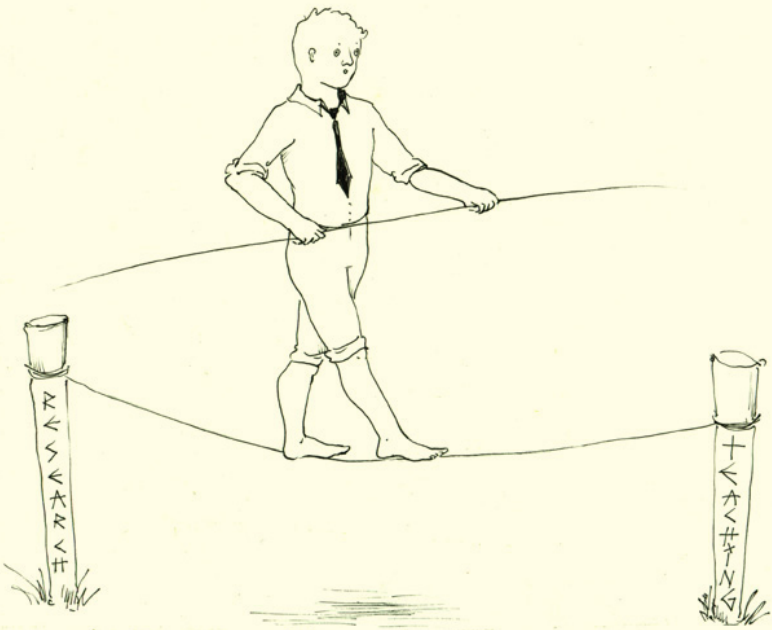


CASE STUDY 1
WALKING THE WALK



Case Characteristics

Table 3: Characteristics of the subject matter expert

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

Gender: male

Rank: AST = assistant

Reason: O = organisational

Time-to-delivery:

2 = beginning in between 2 to 4 months

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

Number of sessions = 6

Knowledge of Design 1 = low level

Knowledge of DE: 1 = has never offered distance courses

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

As the above table indicates, the first case study involved a male, Assistant Professor who was designing his course for organizational (O) purposes. His course would be starting in about four months and the time he had to devote to this work was quite limited (1). Indeed, as it turned out, we met only seven (7) times. Finally, his knowledge of instructional design was rudimentary, as was his knowledge of distance education. He had developed only general objectives (GOs).

The professor had taught this course only once before and he had done so on campus, while other professors before him had taught the same course using videoconferencing. His Department Head and Programs Director decided that the program of which this course was a component was to be offered at a distance, to groups of students distributed among several sites. They wished to continue basing this course around a weekly videoconference but wanted to complete the session by other didactic means, such as e-mail and a new Learning Management System (LMS) that the University had just adopted. Because the course would be taught over the next term, the professor had only three to four months to prepare his course.

Before our first meeting, I asked the professor to email me a copy of his current course syllabus and, furthermore, I invited him to go to my website so that he could view two presentations found there, “the congruency principle”¹ and the steps in the design prototype model (presented above) that I had developed to support faculty in designing their courses.

Session 1: At the very beginning of our first meeting, I decided that, despite the fact that we were working under conditions that bespoke the very essence of urgency, it was appropriate to avoid getting off to a flying start. Rather, I started off by describing who I was (an instructional designer) and what I did (ISD). I followed up by asking him if he had seen the presentations, which he had. He didn't have any specific questions about them but he did, however, mention his apprehension of the scale of the work to be undertaken and of the small amount of time in which to do it. He was worried because he felt the proposed model was relatively demanding and because he had only about forty hours overall to dedicate to designing his course. I then explained the concept of varying levels of design and production (or "layers of necessity," as Tessmer & Wedman [1990] put it) and the "process of ongoing improvement" of his course, which seemed to reassure him.

Having already read over his syllabus, I then asked him to talk to me about his course: whether he enjoyed teaching it, what it was that he liked about it, why he felt it was important to his students, how it fit into the program, how it was regarded by his colleagues, the extent to which it had been planned in conjunction with the other courses (earlier or later) in the program and, finally, whether there was public interest in his course (from a social relevance standpoint). By freely discussing his course, I hoped the professor would become sufficiently motivated to effectively start the design process.

I find it is important, during the first meeting, to outline my role as instructional designer in the design of a course. I have come to understand that only a few professors have ever heard of ISD and that, consequently, it is important to take the time to explain to them what exactly designers do (and don't do...), thereby allowing them to set reasonable expectations. Taking time, at the outset, to exchange informally with faculty members on his or her course has, in my experience, proven to be time well spent, especially as the ID and the Subject Matter Expert (faculty member) initiate a common project which may require months, even up to a year, of close collaboration. In my experience, sharing perspectives on the upcoming course to be designed, creating an emotional bond – a feeling of trust – is crucial at this point. Not only must the faculty member understand what the ID does, they also have to feel that the designer and the technical team

are behind them 100 percent, ready to guide and support them throughout the entire process. Otherwise, faculty are usually (and understandably) not very keen to dedicate their valuable time and significant effort to this work which, for the most part, is often disregarded when they are assessed for tenure or promotion. Consequently, low-level motivation among faculty for design usually translates into a loose commitment to the project and, sometimes, into a sudden halt in the process before it is completed. Understanding to what degree faculty are motivated allows me, the designer, to have realistic course design objectives that set the bar just high enough to advance the process towards an optimal point while not so high as to discourage faculty and doom the process.

As we worked our way through the design process, I realized that it was all about finding balance, being realistic and in tune with faculty needs and expectations.

Telling me about his course in broad terms, he said it occupied a central position in the program and that the course objectives were quite different from those in the other courses of the program. According to him, there was no redundancy or repetition. I followed up, however, on this latter point by asking if he had ever checked his colleagues' syllabi for duplication of objectives, to which he replied "No, never," adding that he did not know exactly what objectives had been set for the courses taught by his colleagues. We parted with his agreeing to obtain and study his colleagues' syllabi before our next session.

The fact that this professor was not at all aware of what his colleagues were teaching did not surprise me. In my experience, faculty, especially the newly-hired, are generally so busy in their escalating multi-tasking (research-teaching-service) that they simply don't have the time to fully acquaint themselves with their colleagues' syllabi. Nevertheless, as an ID, I find it extremely important that such an analysis take place to avoid redundancy, which can be so detrimental to student motivation and, ultimately, achievement.

Session 2: I began this session by asking the professor if he had had time to analyse his colleagues' syllabi. He had not but promised to do so before our next meeting. We returned to the study of his syllabus, which turned

out to be a relatively typical one, containing the usual information, such as the purpose and description of the course, the professor's contact information, a series of general objectives, subjects or contents divided into units, evaluation guidelines and a bibliography. The general objectives were loosely grouped in a list and were neither linked to the contents nor the evaluation guidelines. Moreover, there was no mention of a course schedule, i.e. the chronological progress through material in the course. I noticed that he envisaged covering a considerable number of case studies, which would require the students to read about a hundred pages a week. When I asked him if he had difficulty in getting through all that material the last time he taught this course, he told me he had. He added that, towards the end of the course, there were cases he couldn't cover due to a lack of time.

Initially, our discussions focused principally on his general objectives. We distributed these objectives throughout the fifteen units representing the fifteen weeks of his course. After distributing the general objectives, we began writing specific objectives for each. We got to week 3, at which point the professor decided he would complete this work for the remaining weeks of his course before we met again.

Session 3: Since our last meeting, over a month ago, the professor had sent me copies of his colleagues' syllabi, so we began with a discussion about the courses which were closest to his. We had independently come to the conclusion that there was no redundancy between the objectives in these various courses although there was just enough overlap between course objectives to ensure an acceptable level of pedagogical continuity. Reassured, we returned to working on his course.

With regard to his writing specific objectives for weeks 4 to 15, he told me that he had simply not had the time. Besides, he said, he had experienced 'technical difficulties' when he had started this work, not knowing how to proceed despite the models I had supplied. I came to the conclusion that, fundamentally, he didn't see the need to spend time drafting them because he asked me if it was worthwhile to students to have information provided to them in such detail (i.e. in the form of specific objectives). It seemed to me that he was obviously not ready to put in the time to do something that he didn't consider absolutely necessary. I tried explaining why creating a syllabus based on objectives,

rather than on contents, was, from a design standpoint, essential. But my explanation didn't seem to influence him. Consequently, aware of the risk that he could decide, at any minute, to completely stop the design of his course, I decided to forego development temporarily. We spent the rest of our meeting discussing pedagogical strategies he might adopt in his course.

A linear model requiring systematic precision and rigour and structured with fixed design steps – despite its being very prominent in academic-based literature on ISD design theory – is a hard sell to professors with little time or patience. Their needs are of two types: immediate and specific. Even if I try to be linear and systematic in my application of the ISD model, I feel pressure to answer very specific needs (help in designing an exam, enriching a case study, designing a graphic representation for a PowerPoint, etc.) which, normally, should be addressed at a later step in the application of the ISD model. My attempts at prompting him to complete the steps of the model in sequence seem to diminish his will to carry on. (He often says to me that the model is very structured, doubtlessly meaning it's too structured). I thus find myself in a trade-off situation: I simply can't stand firm on principle without affecting the professor's motivation to continue, so I must deviate from applying the classical ISD model. This puts me in an intolerable position because, on the one hand, if I agree to betray the most fundamental principles of instructional design, doing so will likely result in a relatively inferior course. On the other hand, if I do not manage to respond to his perceived needs, he may abandon the design process. It is a classic dilemma. Ultimately, this situation has been created by the professor's lack of time to accomplish this task, given his numerous other responsibilities.

Accepting to lose this battle while still hoping to win the war, I then moved on to the next step in the method, that of analysing the teaching exercises he had used in the past as well as the contents they required. At this point, the professor started showing more interest in to the design process. The descriptions of his contents were essentially linked to a series of texts to be read by his students: articles, chapters or excerpts from books, sometimes his own notes, all of it comprising compulsory reading. In reference to his documentary search, he stated

that he based his course on textbook cases which were fundamental to understanding the field, on commentary from experts as well as newly emerging case studies. His intent was to keep his materials up to date.

Returning to the general objectives now in each of the 15 units, we proceeded to distribute course content based on those objectives. As we went through his course materials, we analyzed the linkage between the various course contents and the objectives. I, playing the devil's advocate, asked him to explain his reasoning behind the choices he had made. He seemed amazed by this turn of events and he said, somewhat defensively, that this was the first time he had actually thought about it out loud, so to speak, being used to working alone with little feedback from his colleagues. He said that he found this was a difficult and sometimes annoying process. Yet he said that he also had the feeling that we were improving the internal logic of his course, indeed markedly so. Consequently, as we moved through the course, we kept making links between the general objectives and his contents because it allowed us to identify new links. As well, unforeseen links emerged which required our adding additional didactic resources. Finally, even if this exercise was time-consuming, it did greatly improve the overall structure of the course but did not modify its basic thrust. Given the fact that we spent much more time on this than anticipated, we now had to hurry because the professor had only three weeks more and about six hours each week to get everything done on the design of his course.

We continued to identify the didactic resources for the next weeks of his course, linking objectives to the course concepts and contents he intended to present. We also made significant changes to several units, based on the redundancy of some content elements and the absence of others, resulting in an improved clarification of intent on his part. Roughly speaking, the course remained intact although he now felt that it was better structured, researched and presented. He said he now felt more confident in presenting his course. By the end of this session, we had made it to Week 5 of his syllabus.

Session 4: We started this session by linking teaching resources to learner support activities. This required that we analyse his overall teaching strategy so as to identify the kinds of resources he needed and the activities required to support learners as they accessed the

resources. Up until now, the professor had basically limited his analysis to identifying the reading material (resources) he expected his students to cover. I emphasised the need for supplementary learner support activities which would allow them to better utilize the resources he provided. After discussing the matter and understanding the distinction between didactic resources and learning activities, he said he felt “more informed, more enlightened.”

Given the fact that the professor had earmarked a substantial number of readings for his course, we decided to develop learner support activities to help students better synthesize all of the information they were expected to manage.

As we proceed, he seems to understand the extent to which course design, in order to be effective, has to possess a learner-enabling characteristic and that it is not sufficient to simply provide students with resources; there also has to be learning activities that require supporting learning resources.

Given the considerable amount of reading to be done in this course, we decided to go through the required material for each week systematically and to identify learner support activities for each unit. The result of this process was the development of reading comprehension exercises (RCEs) which we hoped would help students focus on the main concepts and summarize the highlights of each text.

The professor’s initial difficulty in understanding the difference between the “teaching resources” concept as opposed to the “learner support activities” concept and the ensuing discussion prompts my thinking that applying the KISS principle (keep-it-simple-sweetheart) in such cases might not be a bad idea, since what may appear to an ID as an essential characteristic of good design could easily be interpreted by faculty as just nitpicking. So I’m starting to think that for design to succeed, at least in higher education, it has to be stripped down to its basics and only the essentials retained. Note to self: stop confusing faculty!

As work on linking his content to learning activities progressed, we diverged somewhat and began discussing how he would conduct his weekly videoconference. He explained that he mainly used the “open discussion”

method. To that end, he required that his students read the weekly-assigned case studies before coming to the weekly videoconference. We then discussed posting his materials online. At the time, he didn't have a website but he did want to develop one, seeing numerous advantages in doing so. For instance, he wanted to avoid the hassle of photocopying and also wanted to post a series of PowerPoint presentations he had done earlier. He did however mention his uneasiness with any form of programming which might be required, unless it were simply drag and drop.

The professor then began discussing expectations that several of his colleagues had, as well as numerous students, with regard to what constituted good teaching. He said a lot of his colleagues considered that the ultimate course, a real course, is a good lecture. He said most of them paid lip service to a need for in-class dialogue, seemingly resigned to the fact that most students preferred to be passive in class. This he felt was the worst possible situation and he went on to describe what I recognized as a socio-constructivist approach to learning. He described the role of the professor in engineering discussion, in keeping students on track and on subject, basing their comments on their readings. He said he tried to keep a balance between the wax and wane of discussions in class and to avoid intervening too much while also making sure none of them spoke too much. He also berated some of his colleagues who appeared to believe that they knew everything there was to know in their field and felt compelled to share it all with their students (i.e. telling them). He connected this traditional approach to the issue of control in the classroom.

Since our time was running out and I had wanted to make sure that he felt ready to begin his course, I asked him whether he had experienced any specific difficulties in the course, i.e., parts where students tended to get bogged down. He said his major problem was that he simply had too much information to cover. He added that, after the first time he gave this course, he had realized that it was necessary to cut back on the material but that he had no idea of how to do that. When I asked him why there was so much to cover, he said it had to do with the wide variety of required subjects that often defied easy categorization. But he said he did try to give priority to some elements and highlight certain cases. I asked him on what basis he ranked cases, he answered: "Usually on the basis of

the more frequently-cited cases, but especially on the relevance of cases to current issues.”

With regard to difficulties in his course, he showed me a series of transparency-based diagrams he had already used and planned to use again. We spent time redesigning them to improve their intelligibility.

As for posting resources on the Web, the technical team had produced a tutorial explaining how to upload material to the LMS. This tutorial was available online and delivered in asynchronous mode. Furthermore, the university retained the services of a student association to supply technical support services over the phone. The professor said that, given his time constraints, he would try to get a teaching assistant (TA) to upload his materials.

Session 5: Between sessions, the professor had produced a series of reading comprehension exercises (RCEs). He had taken a series of in-class quizzes and rewritten them as exercises. We then redesigned a number of questions so that they were more in tune with the general objective for each week. In certain cases, we had to write entirely new questions. While we did this work, I had the opportunity to identify the specific objectives he seemed to be aiming at and inserted them into the syllabus after he had signed off on them. Since our time together was nearly over, the professor told me he was ready to finish the work for the remaining weeks of the course, according to the model we had established.

Towards the end of this session, I sent the exercises we had completed for his course to a member of our technical team whose job it was to assist faculty in placing them on their website. The professor said that this parallel development of didactic materials and reading comprehension exercises (RCEs) went a long way in helping him redesign and ultimately improve his course.

Session 6: This session began with a discussion about student performance assessment. We had to take into account the emphasis he placed on the individual acquisition of knowledge and his doubts about teamwork, but we also recognized the need to motivate students to participate actively in this course. The professor decided to allocate 75 percent of his course points to individual performance, namely, 25 percent for the RCEs, 25 percent for a mid-quarter exam and 25 percent for the final exam. He

then decided to attribute the remaining 25 percent to participation in team exercises to be completed in the online discussion forum between weekly sessions.

Since the time available to us was relatively short, we contented ourselves with identifying RCEs that would be marked (some were being used only for formative evaluation) and checking the level of congruency between the specific objectives and the questions. Having established a functional *modus operandi*, the professor once again said he was willing to complete this work between our sessions.

As we design his course and, more specifically, write his course objectives, we begin examining his mid-term and final exams to check the level of congruency between his objectives and exam items. This allows us to identify objectives which had apparently gotten lost in some of the units/modules but, considering their weight in the exams, had to be identified in the syllabus. This kind of study of the correlation between exam items and course objectives constitutes a good example of reverse engineering in design, a useful technique in cases where it is difficult to identify the objectives a faculty member actually wishes to set or in cases where the professor is not inclined to invest much time in writing them.

One difficulty the professor experienced during this fine-tuning session was differentiating between specific objectives and exam items. I turned to Dick & Carey (2000) and to Morissette (1984) to explain the difference. I realize that a short workshop on writing objectives and exam items, delivered using educational software, would probably be quite useful to professors working autonomously. (NB. The most recent version of Dick & Carey came out in 2007.)

Session 7: Our last working session dealt with the issue of access to resources. We were faced with a decision: either allow learners to simply download the course materials posted on the site (case studies, texts, RCEs, etc.) or limit their access by allowing them viewing and printing privileges only when they were online. The professor considered this decision problematic because he was concerned that his copyright and intellectual property rights might be threatened. According to our support team, technically speaking, it was simpler to just allow students to download .pdf files, and especially .doc or .ppt files, so that they could

study them later and/or complete them offline. This approach worried the professor because he was afraid his materials would become the prey of hackers and even sold online. Finally, after a discussion with the technical support team, we opted for a halfway solution: students would be able to access and download the course material but only in .pdf format. The professor was reassured that his material was somewhat protected, at least with regard to the average student, but this approach limited the level of interactivity that students could have with the resources. Our meeting with the technical team concluded my work on this course. The professor continued working for a time with a technical assistant to produce several digitally-configured documents that we had designed together.

Conclusion

At the end of this first case, I saw that the time this professor had been able to dedicate to the design of his course was very limited, usually no more than three hours of working together and three hours of work on his own per week. However, the classical ISD design model which was the basis for my prototype and which guided the design process over this six-week period required at least twice the time he had available. We had never completed any one step, whether it was the analysis of his course, the overall design of it or, for that matter, any of the others usual steps. We would begin an analysis, I would explain certain concepts using examples to support what I was saying and then I would have to move on to the following step. Since the professor's participation was more or less voluntary, I could in no wise pressure him into completing any agreed-upon task between working sessions. When I tried to inquire into progress being made (like his writing specific objectives), his answers tended to be elusive. Consequently, I was unable to ascertain what exactly he had completed in his course. I was often under the impression that the work had been postponed in the face of more urgent priorities. Another thing I noticed was that the professor had a fair degree of difficulty balancing the design/redesign of his course with his regular activities. He gave me the distinct impression that the time he dedicated to his course design work deprived him of research time.

Ex Post Facto Interview

On the student support activities dimension and more specifically about the role of dialogue in this process: Is dialogue important? “Yes, in my view, it is. It’s what defines the educational experience...For instance, take what MIT has done; they’ve put their course contents on the Web. Now, that is not teaching...There is a difference between course materials and interaction, like quality dialogue. Learning is a process of common investigation based on the exchange of information and perspectives. Dialogue is an opportunity to question one’s own understanding, to question that of others, to think in a critical and creative way but also to think in an empathic way. Passivity for the student is fatal.”

On pedagogical issues: “My students receive a lot of information. I speak to them about issues, about ideas, about arguments and about conclusions...it is our frame of reference. I ask them to position themselves accordingly: what is their position with regard to each idea and issue? On what do they base their opinions, how do they come to a conclusion? How can this position influence them in their career? I want to move them in the direction of knowledge-building. I present them with different cases but what’s important is how they react to a given situation. By seeing how real people act and react in various situations, they can better position themselves.”

On the importance of eye contact: “It’s very important, usually, but I can adapt. To listen to someone without seeing them is OK, so long as we can share documents.”

On distance education: “It’s somewhat advantageous for professors but especially interesting for students. But I’m ready to teach at a distance to increase my students’ access to higher education.”

On delivering the course by videoconference: he told me he had experienced “...a degree of apprehension at the beginning because of the novelty. I had no previous experience (with videoconferencing). There were technical glitches ...I was cut off, ...sound quality was unsatisfactory, the computer screen kept freezing, I couldn’t move around the classroom like I’m used to doing but, as I get used to it, things should go better.”

On comparing lecturing to Web-based courses: “If it’s just for a presentation and if you can get the same thing on the Web, why go to class? Is it the same thing? Hmm, maybe to experience a feeling of belonging to a group? I wonder if that is so important...If we take the case of my graduate students for example, would they be ready to drop the ‘learning community’ experience? Yes, they have already done that with the videoconference courses.”

On the use of technology in teaching: “I agree [with using technology] insofar as I can be guaranteed good quality exchange and dialogue. In that case, yes, OK. If we use technology, it has to work to support the work of professors.”

(Note: this interview was conducted months after the above-described case study was completed).

Notes

1. See the Appendix 1 for a full description of the “Congruency Principle.” The “Method” is a proprietary document which cannot be reproduced.