

## **From Telecourses to Online Courses: a Story of Redesign**

### **Du cours télévisé au cours en ligne : une histoire de redesign**

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#### **Abstract**

This case deals with the redesign of a standard telecourse - printed material, professional studio video recordings and phone tutoring – into an online course. The redesign involved an adjunct professor in the Humanities having some experience in distance education but little with learning technologies. It was a two-year project including the grant application process. The main issues included replacing television-based content with multimedia content; understanding the complexity of interactions between materials, students, and tutors; and adapting traditional assessment approaches to online instruments and methods.

**Keywords:** online assessment instruments; the MISA instructional design method; multimedia in education; prototyping; redesign; Humanities; visual modeling

#### **The institutional context**

This case took place at St-Lawrence University (SLU), a mid-sized Canadian university with approximately 200 online courses. Thierry had been working for 10 years as an instructional designer, collaborating with several schools on all kinds of projects involving technology and pedagogy. One of those schools was Social Sciences where he had worked on a few projects over the past years and, as a result, had established a professional relationship with Dr. Brisebois, the School Academic Projects coordinator.

Dr. Brisebois had just invited Thierry to a meeting with Julie, an adjunct professor, about the online adaptation of a distance education course already offered by the school, “*The History of Social Sciences in North America*”.

### **The key players**

Thierry: instructional designer

Julie: adjunct Humanities professor and content expert

Dr. Brisebois: Academic Projects Coordinator for the School of Humanities

Sophie: multimedia specialist

### **Start-up Meeting**

After the usual introductions, Dr. Brisebois reminded Thierry and Julie that, as both a professor and the School’s coordinator, he had full responsibility for the course. Since Julie had been in charge of the course for many years, she would act as a subject matter expert (SME) for this new version.

Dr. Brisebois: *"As you both know, our university is progressively moving towards online learning and is encouraging all efforts in this direction. Recently, Julie told me that the distance course that she had been teaching for some years and which had 200 enrollments was due for a review. Is that right, Julie?"*

Julie: *"That’s right! The telecourse is more than ten years old and does not even make use of the Internet. The Program Committee has decided it is time for an overhaul."*

Dr. Brisebois explained that the idea was to redesign this course that included printed material, television-based video recordings, and phone tutoring and turn it into a new up-to-date course. As this telecourse revolved around a series of recorded interviews

and animations, he said: “*A new series must be designed and filmed. And a website should be added.*”

Thierry: *That sounds like a good idea. There are so many things that can be done with a course website these days. But, if you’ll allow me a question... why do we have to redo all of the recordings? TV production is so expensive these days and a website offers so many ways to present course content. In addition, SLU just doesn’t fund studio-quality recordings anymore.*

Dr. Brisebois: *I’ll put it simply: studio recordings that are broadcast on an education channel is the way to go. Sure, we can modernize the concept but we are not going to throw everything out and start from scratch. Besides, I have to say that I’m quite fond of courses broadcast on the education channel. I’ve heard that there are some external sources of funding to which we could apply. I’ve also heard that you, Thierry, were an expert in grant-writing. Is that right?*

Thierry accepted the compliment and confirmed that he did indeed have quite a bit of experience in project management and preparing funding applications. Though he certainly was not convinced that broadcasting a course was quite “*the way to go*”, he purposefully decided to go along with the idea yet he still felt he had to temper expectations:

Thierry: *I’m happy to help you complete all the necessary work to prepare the funding applications but you know as well as I do that when we’re talking about external funding, it’s never a slam-dunk. You always need a back-up plan, just in case. But if this is what you want, then let’s try it!* (turning towards Julie): *So, when do we begin?*

Appearing a bit embarrassed, Julie said she didn’t have much time available at the moment. To ease things, Dr. Brisebois assured her that she would be released from some of her obligations so she could work on this project. Feeling energized by the meeting, Julie and Thierry agreed to meet again the following week.

## **Julie and Thierry meet**

At the start of the meeting, Julie informed Thierry that she had been in charge of the current course for about ten years now. Though very motivated to learn about online learning, she didn't really know much about it. For instance, the only things she knew how to do on a computer was email, word processing, and using some specialized software apps. Interestingly though, in the 90s, she had acted as an SME for a multimedia project which was subsequently delivered on a CD.

Thierry: *Julie, can you describe your course? I just had a very cursory look at your syllabus.*

Julie explained that, basically, it was comprised of 13, 60-minute studio-recorded "episodes" with an accompanying textbook. Every week, students watched the episode, read a chapter of the book and then completed some drills. The course had both formative and summative assessments, which were corrected by a team of tutors. The corrected assessments were then returned to students by snail mail.

Thierry: *OK, so this is a classic distance education course. But what is your vision of the newly redesigned course?"*

Julie: *Besides redoing the recordings and having a course website to host the course material, I'd love to create a tutorial like the one I made in the 90s, but using the new tools and, this time, making it Internet-based. What was great about the original tutorial was the visuals, the interactivity, and the sound track.*

Julie added that the CD produced at the time was not being used in the current course because the content had changed.

Although Thierry told Julie about the services he could offer as an instructional designer, he figured that she already knew pretty well what IDs do since she had

worked with an ID in the first iteration of this course. He also showed her a one-page document about the course design method used at SLU, which was based on the ADDIE model, as well as on Gagné, Briggs and Wagner's learning principles (1992). Thierry realized that Julie's current course syllabus was well done: the learning objectives were well written, there was step-by-step activity sequencing, and the assessment activities were all adequately described. Basically, the syllabus had all the required parts. Thierry explained to Julie that the redesign would focus primarily on revising the learning strategies and implementing the technologies to be used for online delivery. Then he presented a few examples of Internet-based courses.

*Thierry: As you can see, there is quite a range of possibilities. As I told Dr. Brisebois, a new series of recordings is one possibility, but getting funding is key. The production cost for professionally recording is a lot more expensive than it used to be, even ten years ago. So we'll see what kind of money we can come up with.*

The next step was putting together a preliminary budget and production schedule. Julie's school had already received an institutional grant of a few thousand dollars to develop this online course but that would not be enough to include a TV production. Because of the scope of the project and the long TV production timetable, usually weeks if not months, Thierry predicted that course redesign and development would take at least a year.

**Metareflection:** Thierry had not been around during the golden age of "telecourses," a form of distance education that was popular in the 80s and even into the 90s (Jacquinot, 1985; Mugridge et Kaufman, 1986). Fortunately, he was part of the original production team for one of the SLU telecourses and had also participated in updating a few of these courses. In most of these courses, the

weekly TV episode was a summary of the week's reading assignment and was at the very heart of the course. For a long time, there had been high enrollments in these telecourses, which had been considered showcases for the University. And so, the high production costs were tolerated. But costs had skyrocketed over the last few years and SLU didn't want to fund their production anymore. "*We're going to have to be very creative to find some money,*" Thierry mused.

### **Discussion about the project scope and funding**

The next two meetings were devoted to the new course content and to the proposed new series of recordings.

*Thierry: From what I can see of the recordings, they were well produced and quite interesting but the concept is a bit old-fashioned: an enthusiastic professor talking while writing on the blackboard. What's the goal of these recordings? Is this the only way to deliver the course content? Is it your intention to do exactly the same thing or do you want to make some adjustments?*

*Julie: This TV lecture method is very traditional indeed but it has been working well for us for the last ten years. Students tell us they like it because they feel as if they were in class. Since the recordings were done, Dr. Rumble, who was the professor in charge of this course, has retired, but I've recruited a young and dynamic colleague from our department. She is very interested."*

The discussion continued on the learning objectives linked to the proposed recordings and the overall production budget. The last series of recordings had been divided into 13, 60-minute episodes, one for each week of the course. To limit production costs, Thierry proposed synthesizing course content in order to make each episode a more acceptable 30 minutes. Even with this modification, he thought the production cost would escalate into the thousands of dollars.

Thierry: *“Since our university doesn’t fund this kind of production anymore, we have to look elsewhere. I know of a national funding program. I think it’s worth trying.”*

Julie agreed with the suggestion. First, there was a *letter of intention* to write. This was an opportunity to gather all of the information on the course and to question each aspect of the project, starting with its target audience and scope. Thierry assumed responsibility for writing a first draft of the letter and emailed it to Julie for her comments and approval. The following meeting was used to complete the letter and submit it before the deadline.

### **Writing the Grant Application**

After receiving word from the funding agency, giving them the green light to proceed with their grant application, Julie and Thierry began seriously working on it. Among other things, this meant that they had to adjust the course learning objectives to conform to the grant program specifications and they had to be as concrete as possible about the proposed recordings and the learning approach targeted. After a fair amount of discussion, they started to feel comfortable working together.

Thierry: *What about using an interactive whiteboard? They have a lot of interesting features. For instance, you can upload prepared content to speed up demonstrations.*

Julie: *For sure, with only 30 minutes per episode, there’s no time to lose. As for the interactive whiteboard, you’ll have to show me and my colleague how it works.*

Writing the grant application allowed Julie to make an inventory of the material she already had on hand: the syllabus, the original recordings, a drills bank, and a textbook. She filled in the application form using this information. The next meeting was about the multimedia part of the course.

*Julie: As I said, I'd like to have multimedia demonstrations and drills on my course website, similar to what I did in my 90s multimedia project. But I remember this took a lot of time to develop. Is it simpler now?*

*Thierry: Ah, sort of. Nowadays, we have rapid e-learning software, a kind of do-it-yourself authoring software. The features and usability of this kind of software have improved a lot lately but still, I think we may need programmers for the more interactive content.*

Julie and Thierry agreed to request additional funding in their grant application that would enable them to develop some multimedia demonstrations to illustrate some of the more complex concepts, as well as some interactive drills to help with content acquisition.

Julie was co-author of the required textbook for the course, along with three other co-writers. The problem was that to use her work as a source for a multimedia adaptation, she would have to reach an agreement with the publishing house, which owned the copyright, and her three co-writers. Since she had had a dispute with one of the co-writers, Julie thought it might be best to write some original content which, she figured, should not be that hard since she had all of the basic building blocks. She decided she would start writing this summer, when she had a little more free time on her hands. Fortunately, she would be able to reuse all of the drills from the current course.

Julie was almost done completing the grant application form. She left the scheduling and budget production sections to Thierry because she didn't feel qualified to complete them. After a few email exchanges and subsequent revisions, the application was signed by Dr. Brisebois and sent in. Meanwhile, Julie began writing the new content.



### **Meta-reflection: Grant Applications for techno-pedagogical development projects**

Since he'd been working at the SLU, Thierry realized that even if professors were experts in research grant applications, they often felt frustrated and helpless when completing a grant application for a techno-pedagogical development project. In most cases, they just didn't have the requisite skills in pedagogy, technology, and project management. An instructional designer's support was more than welcome in such a situation, provided that he/she had some training in project management, which is not always the case. Thierry was confident that he'd done a good job because he had had the chance to learn these skills while working in the private sector.

### **Application rejected – What do we do now?**

A few months later, Dr. Brisebois called Julie and Thierry into his office for a meeting and told them that the application had been rejected. They were disappointed but they still wanted to carry on with the project although now, there would be no new studio-quality recordings for sure.

Dr. Brisebois: *Without our studio recordings, I'm worried enrollments will plummet.*

Thierry: *Well you know, educational TV is not what it used to be in the 80s. There's a wide variety of TV channels available now in a fiercely competitive market. Julie told me enrollments have already declined over the last few years anyway. Today, the new trend in educational video is web streaming. Maybe we should discuss that.*

Dr. Brisebois: *Was that your plan B all along, Thierry?*

Thierry: *That was one of my back-up plans since we now have many alternatives available: streaming user-made video or e-learning content from websites, using a synchronous virtual classroom system that allows for real-time exchanges, and using Web 2.0 groupware, to name just a few of those options.*

Looking skeptical, Julie said that she didn't feel very comfortable with any of these new technologies because, up until now, there had always been a human being explaining content in the course.

Julie: *"So how can we maintain the human side of the course?"*

Thierry showed Julie and Dr. Brisebois a few examples of courses implementing these technologies which allowed them both to get a better idea of the possibilities. Drawing on her experience with multimedia in the 90s, Julie agreed that numerous short video clips, combined with drills, could produce acceptable results. The professor's webcam didn't seem to be necessary, based on the samples that she had just seen, but she would like to add a sound track to the video clips and multimedia drills, so as to keep the learning process *"more human."* Thierry assured her that it was possible to do all of that.

Dr. Brisebois: *This seems like a promising solution, but at what price?*

Thierry: *Considering the fact that video clip podcasts are becoming an essential part of online learning, let me first assure you that what we are contemplating is highly cost-effective. Now, according to the rough estimate that we provided for the grant application and given that some of them will have to be developed by programmers, we should be able to manage with a \$10,000 budget.*

Dr. Brisebois: *But I don't have that kind of money!*

Fortunately, Thierry had another ace up his sleeve. He explained that, besides the few thousand dollars that they had already received from SLU for the online course upgrade, there was another funding program at SLU that could be tapped, one focused on innovation in learning technology. In this case, an application could be put together

quite rapidly since most of the information needed to do was already available from the first application, with the exception of the multimedia component. However, additional questions would have to be answered: What are the contents to be converted to e-learning? By whom? Who owns the copyright?

Dr. Brisebois was pleased with this new financing possibility. Thierry and Julie agreed to work on the new application form. Meanwhile, Julie continued writing her new content.

**Meta-reflection: the window of opportunity for techno-pedagogical innovation**

Thierry is quite satisfied with the meeting since it went off as he had expected. Of course, he suspected from the very beginning that financing a TV production would not be an easy task. From experience, he knew that many academic leaders new to online learning were inclined to replicate what they already knew. Sometimes, being open to innovation only happened after a professor had observed a new approach or a technology at a conference, or saw it on a website, or read an article about it. But the best opportunity for an instructional designer like him to innovate is when the professor is destabilized, realizing all of a sudden that what they had imagined would work, won't, as in this case. Then, a window of opportunity naturally pops open, and this is the moment when new and original techno-pedagogical ideas start emerging.

**Julie's course content and activities and Thierry's model**

Thierry and Julie discussed the grant application form, which she was having difficulty completing.

Thierry: Julie, can you explain to me what your activity sequencing is in the current course? It's not at all clear to me.

Julie: The course was based on a self-study and self-correction model. In a nutshell, students would listen to a TV episode, read a chapter of the textbook, do the drills, write a first version of the assignment and send it in to their tutor. The tutor would comment on the assignment and provide their students with a formative evaluation. Students would then produce a second and final version of their written assignment and send it back to their tutor. So the role of the tutor was to guide students in their self-correction and then assess their results. This whole cycle ran three times during the course, resulting in three graded assignments.

In order to better understand each other, Thierry showed Julie a model of the process that had just been described (see Figure 1), including activities and resources<sup>1</sup>.

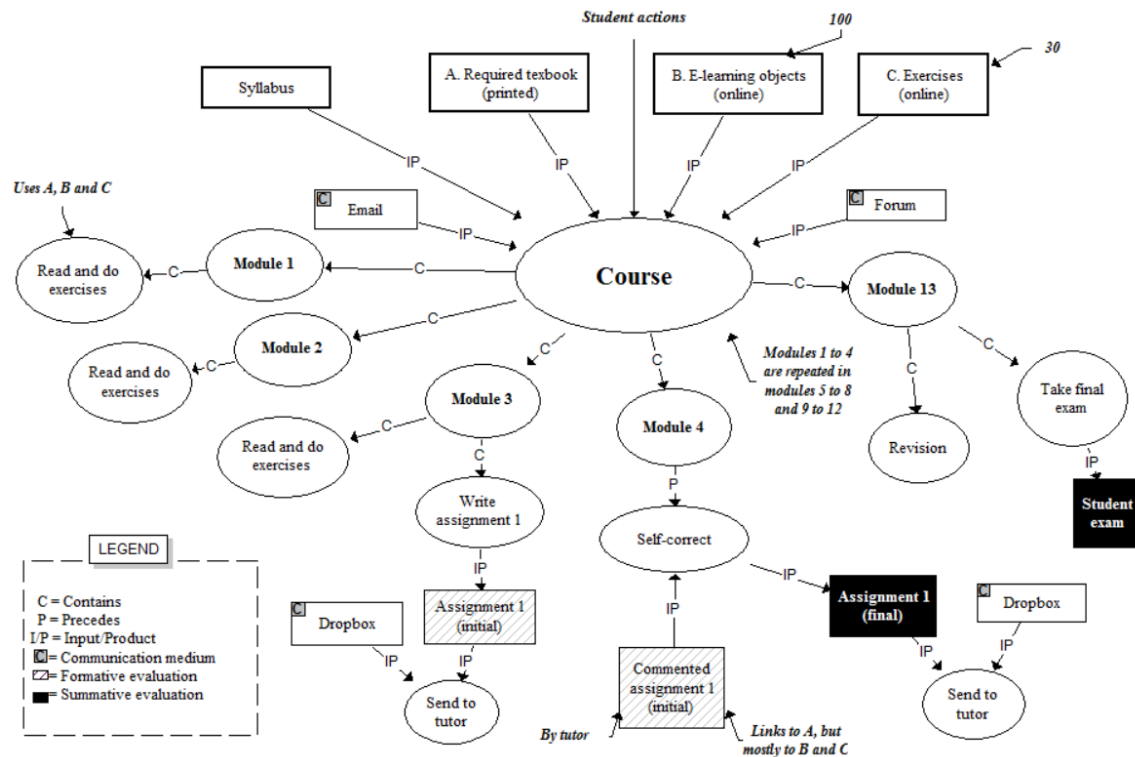


Figure 1 Instructional Model of the Original Course – Learning Activities

<sup>1</sup> According to the MISA instructional engineering method (Paquette, 2002), this is an *instructional model*.

Thierry realized that the instructional model could be classified as *input-type drills* (Paquette, 2002, p. 39), meaning that they were mostly based on information-processing activities (such as viewing TV episodes and reading chapters in a textbook) and drills. In the middle of the model, Thierry positioned the course itself, composed of four modules (one third of the 12 main modules). At the top of the model, he inserted the material resources – course syllabus, textbook (A) and TV episodes (B) – that were used throughout the course. He also added the two means of communication media made available to students: phone and snail mail.

Modules 1 and 2 consisted of doing the readings and the drills in the textbook. However, in module 3, the student had to write an assignment (Assignment #1, initial version) and mail it to the tutor, who commented on it and sent it back to the student. Comments included tips and links to online resources that would allow the students to self-correct their work in module 4, using the textbook pages as indicated by the tutor. Once the students had self-corrected Assignment #1, they would send it to the tutor, again by mail (Assignment #1, final version) for summative evaluation. This four-module cycle was repeated three times in the course. At the end of the course, students also had to take a supervised exam covering the entire course content.

## About the Instructional Model

To illustrate progression through the course, Thierry uses a modeling editor called *MOT+*, which “enables users to construct visual models for the various fields of knowledge” (Paquette, 2010, p. 67). With this specialized software, complex processes can be represented, as in Figure 1. The main advantage of such modeling is to allow discussion of the graphical representation of a process, aiming at its refinement. This modeling technique is part of the *MISA* instructional engineering method (LICEF, 2014a; LICEF, 2014b) with which Thierry was familiar although it was not used routinely at the SLU.

At this point, Thierry designed a graphic outline of the new course instructional model (Figure 2).

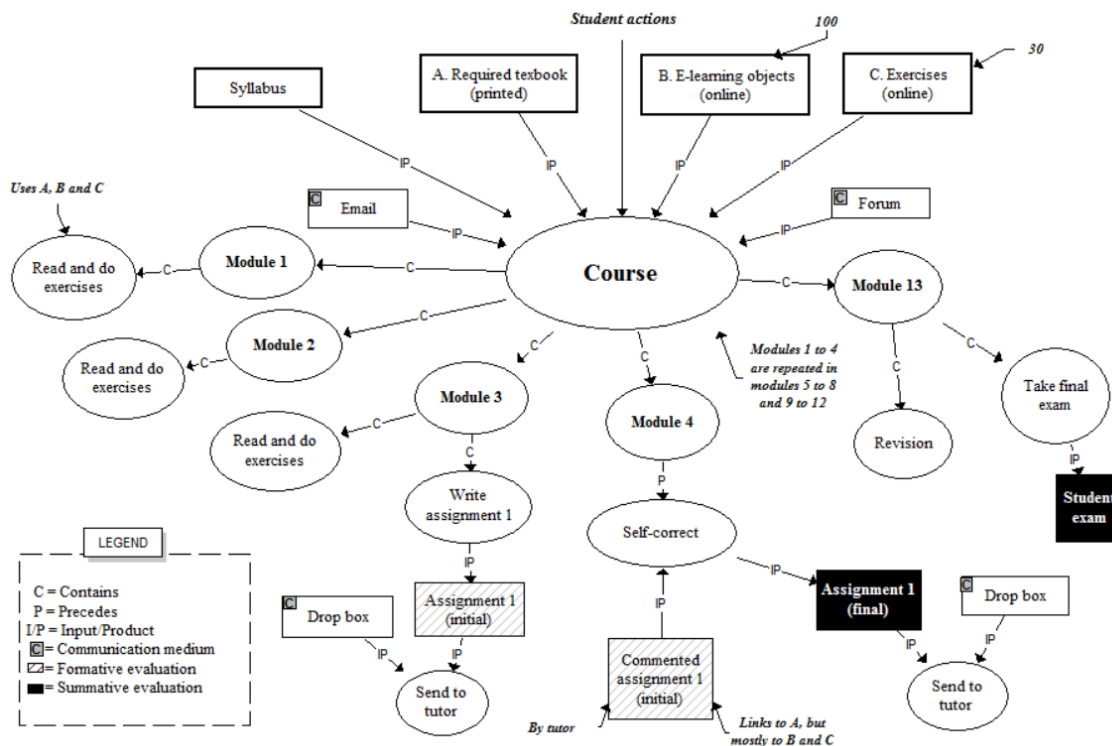


Figure 2 Instructional Model for the New Online Course, emphasizing learning activities

Thierry replaced the TV lectures with e-learning video clips (B) and added online drills (C). The tutors would still have to correct the initial assignment but Thierry suggested that, instead of directing students towards assigned readings in the textbook as before, they should direct them to the online video clips and drills. Julie thought that was a very thing to do because the clips were dynamic illustrations of the textbook. As for the other communication media, the telephone and ground mail were replaced by email, a forum and a dropbox, but these tools would have to be discussed later. Thierry and Julie estimated that they would need about 100 video clips (item B in fig. 2) and about 30 drills (item C). According to the principles of multimedia design (Clark & Mayer, 2008), the clips would be short, segmented and, no more than 10 minutes long, since this was the average attention span of adults (Medina, 2013).

Julie was now confident that she would be able to complete the grant application form for the SLU funding program on innovation and technologies. After the work was done, she added Thierry's production scheduling and budget to the application form, and sent it off, fingers crossed, to Dr. Brisebois for approval and signature. A few weeks later, Dr. Brisebois gave them the good news: the project would be funded as requested. From now on, things should run smoothly. And without any further ado, Thierry contacted the multimedia production team and told them: "*Game on!*"

### **Multimedia production begins**

Sophie, a multimedia developer, joined the team and attended the meeting.

Julie: *What exactly does a multimedia developer do?*

Sophie: *My role is to help develop clear and feasible multimedia scenarios. Depending on what you intend to build, this may result in a few lines of text or in a detailed*

*storyboard. I also act as a bridge between you and the rest of the multimedia team, namely a multimedia technician and a computer graphics designer.*

Up until now, Julie had written about 50% of the new content. She knew that she would have to work non-stop over the next few weeks to guide the multimedia team. Basically, she had to take the content items from the textbook, reformulate them and find new examples. For more complex concepts, Thierry suggested that she try to produce a short storyboard (or at least a figure of some sort) of an explanation or drill.

*Julie: Sophie, you know I'm not much of a computer wiz, so please be indulgent with me and my doodling. I trust your judgment on this, even if I don't really know what to expect.*

*Sophie: You don't have to worry, Julie. Anyway, I will need you to sign off on everything my team does. We'll take our time at the beginning to make sure we agree on the type of learning objects we want. After working on them, it'll get easier. So, can you give me an idea of the kind of e-learning content you are expecting?*

Starting with a few ideas outlined by Julie, Sophie develops a few proposals to increase interactivity in the e-learning modules. She intended to use authoring software like *Camtasia Studio* and *Articulate Studio* to record screen action. Some *Flash* animation programming was also possible where necessary. She showed Julie some exciting examples of e-learning objects from other projects. Then, before going any further, she told Julie she'd have a prototype produced by her team in short order so that Julie could judge for herself what this was all about and could make suggestions for improvement, if necessary.

A few days later, Sophie showed Julie the first drafts. Julie was delighted but didn't say much. Sophie had studied Julie's multimedia storyboards. She thought that, of the 130 e-learning objects and drills to be produced, about 20% of them would have to be done by a programmer because of the limitations of the authoring software. As for Thierry,



while Julie and the multimedia team would be working during the next weeks, he'd assume the role of coordinator and observer.

**Meta-reflection: Team Work Coordination**

Thierry has a hard time estimating how long it'll take Julie to finish because only she knows how much of the existing material can be reused versus how much new content has to be written. However, he does manage to come up with a ballpark figure: 100 e-learning objects + 30 drills X 1 h per object or drill = 130 hours.

This is about four solid weeks devoted only to writing, work that Julie has to do while carrying out her regular duties. In fact, she has only been granted one course release. Sometimes, departments hire graduate students as teaching assistants to help in the preparation of course materials but Julie insisted on doing all this work by herself. Looking ahead, Thierry had to make sure that the multimedia team was flexible in its pacing of the work to be done.

Three months later, Julie was almost finished writing the new content and the multimedia team had produced a large number of e-learning objects. According to Thierry and Julie, the quality of that material was good. Contrary to what Julie first said, she thought that adding a narrative voice to the multimedia content was not really necessary, since animation and interaction already did a good job explaining the content. In addition, after all the work she'd been doing, she simply was too tired to do any additional narrative work. Thierry said that adding narration to the e-learning objects could always be done later, if required. Moreover, time was getting short

because the term was about to begin. What was reassuring was that the same textbook (Fig. 1, item A) was still required, as in the previous version of the course. That should attenuate any flaws in the new material.

### **A simpler feedback process**

Thierry and Julie were finally at the point where they could discuss summative evaluation and student-tutor communications.

*Thierry: Even before the course was online, the tutors used email to communicate with their students, didn't they?*

*Julie: Yes, they used email and sometimes, the phone.*

*Thierry: The phone is always available but in SLU online courses, the most popular form of communication is clearly email, although you may find the discussion forum useful.*

Julie confessed that she had never used a discussion forum in a course. After some explanation from Thierry, she understood that a forum could be useful in transmitting information to all her students simultaneously or as a space for exchanging ideas among students. She agreed to talk to her tutors about this possibility.

*Thierry: You told me that, so far as summative evaluation was concerned, there are three graded assignments and a final, supervised exam. Do you want to change anything in this regard?*

*Julie: No, I don't think so. From my standpoint, the summative course evaluation is well balanced. With three formative evaluation assignments, each followed by a summative assignment, students reach a cognitive level of practical mastery. On the other hand, it does involve a lot of back and forth. A secretary receives the assignments by snail mail, then sends them on to the tutors. The tutors correct and annotate each copy with a pen, and then sends it back to the secretary who mails it back to the student. The whole cycle takes about two weeks to complete, from the moment the student sends in an assignment to the moment he or she receives feedback. Such a delay tends to interrupt the student's pacing. Do you think something could be done about that? I've heard that the new LMS includes an online dropbox, but our department is very conservative and very few of our faculty members are using that feature.*

Thierry: *Have you ever thought of completely getting rid of paper? How about this? Say the students upload their assignments to the LMS dropbox, the tutors then correct each assignment directly on their computer screens, and then they upload the corrected assignments to the dropbox. This means no more printing, a heck of a lot less handling, and the whole cycle would be shortened by a week or more.*

Julie: *This does sound interesting and makes a lot of sense but I'm not so sure that my tutors will agree. They are kind of set in their ways. Anyway, we can try it. But let me talk it over with them first, OK?*

Thierry was a little anxious about the tutors' reactions since they were not very familiar with using new technology. So he suggested that Julie take her time in reviewing the whole online assignment correction process. He also asked her to finish writing the final version of her syllabus and the detailed week-by-week activities.

### **Testing the prototype and training the tutors**

Julie had just completed writing the new content and was in the middle of signing off on the e-learning objects. To this point, she was very pleased with the results.

Thierry: *This would be the time to upload all of the documents and learning objects to the course website. We could teach you how to do this but, since there are so many items and because we're in a bit of a hurry, I recommend that our team do it. Eventually, you will be able to update the website by yourself.*

Julie: *Great! But what about testing the new material?*

Thierry: *I totally agree. Pilot testing would be wise but we need volunteers. Maybe some of your current students would be interested in helping us out with this.*

Julie: *Yes, I think I could find four or five students. I'd like to test a complete self-correction assignment cycle of four modules.*

Thierry: *Excellent. I'll be in charge of preparing the questionnaire to collect their feedback. For the time being, we only need a temporary website with just the material they'll be using for the pilot. We should also train the tutors in the new communication and online correction skills and check with Dr. Brisebois to make sure he approves the pilot budget.*

It was now time to make sure the correction process for the three assignments was clearly understood. To do so, Thierry used the learning model but modified it so the

actions to be carried out were those of the tutors rather than of the students. The model now became a support model (Fig. 3).

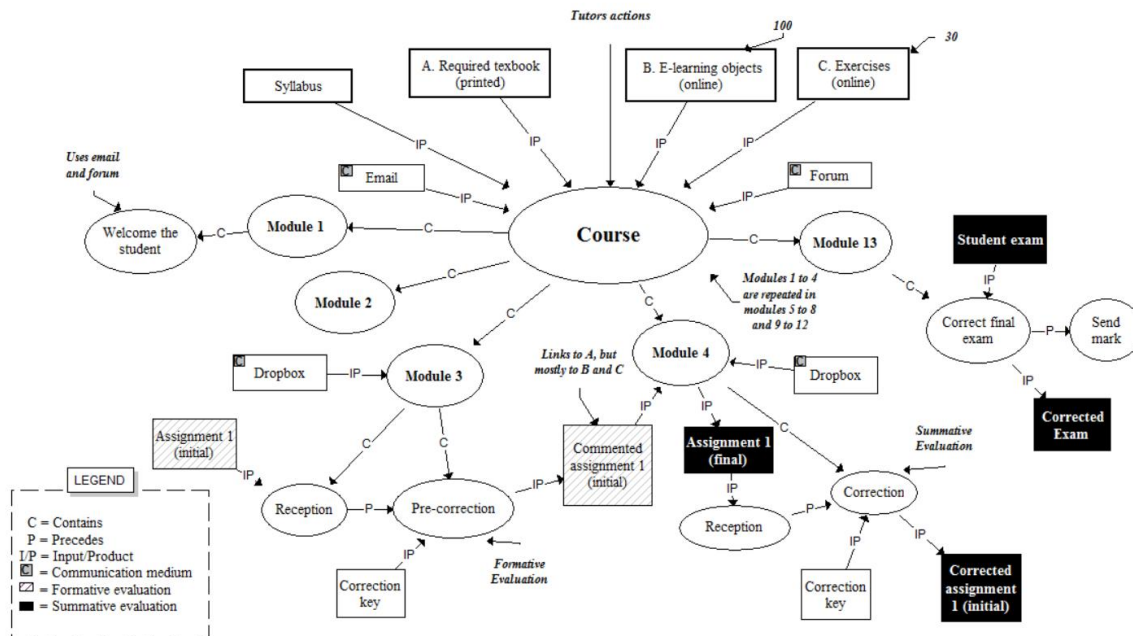


Figure 3 Instructional Model of the New Online Course – Support Activities

In Module 3, the assignment was to be uploaded to the dropbox and its pre-correction was to be done using a correction key listing the most common student errors. In Module 4, the same correction key was used to help complete the summative evaluation of the final version of assignment #1, uploaded by the student after self-correction. In practice, this correction key was little more than a correspondence table between common errors and the URLs of e-learning objects and drills (Fig. 4a). Thierry explained that, rather than linking to pages in the textbook as they did in the current course, they could link them directly to the new learning objects and drills. Thierry showed Julie how easy it was to add a hyperlink to an *MS Word* comment (Fig. 4b). She

was excited about this new linking tool but maintained that tutors would have to agree to these changes and be appropriately trained.

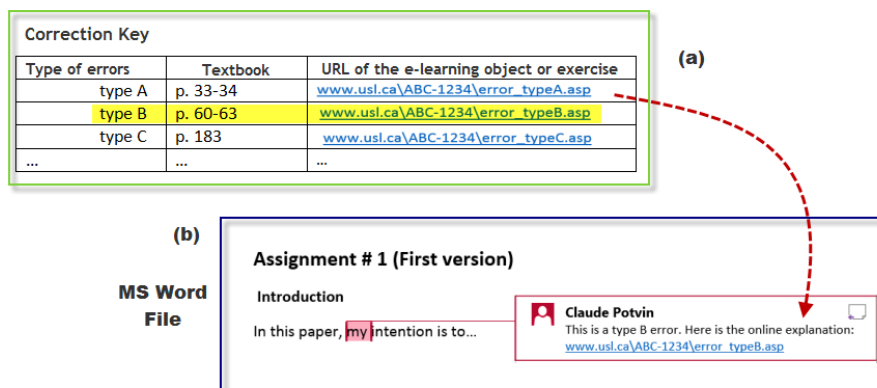


Figure 4 The correction key and the annotated assignment

Within the next few days, a meeting was set for the tutors, and Dr. Brisebois approved their extra hours. The two tutors seemed a little anxious. Thierry and Julie started at the top and explained the new course structure and activities sequencing. Ultimately, the tutors found the new *MS Word* annotating tool to be quite easy to master. Five students had answered the general call for volunteers so the pilot test was scheduled for three weeks later.

### Pilot results

This was the last meeting before the beginning of the term. The website was almost ready. Some corrections resulting from the pilot test may have to be made afterwards and Julie would have to sign off on the whole site. As it turned out, the students' comments were rather encouraging. With the exception of a few details regarding one or two e-learning objects, comments were generally positive: they liked the interactive

explanations, they found the language clear and straightforward, and they didn't complain about the lack of narration, which was comforting to Julie. Moreover, they really appreciated the accelerated correction cycle and the precision of tutors' comments linking their assignments to online resources.

For their part, the tutors experienced a few technical problems at the beginning, but they adapted to the new correction process quite rapidly and, for the time being, said they felt at ease with using the dropbox. But there were virtually no posts on the discussion forum and, when asked about it, the tutors said that they didn't even know how to use this tool. Thierry and Julie realized they'd have to contact the tutors again on this last point.

### **Course delivery**

As the term got underway, the teaching team was a little more anxious than usual. After a couple of weeks into the term, the tutors complained about the increased number of mouse clicks. They also received a lot more technical questions from students than before. But, as the weeks went by, they agreed that they would not want to go back to the original course. The assignment cycle was much faster and they felt they were more efficient. Except for very few isolated cases, student feedback was very positive.

### ***Conclusion***

Two months after the beginning of the term, a final meeting was called by Dr. Brisebois for Thierry and Julie. They all agreed that, although this project had taken longer than expected, the challenge of modifying the telecourse for online delivery was met. At last, the course syllabus and the course structure were about the same, but the course content

learning strategies, the communication media, and the correction process were all new. Julie was satisfied with the experience, even if she had found it very challenging.

*Julie: Writing the funding application took so much time. This was necessary, of course, but we lost six or seven months.*

Afterwards, she realized that, by taking the time to fill in those application forms, she had been able to assemble all of the various elements of the course and to build a stronger, more cohesive course structure with the help of Thierry's models. Since she couldn't use a digital version of the textbook for legal reasons, she was forced to write new content and to do a fair amount of original storyboarding. This had been hard, hands-on learning for her. Looking at Dr. Brisebois, she said she could have used more free time to work on the project but, all in all, she was very happy and even proud of the results. She was especially satisfied with the revision of the assignment correction cycle. In addition, she and the tutors had upgraded their technology skills and she felt more up-to-date than ever.

For his part, Thierry believed that a key point in getting a project like this completed was establishing a climate of good faith and mutual trust between Julie, the multimedia team, and himself. He had found the project rather ambitious from the get-go.

*Thierry: I must confide that, right from the start, I was very doubtful that new studio-quality recordings could ever be produced. Even so, I did what I could to find funding but I figured you'd take it pretty hard when the first grant application was rejected. But, as you know, I had a back-up plan ready. I was also a little concerned by the tutors' reactions to the new course design, since they are experienced people working in a pretty conservative discipline. Kudos to Julie for getting them on-board.*

Thierry thought about the instructional design method they had used, which consisted more of guidelines than a systematic step-by-step procedure. Combined with the visual models, it was a powerful design method. It now seemed to him that the whole course design process pivoted on their decision to substitute the studio recordings with video clips, in tandem with continued use of the textbook. Julie confirmed that, until she had seen the first e-learning objects, she had been unsure but, after thinking it over, she figured she could trust Thierry as well as her own multimedia experience. They both agreed that prototyping and testing prior to delivery were essential. Thierry was convinced that prototyping in online course development would increasingly become the norm, rather than the exception, at SLU (Baek, Cagiltay, Boling, & Frick, 2007). Thanks to the new rapid development tools, they had found an efficient way to shorten the design cycle.

All things considered, Dr. Brisebois was relieved it had all worked out. As the school academic coordinator, he knew the importance that online learning held for the future development of his school. Since it was one of the first online courses to be developed in the school, this course would act as a beacon for everyone else. Moreover, now that he was convinced there was significant growth potential for online courses at this school, Dr. Brisebois was confident that he could hold up this new course as an example to convince his colleagues to move more of their courses online.

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