EDUC 891, Spring 2009
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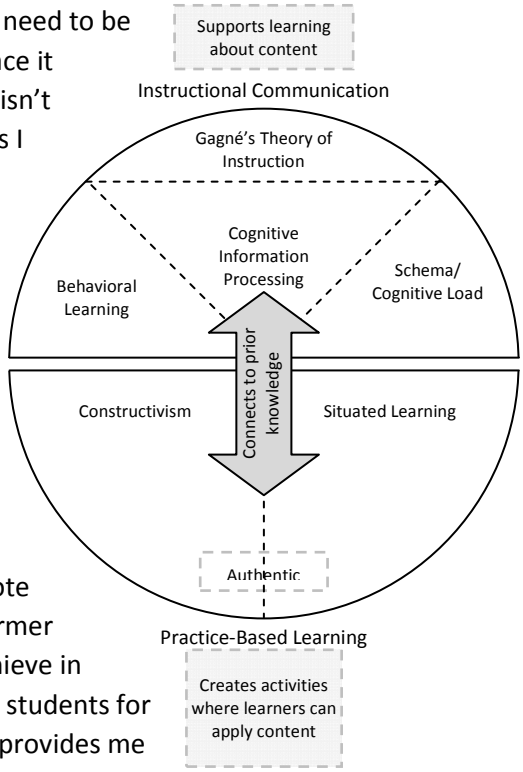
COURSE PARTICIPATION PORTFOLIO

For the last 15 years my work in academic libraries has been focused around teaching and learning. On several occasions I have been engaged in instructional design activities, from working with individual faculty members to help design assignments around information literacy outcomes to leading a team in the development of an online tutorial. But until I took this course, I didn't recognize these activities as being part of instructional design.

Part of my motivation in pursuing this program is to fill in the theoretical blanks, to find out where the gaps are in my own knowledge, and to explore in depth the intersection of technology with teaching and learning. What this course has given me is the language and vocabulary of instructional design; it has also brought out the theoretical framework behind the work in which I've been engaged over the course of my career.

BUILDING A FRAMEWORK FOR UNDERSTANDING

I'm a big picture thinker – in order to learn something new, I need to be able to put it into some kind of conceptual framework, to place it within a meaningful context. One could say that if the forest isn't there for me to discover, I'll try to create one out of any trees I find.



An early challenge in this course was to create a diagram that explained the relationships between several learning theories relevant to educational technology. I developed a diagram (also see Appendix A) that seemed to resonate with several of my colleagues, so much so that I was asked to share it on FirstClass.

The library literature and conference circuit is full of discussions about two learning theories – behaviourism and constructivism – and most librarians would be horrified to note that their teaching practices are more consistent with the former than the latter. But true constructivism is very difficult to achieve in the library classroom, where we will generally see a group of students for one 80-minute session. This exploration of learning theories provides me with a broader palette of theories upon which I can draw, and has allowed me to situate the cognitive theories I discovered in my design project from the fall within a framework of learning theories. The diagram I created here will be featured in a program I'll be presenting in a few weeks at the BC Library Conference: "Information Literacy and Cognitive Science – What Can We Apply from the Science of Learning?" The program proposal was submitted before I started this course, but many of the readings

and activities in this course have shaped the actual content of this program. It will also find its way into a graduate course I'm teaching this summer at UBC, "The Instructional Role of the Librarian."

Another "forest" I created was a mind map (see Appendix B or http://mindomo.com/view.htm?m=8aea2ed8e4904b8d8361b0eac6c9460b) based on an in-class activity that describes the relationships among the concepts and design processes discussed in our readings. It's not comprehensive – I haven't, for example, explored how various models of evaluation fit into the map – but it has helped me recognize those concepts that are new to me (holistic design, for example, and its relationship to constructivism) and to make links to prior knowledge and experience. I also shared this map with my peers through FirstClass and with members of my small group from the in-class activity.

Many years ago a colleague introduced me to the beauty of a good analogy in advancing understanding of unfamiliar concepts, and as I was reviewing my reading guide notes I came across one I had developed in response to the question, *How would you explain "front-end analysis" to someone completely unfamiliar with this notion?* (January 29)

> Suppose you saw the check engine light in your car come on. Your car is operating normally, and from past experience, you know that the warning light could mean any number of things. You take it to your mechanic, who hooks your car up to the diagnostic machine and gets the error code. Now he knows what the problem is, and he can go about making the repairs.
>
> Now imagine that your mechanic, rather than trying to diagnose the exact problem, just started randomly "fixing" things on your car. You'd end up spending a lot of money on unnecessary repairs, and your car might no longer work as well as it did.
>
> Front-end analysis is a form of diagnosis, a way of determining what needs to be done, as well as what the context is, before you take action. The goal of front-end analysis is to make sure that a) something needs to be changed; b) that any change you make is going to meet the needs of your audience(s); and c) to ensure that whatever change you bring about is both effective and efficient.

It occurs to me as I write this that analogies are an important piece of the equation in helping learners to make connections to prior knowledge when learning something new.

These three illustrations are examples of my own learning and growth in terms of understanding the principles of instructional design, but it was in the case analyses that I began to understand the application of these principles, and it was also where I was able to support the learning and growth of my peers.

Learning & Growth

Initially, I stumbled over the case analysis, as did my peers in the small group, Q-SAC. In response to a group member's posting, "…I am finding it more challenging to actually define the primary issue" (Sandy Binning-Dhaliwal, Case #10, "Ross Caslon," January 25, Q-SAC), I offered the following:

> 1. Who is the project leader? (this might just be the primary one - there seems to be a three-way toug-of-war going one).
>
> 2. What was the impetus for implementing WebPath? Was it in response to faculty requests for such a system, or was it a management decision?
>
> 3. There's a disagreement related to needs: OTC needs a system that's locked down, a one-size-fits-all model, but faculty need to freedom to pick and choose the tools that meet learning goals.
>
> 4. The system is being used for storage, but not much else. Why? (Colleen Bell, Case #10, "Re: Ross Caslon," January 25, Q-SAC)

Sandy's response to the points above concluded with, "Thank you Colleen you have got me thinking." (Sandy Binning-Dhaliwal, Case #10, "Re(2): Ross Caslon," January 26, Q-SAC). By the time I had completed my case brief, I had decided that the following was the primary issue: "Speaking of Zinny, he's the biggest obstacle, from my perspective. He drew a line in the sand early on, deciding how the software would be implemented, what his group would and would not do, and what features faculty would have access to." To me, this represented a huge leap in my understanding of the case, even though it was only marginally related to front-end analysis.

By the next case, I had developed more confidence in the process, as had the other members of my group, and as a consequence, the discussion was more focused and much richer. Based on feedback I had received on my first case brief, I became more attentive to creating links to our course readings:

> Agree - the readings this week talked about grounded design theory - about making sure that any design processes are consistent with the epistemological framework. Denny's practice up to this point has not given him the tools or strategies to work within Cynthia's framework, so he needs to brush up quickly on a design strategy that's more consistent with a constructivist framework. The readings give us the 4C/ID model, which I haven't yet read through so I can't say more, but given that the feedback from my first case suggested I need to bring in the additional readings more clearly, I'm going to at least mention holistic design. (Colleen Bell, Case #2, "Re: Case#2 – Issue (differing epistemology)," February 2, Q-SAC)

In a further exchange, the question of testing was raised: "Meanwhile, Cynthia only concerns 'process' instead of 'content', however, is it feasible under such an evaluation system in the form of a test?" (Qiu Ling, Case #2, "Re(5): Question 7," February 2, Q-SAC), to which I responded,

> "I think there's an assumption here that the evaluation system is the test…. And wanting to be true to her own epistemology, she wants to employ the same methods the teachers will use with *their* students to model the constructivist approach – which does include assessment, just not the criterion-referenced assessment that we're all probably used to." (Colleen Bell, Case #2, "Re(7): Question 7," February 2, Q-SAC).

I read with pleasure this response: "I think you nailed it with this comment for me, Colleen. I went into this case originally thinking that Cynthia was the 'bad guy' and Denny would have to 'reform' her." (Andrew Embree, Case #2, "Re(8): Question 7," February 2, Q-SAC).

As our cases moved from a focus on front-end analysis to a focus on evaluation and design, I continued my participation in the same vein: trying to understand the relationship between the case and the course readings, trying to connect to prior knowledge, and supporting the learning of my peers. It becomes more difficult to pull good examples from our small group discussions, as most of them took place in chat sessions, which tend to be shorter and choppier. But a few examples from a later case might provide additional evidence:

> so, we need to learn about quality systems, and write an evaluation plan … maybe start by doing some evaluation on the work already completed … [snip] … looks like the evaluation plan Ray wrote includes some formative evaluation … quality audits "a) maintain or imporove efficiency b) determined how disciplined and effective the operations are c) meet an appropriate level of quality assurance … [snip] … if we're looking for formative evaluation – we've kind of moved into the small group phase, but maybe need to step back? or forge ahead into field testing? … [snip] … would Kirkpatrick come in handy here? the reading from this week really focuses on evaluating instructional materials, and somehow that may be misleading us … I'm thinking program evaluation and evaluation fo training (so Stufflebeam and Kirkpatrick) would be more appropriate … what do you think?" (Colleen Bell, Case #9, "Transcript – Case 9," March 9, BCDs)

Finally, there was one more role that showed up in our small group discussions – facilitation.

Facilitating the Process

One of the things I've discovered about myself in this program is that teaching is so ingrained in my psyche that I can't help dropping back into the role even as I'm engaging in the role of student. On many occasions during our weekly small group discussions, I found myself playing the same facilitator role I would play in discussions in the courses I teach, as in this example from our first chat session:

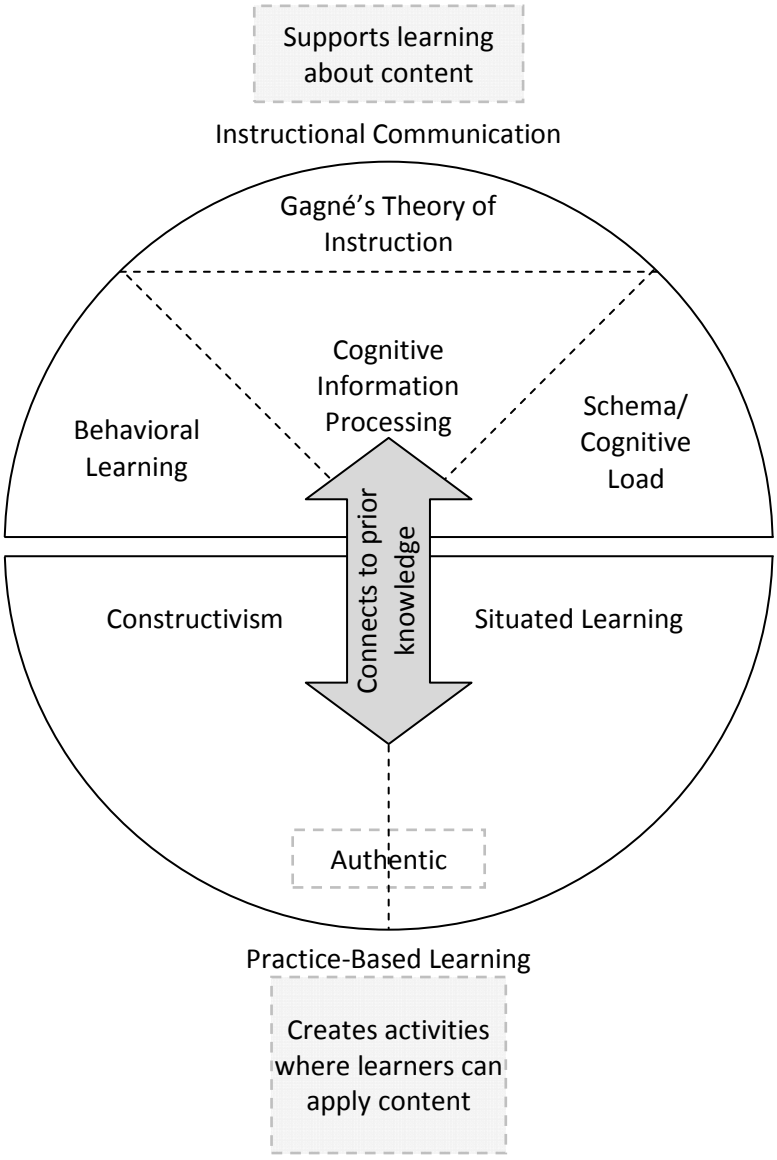
> summarizing: we've talked about task analysis (how to figure out what the procedure is that the operators follow - steps in the sequence), and we've talked about how to make use of the subject matter experts (and what they probably won't be willing to do), plus we've established that we've done a pretty good analysis of need, context, learner, and environment - what's still missing? (Colleen Bell, Case #18, "Transcript of chat for Case #18," February 9, Q-SAC)

Following the chat, I posted the following question, which followed up on previous discussions we'd had around process, efficiency, and effectiveness:

> So, what did everyone think of the process tonight? I think the chat did a really good job of mirroring the face-to-face process, where the small group discussion is 30-60 minutes. Would we want to continue with this? (Colleen Bell, Case #18, "Chat vs Asynchronous Discussion," February 9)

The group agreed to continue with the chat sessions, supplemented by asynchronous discussion in the conference, but in practice, most of the discussion took place in the chat room.

APPENDIX A: LEARNING THEORIES RELATIONSHIPS DIAGRAM



APPENDIX B: LEARNING AND PERFORMANCE DESIGN MIND MAP