1. In the Duffy and Jonassen book, Reigeluth characterizes several authors’ views as “extremist, exclusionary, and somewhat evangelical,” a view also expressed by some of you in class. For example, he takes Sagredo’s (Cunningham) views (below) to task:

   Objective measurement is a fiction or at best a degenerative case where knowledge is so decontextualized that only one context (the school context) is relevant.

Based on the lessons learned from your design project in this class, explain whose position, Sagredo’s or Reigeluth’s, you support.

(Don’t retell your project design story; just ground your views in the lessons you learned from project.)

I would tend to agree with the statement of Sagredo that objectivist design lends itself to a more strict and narrow interpretation of learning. Objectivist design is set up for a particular place and time. If the conditions are not right, the desired outcome is not always achieved. Attempts are made to satisfy all possible obstacles. I found this occur in the implementation stage of my project. Due to the short time period in which the students had to learn the skills, they resorted to written instructions, rather than the video based instruction. They opted for the step by step, hand-holding directions, to save time and energy. They did not want to think, they instead wanted to be led. The high priority need for such efficiency had not presented itself to me during the design process. Objectivist design also is a tedious process of design and re-design and re-design, etc. While I believe constructivist design warrants re-visitation and reform, I believe it offers more flexibility in the implementation for a wide variety of learning situations. Again, referencing my project, I designed the modules for a student sitting in front of a Apple computer, using iMovie, and learning to edit a video. A more constructivist approach to the module might have given the student the task of editing a video with any resources available. One group of students might choose to use iMovie, another Final Cut, another by using Microsoft MovieMaker. All the while each student is learning about the technology behind the editing and digitizing process. They also learn about compression rate, the different formats used for displaying video. Ultimately all achieve the resulting digitized video.

While I say this, I do want to point out that Reigeluth does admit agreement with Duffy and Jonassen on multiple ways of structuring learning for multiple means of understanding. He simply refutes the other authors adherance to strict Constructivist approach as the means for multi-structured learning. In some cases an objectivist approach might be appropriate, in others constructivism works best.
2. In the Jonassen and Land book, Land and Hannafin (Mike not Bob) advocate for a grounded design approach, or a “systematic implementation of processes and procedures that are rooted in established theory and research in human learning.” Elaborate on this definition. What are they trying to say to instructional designers?

My interpretation on this definition is that a design model (and I would argue ANY design model) should be supported by steps that are both documented and well tested. Furthermore, these steps should then be supported by research that shows the model works. I would venture to say that this can be directed at the DCC model as a tried and true model of instruction. The DCC model is similar to the software design model I used as an undergraduate engineering student. First determine needs, second determine objectives, third build prototype, fourth test, fifth revisit for improvements, sixth release for more testing, continue steps 5 and 6 until objectives are met. That model has been successful in business for many years, as has been DCC in instructional design. I believe that Land and Hannafin are advocating that before a new model of ID is adopted, it should be well researched and tested.

3. Also in Jonassen and Land, Barab and Duffy discuss how since the mid-1980s, learning is increasingly explained using a participatory rather than an acquisition metaphor. How would building communities of practice be participatory?

In early models of learning students were “taught to” and expected to “absorb” information. As Barab and Duffy pointed out, this resulted in “inert knowledge”. Newer models of learning employing communities of practice are similar to real world occurrences. A community of practice is a group of people with a common interest sharing ideas and experiences. Communities of practice have been around for many years now. Many of these communities are formed based on increasing efficiency and productivity. Learning occurs by being part of the shared experiences of the group. The key is sharing, or many-to-many interaction, not one-to-many.

For example, a group of Lab administrators at the University participate in a Listserv and meet monthly to share information. As each employs new software and hardware, they share their experiences, triumphs, and frustrations with each other. Each member gains valuable knowledge about the products and the information for future decision making. One event occurred late last week. The Psych dept was having trouble with SPSS running on lab machines. After contacting the company directly they found that the registration key was expiring prematurely due to improper installation (not being installed under admin privileges). A patch was released to fix this issue and needed to be downloaded. The information was shared at our last meeting and everyone returned to their schools/colleges with new knowledge that SPSS MUST be installed with Admin privileges.

4. On the midterm, I asked you to comment on the statement “The rest of the (DCC) model does not really matter - if you get the objectives and assessment right, your instruction will be fine.” Respond to this statement again based on what you learned from your project implementation.
5. According to Jonassen (in Duffy and Jonassen), why is evaluation so difficult in constructivist environments? Describe how Jonassen might evaluate a constructivist learning environment?

Jonassen describes evaluation and assessment in the constructivist-learning environment as being difficult due to the many possible outcomes, experiences, and knowledge of the learner. Some of the suggestions Jonassen gives for successful evaluation includes portfolios, containing multiple products (artifacts) illustrating the students understanding of concepts. Jonassen goes on to say that multiple people, however, should evaluate the portfolios, as no single person can be an expert in all areas.

Another suggestion made is review by panel. This works similar to my understanding of the Comprehensive Exam process, in which the student chooses three faculty to ask questions related to the area of study. The faculty determine from answers given if the student has grasped the knowledge asked of him/her. This approach allows for multiple attempts at drawing on the students knowledge base. The outcome is not an acquired skill, but an understanding of concepts introduced.

6. How are Understanding by Design (UbD) and the DCC model similar?

Both the UbD and DCC models advocate formative feedback as a backbone of success. As the McTighe/Seif paper states, “Feedback is fundamental to learning, but feedback opportunities are often scarce in classrooms. Students may receive grades on tests and essays, but these are summative assessments that occur at the end of projects. What is needed are formative assessments, which provide students with opportunities to revise and improve the quality of their thinking and understanding.”

Basically, a higher ultimate success rate is a result of performing evaluation and assessment as the design process is ongoing to eliminate errors or misunderstanding in the “final product”.

7. Why is it important to do a formative evaluation?

Formative evaluation helps the designer understand his/her audience and how they might interact with the instruction better. Through pre-tests, post-tests, comments, or expert advice a designer can tailor instruction to meet the needs of the audience in the best way possible. DCC separates formative evaluation from revising instruction to emphasis the importance of looking at the instructional package as a whole. The “revising instruction” step might only focus on a particular piece of the design (i.e testing the first module of my project and finding the video quality poor). Formative instruction is more about the entire learning experience (i.e. Comments from students after using the modules). This differs from summative evaluation in which the focus is on the meeting of objectives.