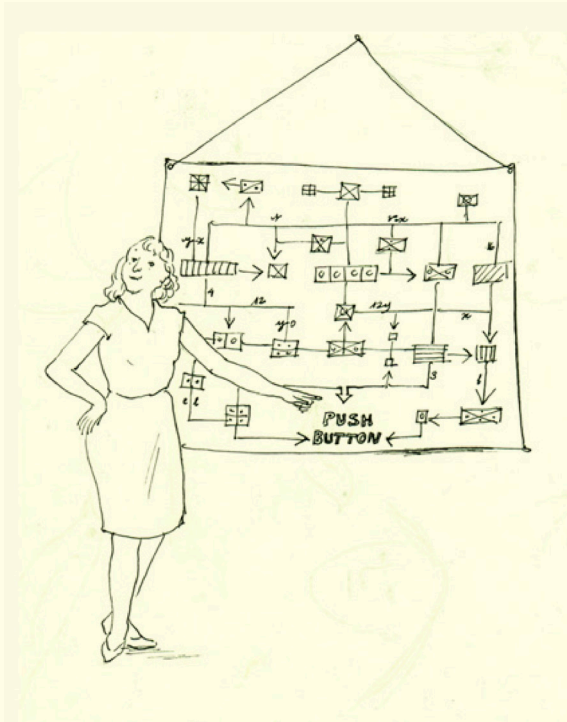


CASE STUDY 5 GETTING FROM A TO B



Case Characteristics

The professor in Case 5 (see Table 10) had some characteristics in common with that of Case 4. Our fifth professor was female (F), at midpoint in her teaching career (M) and participating in the design of her course for organisational reasons (O). Also, the time between the beginning of our working sessions and the beginning of her course was short—the course was about to begin (1). Moreover, she had no experience with teaching at a distance (1). There were, however, two differences with earlier professors: she had some knowledge of instructional design (2) and had already defined her general objectives and a few specific ones (3).

Table 10: Characteristics of the subject matter expert

Gender	Rank	Reason	Time	Availability	No. of sessions	K/ Design	K/ DE	GO/ SO
F	ASC	O	1	1	4	2	1	3

Gender: female

Rank: ASC = midpoint (5-15)

Reason: O = organisational

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

Availability: 1 = 1 to 15 hours

Number of sessions = 4

Knowledge of Design: 2 = intermediate level

Knowledge of DE: 1 = no experience with DE

General Obj. /Specific Obj.:

3 = GOs + SOs (SOs in limited number)

Finally, a pattern was starting to emerge. Was this a prelude to systematisation? —A sign of things to come? As usual, before our first meeting, I asked the professor to send me a copy of her course syllabus in its current state. She had a syllabus in the form of a “learner portfolio” which fairly well developed. It outlined, in some detail, how the course was to unfold. I also gave her the address of my website where I had updated my tutorials on “congruency” and “method” and I asked her to have a look at them to get an idea of the quickly-evolving instructional design model I was proposing. I also sent her a copy of the most recent version of the horizontal course syllabus (HCS) developed in Case 4. As with most of the previous cases, this course was about to begin when we met for the first time and the professor had been told by the department to prepare her course to teach it at a distance, like it or lump it! We

therefore had to focus on the more problematic aspects of course design. Also, as a result of her limited availability, we didn't anticipate being able to meet more than four times.

Session 1: This working session began with a discussion of the tutorials. She told that me she had looked at them, that she had liked them and that, overall, she had understood the proposed design model. However, she felt she wouldn't have enough time to apply the model in its entirety and that worried her. To get going, we undertook a global analysis of her course syllabus, or rather, her learner portfolio. It was only the second time that I had ever seen such a well-developed document for an undergraduate-level course. In fact, it was much more than a course syllabus: it contained a general outline of the course, a list of course-internal policies, university regulations, resources, a list of guidelines for assignments, a methodology, a few examples of both faculty-centred and student-centred assessment instruments. Given the overall level of preparedness of her course and the time limit we were facing with regard to course delivery, we decided to focus on five main tasks:

1. Improve the quality of her lectures, particularly by developing a series of PowerPoint presentations containing graphics and figures to illustrate the numerous abstract concepts in her course. (This task was, in her opinion, the most important and would likely take up 80 percent of our time.)
2. Improve her course syllabus by creating a calendar for learning activities;
3. Check her GOs (general objectives), distribute them throughout her course on a weekly basis as well as complete and fine-tune her SOs (specific objectives);
4. In collaboration with the IDC (Instructional Development Coordinator), create an attractive, efficient, user-friendly yet basic Web site and transfer her didactic materials (as contained in her portfolio) to it;
5. Ensure that her assessment instruments were in line with her course objectives.

This is the first time that I have been able to work almost exclusively on one particular aspect of a course without having to worry about all of the other tasks that have to be done. In previous cases, I often felt that the “show must go on,” even if our work on one week of the course was incomplete. I wonder if I’ll ever get over that feeling. Maybe it is simply the nature of the beast—that a university course is ipso facto an incomplete entity which must constantly be improved, renewed and recreated.

Before focussing on her PowerPoint presentations, we started off our work by making a schedule of course activities according to the academic calendar for the upcoming term. Assuming a 15-week term, we determined that the actual number of working weeks would only be 12, by removing the following:

- the first week, which is normally devoted to the professor’s presentation of the course syllabus and presentations by support staff (the IDC on learning tools and a librarian on accessing online resources);
- the midterm break week;
- the final week, devoted to exams.

Taking into consideration that actual coursework would cover a twelve-week period, we decided to divide her course into two, six-week units. During the first unit, the professor would lecture on the general themes of the course while assigning students both individual and team activities on a weekly basis. According to the professor’s wishes, we then allocated the final six weeks in the course partly to in-class, student presentations to take place during the first half of the plenary session, and partly to subsequent group discussions, brainstorming and other interactive activities to take place during the second half of the plenary session. Dividing the course up in this manner provided us with a course structure based on thematic content areas according to which we could distribute the readings to be done each week. Having noticed a rather large amount of prescribed reading, I suggested to the professor that we go over each of the reading to determine how many pages she would expect students to read each week. As in Case 4, the professor decided to remove some of the readings she had seen were not essential, given

the amount of time available to students to carry out their activities. After having resolved to review her readings for each week of the course, we agreed that this realignment of readings would best be done outside of our working sessions. By this point, we had an approximate idea of which reading would go where in the course syllabus, even though the actual distribution had not yet been finished. We saw that doing so would require some degree of realignment of her portfolio.

In working with professors on redesigning their courses, I have noticed that they often decide to reduce the number of readings that they require from their students. They usually come to this conclusion because, when using the HCS, they must identify their objectives, link them to content and then link content to specific learning activities. As a result, they often realize that they are being too demanding and that, in fact, they run the risk of students simply refusing to do the required readings, especially if no points are awarded for it. Points cannot, on the other hand, be awarded to everything unless the professor is ready to mark everything. Consequently, the importance of individual and team assignments becomes immediately apparent because, by directly linking the readings to course assignment activities, the former become a requirement to completing the latter, and only the latter need to be marked.

The task of selecting appropriate readings brought us to examine the distribution of her GOs. As mentioned, her GOs were bunched together in one area of her syllabus/portfolio, as is common practice. We also still had to finish writing her specific objectives. In her syllabus/portfolio document, she had provided a list of six general objectives but she had not indicated where, in her course (or even how, for that matter) her students could meet these objectives. After discussing the matter, we distributed her GOs throughout the course schedule, with some of the more salient general objectives appearing more than once throughout the weeks. When we finished the process, two new GOs emerged, which we added to the syllabus.

Now that we had a basic framework for her course, she wanted us to re-examine her readings to determine to what degree each one enabled students to progress towards the GOs. I decided that the best way to proceed was to let her tell me about each one of them and, in listening to

her, I would try to mentally link them to her GOs and also start writing down some SOs (specific objectives). When she had finished explaining the importance of each text that she wanted her students to read for Week 2, I told her what I had written down (the SOs) and got her feedback. In doing so, I was able to figure out, in pedagogical terms, her intentions for her students that week. We proceeded in the same manner for Weeks 3, 4, and 5 so that I could give her a *modus operandi* for writing her SOs. For Week 5, she informed me that she should have no problem continuing this task outside of our working sessions.

The site: Now that we had a good number of items in hand (the somewhat revised course syllabus-portfolio and several texts in digital format), we sent them off to the IDC so that he could begin creating and populating her new website. I suggested that she also send a brief biography and a photo or short video, to post on her home page—a gesture that students usually appreciate. She agreed. The IDC also said he would put her in contact with the technical support team’s photographer/videographer so that he could take a picture (or make a clip) of her in her office.

Session 2: PowerPoint Presentations: At this point, and at the professor’s request, we tackled her PowerPoint presentations. Having already seen mine, she told me how impressed she was at how I had visually depicted the various concepts I introduced. Since she also had a number of abstract concepts, she believed they would be easier to understand if we could put them into a similar visual form of some kind, either representational, analogical or arbitrary (Reiber, 1994).¹

We began working on her Week 2 presentation which introduced the basic concepts of the course. At the very beginning of her presentation, she wanted to show slides with definitions of each concept, but she had not had the time to look them up in the dictionary and type them out. I suggested she consult the *Office québécois de la langue française*’s free online dictionary at <http://www.granddictionnaire.com>. She typed in a word to obtain its definition right away, then copied and pasted it directly into her slide (citing the source). In a matter of minutes, she had included several definitions into her presentation. She was as pleased as punch! We then started to think of ways in which we could graphically depict these concepts. I asked her to tell me about the first concept, the main one. I asked her to explain its importance to me, why she felt her students

had to master it, its nuances, characteristics, and as she spoke, I started drawing.² We then brainstormed together so that we could improve it.

My schematisation for her concepts consisted of presenting several basic geometric forms, each concept being in a different colour. Each form contains an extract from an interview verbatim and then, in the following slide, it moves to the background as a second form of another colour with its own text appears in the foreground. This was an attempt to represent the notion that there are various forces at work in any given situation, all acting in their own particular way, yet co-existing to represent the situation as a whole. At the end of the exercise, all forms appear together as a set, revealing a complex state of affairs, rich yet diverse.

After having proceeded in the same manner for subsequent concepts, we completed the slide presentation and sent it off to the IDC, who would hand it to the graphic designer who would then, working with our basic strategy, add a professional touch and send it back to us for sign-off. After that, the IDC would place the PPT on the professor's Web site.

Session 3: The second slide presentation we tackled was the introductory one planned for Week 1. She had wanted to make sure that the Week 2 presentation was “in the bag” before looking at any of the others. In the first week, she wanted to present various fundamental concepts related to both the course material and to how the course was to unfold. As she explained these concepts to me, I sketched out some rough diagrams. In light of what she was telling me, I recognized that a systems view would be appropriate, so I drew a series of overlapping concentric circles. These would illustrate the relationships between each of the concepts in question and allow students to understand notions of intersection, shared experiential fields and views, reciprocal influences, and so on. We also explored the option of showing the students other concepts related to the systems approach, such as “open/closed systems,” “natural/artificial/hybrid systems,” “input/output,” etc. She was quite pleased with our work but, rather than send it to the IDC immediately, she wanted to mull it over and make a decision about it later in the week.

When we had finished this part of the work, she told me that she was very happy with this way of doing things. She had long believed in

the power of visualisation for learning and had always wanted to make graphic representations to complement her oral explanations but she had simply never had the time. She was very grateful to have my support in finally doing so; indeed, she told me that this was the first time she had been given the opportunity to work in tandem with anyone on the pedagogical development aspect of a course.

We then discussed her student performance assessment instruments and how to visually present each of them, showing how she intended to distribute course points to each one. She told me that she intended to assess performance in terms of four types of activities, namely:

1. in-class participation in discussions during plenary sessions;
2. an individual midterm assignment based on course readings (to be submitted as a report);
3. a group presentation (during a plenary session);
4. an individual end-of-term assignment based on an introspective and reflexive analysis of “my learning” during the course (to be submitted as a report).

I immediately pictured a timeline for the complete fifteen weeks of class, indicating the cut-off dates for each assignment. With regard to student in-class participation, we decided that it would probably be best (i.e. most equitable) were it assessed on a per class basis. This discussion brought up the question of how she would actually go about assessing class participation. The professor had decided that she wanted to award points for participation and not only for “end-products” (the assignments). However, she had only a vague idea of how to proceed. In the past, she was in the habit of taking attendance even though it was not compulsory, but she could not award points on such a basis since she agreed with me that attendance was hardly an accurate measure of learning (but it helps... Woody Allen was fond of saying “90 per cent of success is just showing up!”). Nonetheless, she was intent on finding a way to assess student participation. It was now up to us to find out how.

Assessing class participation is a difficult thing to do. How do you assess it? In the normative manner as in comparisons among students? X intervenes more often than Y? Or in a criteria-based manner but according to what

criteria? Everyone must participate...number of student interventions? X number of times? Even if what they have to say is not relevant to the discussion? I don't think so. I wracked my brain for various assessment strategies I had seen in the literature and the idea of the "reading grid" came to mind: as the student was doing his/her reading, they would complete an analytical grid with which they had been provided. Granted, it is not a direct way of measuring in-class participation. However, it was indicative of preparation for participation, and it had the benefit of being an activity which, if carried out correctly by the student, would likely have a direct and positive effect on participation. For how can a student participate intelligently in a discussion if he or she has not done the necessary readings? By assessing a student's preparation for class, would that not put professors on firmer ground to more accurately assess the quality and relevance of each student's participation? If so, this would mean that individual or even team reading grids would need to be developed. I could already hear the professor groaning, "more work." On the other hand, it reminded me of the old Québécois saying, "No money, no candy."

Session 4: During this working session, I broached the question of how to distribute points, how the importance of each of the activities planned would be weighted, the reasons for awarding points as well as how many for each activity. I shared my idea of developing reading grids which could be used to determine who was truly preparing for the course and who was not. I explained that I was basing my reasoning on the fact that, in order to be able to assess something, one must have both criteria and instruments.

This discussion also brought to mind the idea that it is harder to assess, and award points to, a process than it is to a product unless the process has clearly-defined assessment criteria and known performance indicators. I have found that faculty are often forced to assess what they cannot measure. However, it seems clear, at least to me, that the accuracy of an assessed result is inferior to that of a measured result. But this begs the question: "Can everything be measured?" Another problem with measuring is the question: "Are we measuring what is truly important?" and an even more fundamental question, "What is most important?"

The professor agreed with the idea of developing reading grids because she had realized that her students had difficulty with several of the compulsory texts when she had to spend considerable time explaining the authors' perspectives. She liked the idea of providing grids to guide them through their readings in theory, but, as I had anticipated, she was rather reluctant to devote the time required to developing them. In the end, she agreed to take a crack at it, using her first text as a model. We got right down to it and we started reading the article together. As we read, I asked her questions and she told me whether they were important or not. Those she deemed most important were noted immediately. Since she knew her texts very well, in less than an hour, we had written our first grid. She now saw the advantage of the reading grid system and seemed ready to continue writing grids for the other compulsory readings in the course. To complete the whole process, she decided to adopt the *Socratic* approach, which is based on questions and answers during plenary sessions. To sum up the approach we adopted,

- she would only ask questions to those students who had submitted files to her, questions which she expected them to be able to answer without looking at their notes. Consequently, students who had not completed and sent back the grids would not be able to participate in the discussion or be awarded participation points,
- if she noticed that the students to whom she asked questions did not know the answers, she could decide not to award them participation points either.

In this way, she would be able to assess both a product (the completed grid) and a process (oral participation of students during the plenary session), both of which were closely linked to reaching her course objectives, particularly in terms of acquired knowledge assimilation and accommodation (Block, 1982).

It has become clear to me that a designer sometimes has to consider processes and products, the assessment of the former often depending on the measurement of the latter. I also realize that my background in measurement and assessment leaves something to be desired. I really must

get in touch with a specialist in these fields so that I am better equipped to advise professors in terms of the various options available to them.

This case ended somewhat abruptly, sadly. The professor was simply “flat out of time” and we left off with some feelings of regret, knowing that we could have accomplished much more if we had just had more time. Below are excerpts from an interview I conducted *ex post facto*, where she reveals more about her personal philosophy learning which, I feel, is both rich and well balanced.

Ex Post Facto interview

On creating teams: “For the first activity, I leave it up to them, that is, they can team up or not. Then for the second activity, I create teams in random fashion (i.e. 1-2-3-4-1-2-3-4...) and then after that, for the term project, they choose their team members, to get a more ‘natural’ grouping. I have always valued teamwork.”

On how teams function: “Teams function according to what you might call ‘self-governance.’ They can choose to form teams of between 2 to 4 members and carry out their work however they want, provided the end-product represents both the team as a whole as well as each and every individual in the team. Each student in the team should be able to see themselves in what is produced. The goal of all of my activities is for them to get other viewpoints on a given subject. In teams, they have access to just that.”

On virtual teams: “They get together over the phone or by email and team presentations are delivered from different (videoconference) sites.”

On the link between individual activities, team activities and plenary sessions: “The first time I had ever done anything like that was in developing my course with you.”

On writing objectives: “At first, I was ‘allergic’ to objectives. Working with you forced me to develop them a bit more, but this had a pernicious effect as well...the students knew how things were going to unfold so well

that they would freeze up, there was no more spontaneity...we had killed the element of surprise!”

On the course syllabus: “They (the students) had the full syllabus. They could see everything that was going to happen. Normally, I don’t give them the course syllabus right at the beginning (of the course). Rather, I reveal it bit by bit. The students really appreciated the portfolio that we had developed further using the horizontal course syllabus. [...]... my teaching style involves their doing research on the ‘inside’ (internalizing) and then, afterwards, research on the ‘outside’ (externalizing), that is, reading what various authors have written on a subject. [...] I find that when I provide them with too many details or when I want to do something which focuses specifically on their personal experience, it is as though they lose focus, they get too concerned with details. Students find things much clearer when I use visuals (graphics)...I still use them today.”

On her philosophy of education: “Learning is always a social phenomenon, you are never alone. Sometimes you try to read into the minds of others, sometimes you go out on your own, alone with your thoughts...We are the fruit of our experience...The very fact that we exist in an environment, in a society, means that we are never alone. We are always connected. If I walk alone, I am still part of a couple, of a community, of all that is living. We can reflect by ourselves but the minute we make contact with others, our reflections become anchored in reality. We define ourselves through others. Sometimes we are of two minds, two opposing opinions, like when we are not sure about something...Others do not stop me from being myself. Even Robinson Crusoe wasn’t alone. I feel the most alone, in fact, when I am working with technology. I felt alone because, being naturally very independent, I get a feeling of dependency, a feeling of solitude...I really felt it when I went to see my students at their sites. I had felt some tension among my students when I was teaching at a distance but that wasn’t enough to convince me that there was any. Because I was at a distance, I couldn’t feel the effects of my teaching. But when I visited their sites, I realized how accurate my impressions at a distance had been. When I came back, I realized that my perception was right. I could feel what they [the students] were feeling.”

On assignments: “I usually give them a term project with several parts, with all the parts related to each other of course.”

On the design process: “It was a bit hard for me. We started our work before the strike and we finished after the strike. I was giving a distance course for the first time. I was happy that I was going to have someone to look at my pedagogy with me. What I remember about you is that you didn’t want to change what I was doing. First of all, you sought to understand my method and then how you could help me reach my objectives. You are the person that I have talked to the most about my teaching since I arrived here [at the university]. I have been here for more than three years. At the start, I was afraid of what you were going to tell me, but that didn’t last. You have a talent for turning ideas into images. I talked to you about my teaching and felt as though I was actually teaching you something. I had the feeling that we were doing something together.”

On student passivity and teaching at a distance: “We still have a lot of discussions in spite of the distance involved. My on-campus students were the most passive. They were the ones who seemed to have the most difficulty coming to grips with it [the hybrid model of teaching]. I believe they were telling me that I was more ‘connected’ to the remote-classroom students, more in tune with their needs. In the second course, those on campus appeared to be struggling. They seemed to be saying ‘we could have had a real course’ while those at a distance seemed to be saying ‘good thing we have this, otherwise we wouldn’t have any course at all.’”

On the link between assignments: “Preparation is carried out individually and there is a team assignment. I give students a case study-based problem; they read it individually and reflect upon it so that they can then talk about it to their team. During the plenary session, we share reflections and identify problem areas...we pool thoughts and ideas. My goal is to get students and teams to develop their own views and to have them prepare a debate for the plenary session. And since each team works on a different problem, everyone participates in the debate. The idea is to show them that everyone can participate, that everyone has their own ideas.”

Notes

1. This categorisation is based on work by L. P. Reiber (1994).
2. To preserve the anonymity of the participants in this research project, I cannot present the schematisations produced during our working sessions. In Appendix A, however, I have added examples of various graphic representations that I have developed from concepts linked to various domains under other circumstances.