/exercises she for her students. I proposed we start by developing team

exercises (TEs). This type of exercise was new to her, so I took time to explain the importance of such activities from a socio-constructivist perspective and emphasized the necessity of creating the most relevant exercises possible in light of the objectives to be reached. We returned to her syllabus and, after breaking down the general objectives, we started identifying specific objectives (SOs) for the first two weeks of classes. We were then able to identify TEs that were directly linked to her SOs. Students would be required to accomplish the TEs in teams of four or five, depending on the numbers enrolled in her course. The TEs were designed to help her better supervise her students because, according to the scholarly literature (Colbeck, Campbell & Bjorklund, 2000; Laurillard, 1993; Millis & Cottell, 1998), teamwork and peer-to-peer coaching has been amply demonstrated to be particularly effective in enhancing learning, especially for retention and motivation, with the advantage of requiring little involvement or time investment on the part of faculty, other than an upfront description of exercise completion guidelines and a follow-up synthesis. The kinds of team exercises we developed were, for the most part, based on weekly readings, often consisting of open-ended questions for debate, the results of which would be shared in class, seminar-style.

She also wanted to discuss videoconferencing (V/C), with which she had little experience. These weekly virtual meetings were organized according to the same schedule as campus-based courses and lasted as long, i.e. three hours with a twenty-minute break at midpoint. Since this was the first time she was to deliver a distance education course, she asked me to explain the difference between on-campus teaching and teaching via videoconferencing: limitations, guidelines, tips, resources requiring development, etc., which I did.

In hindsight, I realize that I probably downplayed any real differences between in-class teaching and teaching via videoconferencing, likely in an unconscious (or semi-conscious) attempt to allay her fear of starting this course. There are, of course, differences, especially with regard to faculty mobility in class. Those who are used to moving about (writing on the board, interacting spontaneously with students) may feel a bit stymied by the limits of V/C, at least given the technical set-up we had at our disposal. Our set-up required the professor to move as little as possible so

as to not interfere with audio and video quality, ideally using the document camera rather than the SmartBoard (which seemed to serve no purpose whatsoever), all the while not forgetting to switch back to the headshot camera after using the document camera.

Afterwards, at her request, we began to analyze the compulsory readings in her course. She had already chosen a textbook and other reading material (mostly short articles and case studies). This brought us to the work of developing reading comprehension exercises that students could be expected to complete after doing the readings. I realized that since the professor was used to teaching on-campus, she presented a lot of her guidelines and instructions verbally. Therefore, I suggested that she document everything she told her students in class, so as to add it to her learning exercises. We then developed the first reading comprehension exercise (RCE) of the course, which would serve as a model for elaborating subsequent exercises. Doing so brought us to the topic of objectives and how they might form the basis for “modularizing” her course, i.e. “chunking” it (Reigeluth, 1999).

We worked on identifying her expectations in the most precise way possible. For instance, she had a number of fundamental must-see elements (e.g., the scientific foundations of her discipline), which she intended to present to her students at the beginning of her course. The very act of identifying a specific number of elements seemed to help her stay within the available time each week of her course. We continued identifying her RCEs, and also other individual assignments that students were expected to do (and which were to be marked), such as oral presentations about theoretical approaches. Intuitively following an emerging, iterative design pattern brought us around, once again, to talking about team exercises, namely team presentations. Considering the fact that this professor neither knew exactly how many students would be enrolled in her course, nor where they would be enrolled (on the main campus or at a satellite campus), it was difficult to anticipate the size of the teams or even the types of teams, i.e. virtual or location-based, that would emerge. While waiting for this information, we discussed team exercises dealing with the simplification of some key concepts. In this regard, one of their assignments was to develop a conceptual map of an abstract concept, based on a model the professor would supply to

serve as an advance organizer, *à la* Ausubel (1963). We discussed which guidelines should be provided to students to prevent their reproducing the model they were given, which they might do in the absence of clear instructions.

After completing that exercise, we once again returned to the readings chosen for her students (which represented her principal learning resource) and we began distributing them throughout her course. In this way, we positioned the readings to be done, week by week. At this point, the professor wanted to analyse the contents of the readings, to make sure that there was proper “concept chaining” (her term) and also to discuss the limits she wished to set for this course. After analyzing and adjusting the linkage between all concepts and the linkage between the concepts and the readings, we ended this long session by inserting into her syllabus bibliographical resources to clarify elements presented in the textbook and to offer alternative perspectives.

Bouncing around from one problem to the next makes me realize to what extent an ID must be flexible while accompanying faculty through the design process. The professor is naturally nervous as she approaches teaching her first course via videoconferencing and this nervousness translates into a muddled session during which we move haphazardly through various design stages. Flexibility appears to be necessary, for had I remained faithful to the usual design phases and advanced through each one systematically (finishing each stage before moving on to the next) she'd likely have abandoned the process by now and forged on ahead alone, doing as she saw fit. However, by attempting to answer her most urgent questions and by finding concrete solutions to her immediate and particularly vexing problems, I believe I managed to provide her with the kind of help she needs, albeit not the kind I had envisioned.

Session 2: The professor informed me that she wanted, during this session, to focus on assessing student performance by reviewing the various instruments of measure and evaluation that she had already developed for her course. Based on previous experience, she knew that she wanted her students to complete a quiz every three weeks, carry out a team project and write two exams, one at mid-term and the other at the end of term. Moreover, she wanted to encourage student

participation in various course exercises, such as the online discussion forum and the videoconferencing-based weekly class. We also discussed allocating points for participation. We reviewed her existing assessment instruments, taking special care to rewrite her guidelines for students. Before ending our conversation on this subject, we also looked at her marking scheme and her clearly-identified assessment criteria.

On participation: in most cases, professors enjoy complete freedom in identifying the number of points that they wish to assign to student participation in their courses. According to available information (gleaned from discussions with faculty teaching in the Humanities), among the professors who assign points for participation (not all do), the total number of points usually varied between 10 to 15 percent of the final mark. However, I later learned that participation didn't seem to matter in some faculties (such as in the Physical Sciences), where it was only expected that students be successful in their exams.

We also discussed the pros and cons of paper versus electronic assignment submittal as well as how to manage the additional workload of supporting students working at a distance.

At this point, I begin thinking about the progress we have made during our working sessions. I realize that the professor has taken little notice of the design model I had proposed to her at the outset. Was she not interested in the model and in its different steps or does she simply not understand it? When I first spoke to her about steps, namely analysis and module-building, she seemed to understand these concepts, but as for the others, teaching strategies and learner support, they appear to be vague to her. She does not seem capable of distinguishing between, on the one hand, designing her teaching resources and, on the other, designing learner support activities. I decided to try a new tack.

I then spoke to her about the importance of identifying all the elements which were to be presented to her students during a given week, one week a time. We thus returned to the elements we had created up until then: the objectives, the contents (or materials) and the teaching and learner support exercises and resources. It was at this point that, in order

to put everything together, I understood that we should develop a grid to help us visualize all of these elements.

At this point, I'm starting to imagine a different course syllabus, one that would facilitate visualizing the whole course at one glance. Instead of the traditional syllabus model used in most universities (for instance, see various syllabi at the University of Texas World Lecture Hall: <http://web.austin.utexas.edu/wlh/>) and which is, for the most part, essentially characterized by its verticality—the composite elements being aligned from top to bottom—I could now see the necessity of aligning these elements on a horizontal plane so that the students could see, in a clear and precise way, what was expected of them (objectives), what they had to work with (content) and when they would be doing it (exercises).

Session 3: The professor had obtained the syllabi for the other courses in the program, so we began their analysis and found that there was no major overlap between her objectives and those of these other courses. Having satisfied our curiosity, we turned our attention back to the study of her syllabus which, in light of the above reflection, was a decidedly vertical course syllabus.

During this session, we returned to the question of objectives, namely the general objectives for her course. The initial distribution of her general objectives had not been made on a weekly basis but rather by dividing the course roughly into four parts (which she called units). We began re-dividing her course up into weekly components so as to make it easier for students to understand what they were to do and when they were to do it. She agreed and so we redistributed her general objectives at the rate of at least one per week.

As in the previous case, the professor had never had the time or taken the time to finish writing her objectives because her department did not require faculty to define specific objectives in their syllabus. Consequently, I only had a rough idea of her expectations *vis-à-vis* her students, as I believe she did. To remedy this, we began identifying specific objectives for each general objective. Like the professor in the previous case, she at first had difficulty writing her objectives, but we worked at it until we had completed the first four weeks of the course. At that point, she said (rather dismissively) that she would use the same

model to finish writing the objectives for the remaining weeks (Weeks 5 to 14) but I had my doubts. Again, my explanations of the necessity of creating a course syllabus based on objectives rather than on content did not hit home. Consequently, given this manifest lack of interest on the part of the professor for writing objectives, I decided to limit any further intervention on my part to a revision of her general objectives.

Over the years that I've worked with faculty, one thing I frequently notice is, when faculty write objectives, they tend to do so from their own point of view, rather than from the point of view of learners; that is, they tend to write about their teaching objectives rather than students' learning objectives. Furthermore, the specific objectives tend to be either too general (non-operational and virtually immeasurable) or too specific (a series of tasks to be carried out, more like exam items than objectives). Not for the last time in these case studies, confusion about objectives versus exam items, tasks, steps, and so on resurfaced.

Again, I was confronted with a professor's manifest indifference to writing objectives. Either she did not see the necessity of doing so, or the urgency, or both. She mentioned her concern that clearly defining objectives "reveals too much" to students, in turn making exams and tests "too easy." Like the professor in Case 1, she did not see any value in "laying everything out for them" [the students].

In my view, this exemplifies how unimportant faculty consider writing objectives as compared to writing course content. It is at the cost of sacrificing objectives that courses are developed. Moreover, in the original syllabi, I noticed that the main part of virtually every one deals with contents, sometimes divided into sub-sections, units or modules. These professors are very aware of "elements" they want to "cover" (a favourite verb among faculty) with their students as well as the order in which they want to present them, but when I ask them questions about what the point is (i.e. the objective) of covering this content, they tend to be evasive.

This obvious lack of interest on the part of faculty for objectives-writing (and the recurring pattern of resistance to doing so) is starting to make me question the usefulness of objectives higher education. Maybe faculty have a point. It is a fact that instructional design as a field of practice, and subsequently of research, didn't start in universities, but in the military and then in industry, where it is of the utmost importance to train personnel

for competency, skills mastery and other observable activities. It is also important in large organizations that large numbers of individuals receive the same training and be brought to the same competency threshold. Maybe that was the problem? Faculty see themselves as being responsible for arousing intellectual curiosity in their students, of developing minds and sharpening intellects, but they definitely do not see themselves as mere “trainers,” aiming to reach objectives. So, how applicable is instructional design to higher education? Now there’s something to think about...

Afterwards, we returned to examining linkage between course contents from one week to the next as well as their sub-division into exercises. This activity seemed to hold more interest for the professor. Our analysis of her course contents revealed a certain level of redundancy in the didactic resources she provided to students. We saw some overlap in the proposed readings and recognized that students did not need to read 40 to 50 pages of text to be able to attain the weekly general objective. Thus, we spent some time analyzing her intended course content as well as its format. As mentioned, her course content was mainly comprised texts to be read, sometimes articles, sometimes book chapters or excerpts from books, sometimes the professor’s course notes. We then proceeded to distribute these contents throughout the course according to the already-identified general objectives, in conformity with proper ISD practice although running counter to a well-established faculty practice of first identifying the contents and then identifying the objectives. As we made our way through her content, we analyzed linkage between elements and, always playing the devil’s advocate, I asked her questions about her reasoning behind various choices of elements and why certain elements were linked. She told me that this was the first time she had ever gone through this process with anyone else, being used to working without feedback from anyone, even colleagues. Although she found it was a “difficult and sometimes annoying process,” she had the feeling that we were “greatly improving the internal logic” of her course. As a result of noticing a lack of resources in some cases, she had to identify other potential sources of content in order to complete her course. Nevertheless, she had already identified about 80 percent of the documentary resources she would be using.

Finally, in spite of the fact that we could have spent many more hours on it, we had to hurry because the professor only had about six hours a week to spend in completing her course. So, by the time this long (and winding) working session drew to a close, we had managed to get to Week 5 of her syllabus.

Session 3: This week, we decided to complete the process of identifying the didactic resources for the remaining weeks of her course. This work went well. Once again, we closely examined her concept-chaining and made some minor changes. Roughly speaking, the course remained intact.

Discussion then ensued on delivering her didactic resources. These were slated to be available on the course website, either as documents which could be opened and modified online or downloaded and modified and then resaved offline. The question of access to these resources was, in the eyes of this professor, of the highest importance. We were facing what she considered a major decision: either to allow learners to simply download the didactic resources or to limit access by only allowing them to be viewed as non-modifiable, on-screen resources while students were online. The professor perceived this decision to be problematic from the point of view of copyright law and intellectual property. According to our support team, technically speaking, it was simpler to allow students to download what usually amounted to .doc, .ppt or .pdf files, so that they could study them, complete the assignments, and then post them for marking. The professor was afraid students might keep copies on their hard drives and sell them online. As a consequence, she preferred severe limits on student access to her documents.

In retrospect, her decision to limit access to her documents, taken during discussions with the support team, appears to have been a means for the team to reassure her, even lull her into a false sense of security. With regard to the average student, this solution did seem to offer the professor a better level of security for her intellectual property. But, as we all know, if there is sufficient motivation, any student can reproduce and redistribute whatever appears on their screens. The down side to her decision was the limit on students' interactivity with the didactic resources, unless the support team were to invest a considerable number of hours in producing each resource in

a protected format. As it turned out, the problem of IP would to continue to haunt us throughout the entire case study process.

Session 4: We now moved on to the analysis of a student support strategy which would complete the professor's teaching strategy. Indeed, considering the considerable amount of reading to be done by students in this course, we decided to supply learners with two types of exercises to improve content-learner dialogue.

Type 1: individual exercises

Type 2: team exercises

Type 1 exercises aimed at producing a first level of understanding of the texts being read, i.e. terminology acquisition, at both the abstract and theoretical levels and at the level of what I termed "learner cognitive positioning" (inspired by Skehan, 1998), meaning the student would read texts and answer questions which required his or her taking a position on issues raised. Type 2 exercises were intended to allow the learners to compare their answers from the Type 1 exercises with their teammates and, bearing in mind a socio-constructivist approach to learning (Sullivan-Palincsar, 1998), to negotiate the answers obtained. This exercise was intended to allow learners to reconcile their viewpoints with those of their co-learners.

Given the fact that this course was going to be delivered at a distance with about thirty students distributed over five sites, it was necessary to envisage appropriate means of follow-up and supervision. Because an existing agreement had established that this course would be delivered live by videoconferencing at the rate of three hours a week, with learners congregating at any one of five available videoconferencing sites, this meant the principal means of providing learners with feedback on their processing of the course didactic materials would be during this synchronous event. In addition, we established that the main means of asynchronous feedback would be via email and an online discussion forum because all of the learners had access to university-provided email accounts as well as to the course website.

I am reminded that I need some sort of tool with which I can better guide professors through the design model, such as a list of tasks they would carry out or, better still, a form they could complete. Consequently, I start developing a course syllabus template in the form of a synthesis grid, which could give form to the syllabus-development process. Based on my earlier reflection about vertically- as opposed to horizontally-designed course syllabi, I'm thinking that this synthesis grid (see Table 5) should be structured differently than the traditional/classical course syllabus in that it should have two dimensions: one vertical and one horizontal. The course would not be divided into modules or units but, for simplicity's sake, would be directly linked to the available time for each class period. As is the case for most three-credit college or university courses, total seat time is usually 45 hours, spread over 15 weeks. Hence, the grid would be divided into temporal units corresponding to each of these weekly course blocks. Weekly progress would be charted along the vertical axis line and the various course components (objectives, subjects/content and exercises) would be displayed along the horizontal axis to create a continuous link between every component. The connection between the design model and its representation as a functional synthesis grid seems natural. Having already decided to abandon too rigorous an insistence on the ISD model, I feel the new grid may indeed assist faculty in their course planning. I intend to implement this grid during the next working sessions, to see if I can get course design to finally take off.

I've now fully grasped that distinguishing between teaching, learner support and evaluation activities is more of a theoretical and academic interest rather than a universal and practical interest for faculty. To simplify matters, I could simply help them develop an exercise in which there was a teaching component (a resource), a student support component (like a series of closed- or open-ended questions) and an evaluation component (limits, conditions and performance criteria). Also, professors could decide whether an exercise would "count" in students' final assessments or not.

Thinking about assessment makes me wonder how well we are using "class time." In a traditional course, a professor spends approximately three hours a week presenting his or her content to students and then he or she requires them to spend approximately six hours outside class studying (completing course individual or team activities). In our case, courses are delivered via weekly videoconferences so the same number of hours of seat

time is usually maintained. The remaining six hours of activities also fall into the same pattern as on-campus courses but, in general, increased use of electronic media is becoming the norm:

- compulsory reading that the professor provides, either as a hard copy or increasingly, electronically, to students;
- class notes and guidelines are increasingly posted online on a professor's website;
- teaching resources (.ppt presentations with attached audio tracks, 2D or 3D animations, .pdf-formatted texts, audio or video-based documents to be studied by students before class, etc.);
- individual or team exercises based on course readings but, increasingly, on websites to be researched, etc.;
- increasing interest on the part of faculty not only to allow students to exchange ideas online in the discussion forum and via email, but also their interest in participating in such exchanges.

These examples of “blended learning” whereby classroom activities spill over into cyberspace appear to be enriching the didactic relationship between faculty and students but also, seem to be increasing faculty workload. How much enrichment can faculty support?

Table 5 : The synthesis grid model

Design phases						
Week	1	2	3	4	5	6
	Analysis	Module-Building	Teaching Activities Development	Learner Support Activities Development	Evaluation Instruments Development	Items for Ongoing Improvement
X						

This fourth meeting concluded work on Case 2. It had been a short yet highly productive course design project and it had given me new insight to carry on. What had become an incredibly frustrating experience suddenly got a lot easier... and interesting. The synthesis grid held the hope of providing faculty with a new tool which might speed up their course design and speed seemed to be of the essence, given the small amount of time I'd been given to work with.

Ex Post Facto Interview

On the instructional design process: “This design process allows for a high level of student autonomy, and because of this I’m finding it hard... I have to be rigorous in my planning of exercises and activities and in my guidelines...I’m always wondering: “Is it enough?” With distance courses, everything has to be planned, when possible; we can’t just let things happen randomly or spontaneously.”

On team activities: “I used to get students to work together as teams in class. Now, I get them to work together before class. So I feel that there is less contact (between me and my students); it is more distant...I have more difficulty checking on what they are doing. What’s more is that, besides the distance students in the multimedia rooms, I also have students on-site in my classroom. When I pay attention to the distance students, those on-site feel left out...if the technology allowed me to do what I want to do, that would be great...like getting good quality audio.”[...] “They always have an activity to do before coming to class, like an individual or team assignment. Should they have trouble with one or the other, I go over them in class, during the videoconference.”

On the usual activities sequence (individual, teams and plenary session activities): “This is the 1st time I’ve done things like that. Did things work out? Yes and no. Yes, they [my students] appreciated the structure [of the course]. And no, they said they had too much work. I realized that I had to opt for either an individual activity or a team activity but not both in the same week. To worsen matters, it was a spring term course so everything was accelerated. I’ll never do that again...there just wasn’t enough time.”

On weekly readings: “My students did their readings because they had assignments linked to the reading to hand in which I corrected, but not all the time. There was just too much had to correct every week, plus it was a crash course! So I did random checks, say 4 out of 12...that was the carrot I had to work with! Then I gave them points for participation, for simply handing in their assignments. I asked them to complete the assignments and to hand them in, but there were no points for right answers...it just wasn’t possible.”

On videoconferencing and the plenary session: “I always began by reviewing the assignments, questions they couldn’t answer... I asked them to hand in their assignments in advance so that I’d have time to go over them but I had to do that in a hurry. Then, in class, I used the Socratic method of questioning. But, at a distance, there was this gap which was annoying, even “hellish.” I’d ask a question... silence... then I’d ask it again ...while they had begun answering it. The next part of the course dealt with their presentations on the weekly course content. I usually asked them to draw me a diagram which represented the main concepts from the weekly readings and to organize everything in a visual representation, to show me that they had understood the material.”

On teamwork: I had divided them into groups of three, triads.”

On course designing and professorial workload: “Yes, absolutely, a distance course takes more time to plan but I had a course release to do this.”

On technology: “I was having computer problems at the time...I wasn’t receiving my e-mail. I didn’t use the LMS e-mail because I found it confusing. But I’ll likely have to start using it to separate my email because students send me their assignments directly every week... their presentations, assignments.”

On using Web resources in class: “I identified a few sites but some disappear and it’s frustrating. But I use it [the Web] more and more. There is obviously the language problem but I try to find French-language resources. (How do I use Web for educational purposes?) That depends on the site. I ask my students to search for precise information, to investigate these sites and then report of what they’ve found. I believe experiential learning is very important. I ask them questions open-ended questions like ‘According to you’... ‘in your opinion’...I ask them to make the link between their own personal experience (what they observe) and what the experts say.”

On the students [enrolled in this course]: “It was a diverse group. They were from several fields but that was not a problem in itself. I am used to

working in multiple areas at the same time. In such cases, I work more on a 'general' level, trying to provide all with relevant examples."

On using information and communication technology: "Yes, I use it technology] a lot in my teaching but also in my research. Like with Australia! We have only technology to bring us together. They are mostly asynchronous exchanges for the moment but, if possible, I'd like to move on to synchronous exchanges. Now that I have a new computer, I'm increasingly using technology. Also because of the new multimedia room, I avoid using chalk. I prefer to go directly to sites online and then maybe show a video, etc. We analyze sites in class and we criticize them. Then I show PowerPoint slides every week. I find Internet sites that can help some of my students who have difficulties, such as problems with language. They are supplementary resources for my course."

On course planning: "I get back the time [invested]. Certainly. My students have quite a bit of work to do outside class."

On using the forum: "I think of using it but I haven't yet got around to it."

On assessment: "I am not in the habit of thinking in dichotomous terms of individual evaluation versus team evaluation but I suppose that my assessment is essentially 100 percent individual because each student has to meet the course requirements. Then, assessment of teamwork is problematic because some students do not work. I use a self-evaluation grid plus a team evaluation instrument for which each student is asked to assess what he or she has done as well as his or her peers. But students are never going to 'squeal' on their peers...I have to admit it is a pain to manage, personally. So, since this way of assessing students is such a pain...I really don't know how to manage teamwork... and online to boot! It is more complicated. I believe teamwork is rich, especially in teams of three or four students, no bigger than that. Usually triads, not dyads, except for in-class for random assignments. I now try to get them to do their teamwork outside of class. But I have to admit I do have trouble managing teamwork at a distance."

On faculty's role in the future: "I have always spent a lot of time planning my teaching. I now think that with the new technology, I am going to be able to start offering my courses partly in real-time and partly in differed mode, but never again using videoconference. I would also like to participate more actively in the online forum. I want to get involved, to guide my students, to answer questions, to deepen their reflection. I can start teaching directly from my office. I do not think that the didactic relationship will be as rich (as our relationship in class) but it's possible."

On using the telephone to support learners: "On the telephone, we can't establish a real didactic relationship, not as much as in class. The non verbal is too important. Maybe the non verbal is 80 percent of the message. To see one another is important, that is if we want to avoid a 'pedagogy of just getting the answer right'...especially so in my particular field where the need for good communication is stronger than in other fields. I need to see my students...their faces. But I am able to adapt, I'm flexible."