Reflection on Your Developing Expertise

Problem Analysis

Summarize vs. Synthesize

Denny Clifford

As I read my responses to the design challenges, it is readily apparent that my assessment of the situation was very literal. The following passage from my analysis portrays a novice approach to understanding the problems that the instructional designer needs to overcome:

“How can Denny design the material to help the science teachers to create the environment for nurturing the type of exploratory problem solving experiences that Dr. Oakes deems imperative for a successful constructivist learning situation? The key to constructivism is the veiled structure that unfolds before the student as the instructor facilitates an environment for personal construction and learning of science.

The second challenge facing Denny is Dr. Oakes vague parameters for him to follow; not to say that Denny always follows a pre-determined framework but the lack of structure is a big challenge. Design always requires being creative but designing to promote constructivism requires a different approach.”

Craig Gregersen

“At the onset, Craig is excited about the project until the clarity of the situation set in and he observes each group of stakeholders expecting something different from the training. In order for Craig to effectively design training for the Electron Corporation he will need to analyze the situation and ask pertinent and relevant questions of the stakeholders.”

If I were to quote the entire section, it reads like the ‘novice ID primer’. I tell it like I see it with no underlying meaning; as if I were going through a checklist.

Abby Carlin

“Abby and she quickly realized the nuances of the design that she would need to address. It will be imperative to the design that Abby gain the confidence and respect of the retiring employees in order for them to act as her SME’s. The SME’s cooperation will be essential to maximize the training and for the ‘hands on’ aspect of the training and to document accurate procedures, guidelines, and visuals into the instruction and the creation of a manual for the future.”
The Abby Carlin case study is the third case study plus, at this point, I had conducted an analysis and feedback of the Beth Owens for peer facilitation. Reviewing my work in this analysis, I feel as if I had a greater awareness and grasp of situational aspects, goals and planning. The goals and planning fall into the competent category; however, as Dreyfus & Dreyfus: “Someone at a particular stage of skill acquisition can always imitate the thought processes characteristic of a higher stage but will perform badly when lacking practice and concrete experience.”

Principles vs. Features

Denny Clifford

“How the students interact with the science classes could conceivably have a profound effect on them that changes the course of their lives. It is not uncommon to hear stories from successful people regarding humble beginnings or having no direction when they were in school.”

I actually managed to scratch ever so slightly beneath the surface of the design issues to address the deeper issues of the design in relationship to the bigger picture. While the statement is far from the insight of an ‘expert’, my interpretation of the problem deals with the relationship between the problem and its relationship to the principles that are involved.

Craig Gregersen

“He needs his design to address: Engaging training, Product liability safety issues and how they apply to the various departments, Just the right amount of training, & How the training applies internationally (what modifications need to be made dependent upon locale). His design needs to focus on recognizing problems, anomalies, and then the process to determine if it truly is an issue and if so what plan of action to take. The bottom line is safety for everyone and a bonus is minimal legal exposure.”

While I clearly represent the issues that Craig was faced with in this case study, I incorporated the principles behind stating the obvious and understanding the relationship between the determining factors.

Abby Carlin

“Design challenges include conducting a systems analysis, the who, what, where, when, why & how, and understanding her target training audience juxtaposed with the required training environment. The training design is for psychomotor skills to run the huge metal stamping machines; therefore, emphasis on the task analysis will be extremely important. Training will center
on demonstrations, visuals, simulations, and ‘learn by doing’. The design must present a step by step sequential procedure for operating the machines.”

All of my case study analyses are filled lists of surface issues and facts; however, in the aforementioned passage, I have attempted to utilize the principles to gain experience of their accurate usage and gain a deeper understanding of the design issues and how to alleviate and overcome the challenges.

**Relationships Among Issues**

**Denny Clifford**

As I reviewed my interpretation of the challenges faces Denny in his design project regarding the teaching of the science teachers in the constructivist style, I found I listed the various issues that Denny faced without creating a correlation between the challenges. I can clearly see that my novice attempt at understanding the ‘bigger picture’ falls short as my body of experience is nominal.

**Craig Gregersen**

“Forthly, Stan the senior design engineer throws another problem Craig’s direction as the engineers promote a “draft of a company-wide product safety program that established a comprehensive organizational structure and detailed procedures for a number of the issues he had mentioned” 4. Craig can understand the engineers’ logical, straightforward solution to the problem; however, very often problems fall into the ‘gray area’ which the draft did not account for.”

My approach to the Gregersen case study included a laundry list of issues and challenges for Craig to deal with and overcome; however, I did manage to recognize the relationship/correlation between the engineer’s approach to problem solving and ‘best solution’ for the company. I know in my head that everything in life is interconnected or inter-related somehow in the bigger picture and as I go back a review my work I can acknowledge the necessity to attempt to identify these relationships more readily.

**Abby Carlin**

“Abby has a blank slate to work with due to the absence of any previous form of training in place, no manuals, and Andrew Thomas, the plant manager never having trained on the machines. Retiring employees are the only employees, onsite that know how to run the machines.”

The Carlin case is unusual and especially challenging in that the company has no form of training in place; the idea seems rather disconcerting. I did allude to the relationship
between the design challenges and the plant manager’s lack of training, no training currently in place, and the retiree’s knowledge and experience that is desperately needed to facilitate and implement comprehensive training at the plant for the first time.

Reflective vs. Reflexive

Denny Clifford

“How can Denny design the material to help the science teachers to create the environment for nurturing the type of exploratory problem solving experiences that Dr. Oakes deems imperative for a successful constructivist learning situation? The key to constructivism is the veiled structure that unfolds before the student as the instructor facilitates an environment for personal construction and learning of science. ‘

I understand that the primary difference between reflective and reflexive is the breadth or scope of the terms. While knowledge is power and inordinate amount of extraneous materials can only confuse the details and block the primary vision/goal. Therefore, it is prudent to narrow one’s search for additional information in the design process. I actually feel as if I managed to get half-way there. The question I posed is broad and researching the information as I posed it would be extensive. For one thing I could shrink the boundaries and narrow the focus to information that science teachers or more specifically science teachers that are currently using this teaching method. This actually reminds me of the video instructing us on developing a research topic. Write your question in a manner to narrow your focus in order to pin point/target your information and research.

Craig Gregersen

“In order for Craig to effectively design training for the Electron Corporation he will need to analyze the situation and ask pertinent and relevant questions of the stakeholders.”

I think it is safe to say that I really missed the mark with this question. Craig needs to analyze the situation for what? The company is concerned about product liability; maybe a question about ‘what are the top three issues regarding liability that concern the company? Or one important issue from each stakeholder group represented.

Abby Carlin

“Once Abby has analyzed the scope of the project and recognized the required parameters she realizes the specific challenges that she must overcome to design effective training.”
Once again, it is imperative to narrow the scope of search for the parameters involved with employee production at the FDM plant. The number of employees that need to be trained would be an obvious question in the analysis. Determining what the current employees have to say about what they feel are the most important aspects of the production routine and what are the most important/necessary skills for the job?

**Problem Solving**

**Relationships among Solutions**

**Denny Clifford**

“While Denny Clifford has many challenges that he is facing to design the instructional materials for Dr. Oakes, I feel the center of the case study is the design issues. Denny needs to recognize he should adopt a problem solving, constructivist attitude to use as he speaks with Dr. Oakes and determines exactly what she expects of the instructional materials. Basically he will need to embrace and immerse himself in the constructivist philosophy in order to create designs that will please Dr. Oakes and further her desire to promote a real life relationship between the students and science.”

While my recommendation in the Clifford case does address the design issues, the solution is weak from a lack of details. The recommendation is lacking specifics. For example, what would be a question Denny could pose to Dr. Oakes to engage her since she has been less than forthcoming with her true expectations. Once Denny is armed with Dr. Oakes information he will be able to address the particular design problems with a more localized solution.

**Craig Gregersen**

“Craig was excited he had stumbled upon a project that is seemingly as perfect fit for his skill set. Craig has both a legal degree and a Ph.D. in instructional design. The Electron Corporation, a multi-national corporation, has requested Craig design engaging training for all employees regarding legal issues of the telecommunications equipment they sell. Successful training will require a systems approach to the design for total company ‘buy-in’ that allows focus on both product liability for the whole company and contextual product liability for the individual departments. Craig has become aware of the challenge the project will be. He has discerned the necessity to understand each group’s point of view and objectives followed by a training design that creates a win-win situation for all concerned. Ultimately the design needs to align the objectives of the company
with the objectives of the individual groups of employees. Communication is imperative between the different groups, the company, and Craig to evaluate and disperse attitudes and biases that inhibit the employees from fulfilling the expectations of the Electron Corporation. Craig must placate the legal department to recognize the wisdom of ‘knowledge is power’ for the employees, rather than ‘ignorance is bliss’ to minimize company legal exposure. Despite the enormity of the company, the whole is nothing more than the sum of the parts.”

As I analyze my solution, to my understanding, I actually believe I explained and showcased the relationships between the solutions and the design problem. The recommendation relates to the design issues set forth by the company. The recommendations have shown the correlations between perceived challenges and the solutions to overcome them. I will freely admit; however, that the solution is simplistic. My recommendation sounds good to me on paper but the logistics for all of the companies, in all of the countries, to just magically come together and see eye to eye about the scope of the training would be daunting. If these are indeed ‘real life’ scenarios, I would love to know exactly what was Gregersen’s solution?

Abby Carlin

“Abby has an opportunity to work alongside her former professor. She can showcase her instructional design education as she creates training procedures, manuals, and precedents to assure successful training for the impending new hires and the new hires of the future. She should engage the retirees as her SME’s for training particulars & descriptions and for the hands on training that is imperative for the success of the design and the accomplishment of the goal to train three sifts of inexperienced new hires in ninety days without a reduction in productivity. Abby needs to film actual production for classroom training. The videos should be dubbed following film editing to enhance instruction and comprehension. Once the trainees have completed the classroom training they need to begin practical application on the machines. The combination of classroom training procedures, simulations, and hands on training should afford a seamless transition and success for Abby and the stakeholders.”

The recommendation for problem solution at the FDM plant does indeed portray the relationship between the problems and the solutions. Currently there is no training. I have patterned a solution that addresses the design parameters along with the challenges and issues. For the first time, I felt as if I had a firmer grasp on the design issues and acceptable, feasible solutions for the challenges.
Considerations of Implications

Denny Clifford - Craig Gregersen - Abby Carlin

As I review the solutions/recommendations that I proposed for the three case studies, it is glaringly apparent that the answers were lacking details. If I create the analogy between the solution for the case study and a recipe, I would have a big problem on my hands. If you write a recipe that does not detail the ingredients, how much, how to combine, how long to bake, how to know that it is done, you will have a disappointing outcome. The same is true for instructional design or more specifically the three case studies that I have completed thus far. I think they are good starting points but they need to be fleshed out for the real world.

Flexible vs. Rigid

Denny Clifford - Craig Gregersen - Abby Carlin

Once again, I missed the mark regarding the manner in which I posed the solutions to the cases. I presented the recommendations as if we live in a perfect world and the solutions I put forward would be implemented as is with no problems. (silly me) As I read this section I was surprised by myself that I did not consider how the training would be received. I may have mentioned before but I will repeat it again: When I took my very first class with Dr. Newby, I often felt as if our reading selections were a half step behind our projects/papers; however, what I came to realize it was a teaching tool. We would complete the paper or discuss the topic and come up with our responses and then we would have a reading the following week that clarified what we had spoken about before which allowed us to compare and contrast the before and after, give our previous work a second look and consequently learn from the practicality of the process. I have the same feelings right now. If I had read the Ertmer/Stepich paper first, my case studies would have been completed differently; however, I don’t know that it would have had the same impact. Reading the paper now that I have completed a few case studies, the ‘light bulb’ went off and it makes perfect sense now. I still struggle to utilize the necessary information from the previous classes; however, I am seeing how to connect the dots.

Action Plan for Moving Forward

We come to this program with a certain skill set/tool box of intuits ‘know hows’ that we have acquired through practice and experience that we may not even realize we have. I was not born an instructional designer, therefore, when I started this program I started out pretty much at the bottom of the learning curve. I jumped into this program with
both feet and I have immersed myself in all of the course materials, discussions, projects, and research. I have been on my personal path from ‘knowing that’ to ‘knowing how’\textsuperscript{1}. Without a frame of reference, except for my human development background, the program has been challenging to say the least.

I plan to continue to challenge myself and push my personal boundaries and limits and gain the experience that will afford me to work my way through the five stages of skill acquisition. (Dreyfus & Dreyfus, 1986)

We have learned through life and our readings that in order to move forward in whatever you strive to learn, there is no substitute for experience. You can become a legend in your own mind but that will never translate to real life. There is an old musician’s joke that says “How do you get to Carnegie Hall…Practice, Practice, and Practice.” Even people with natural born talent still have to practice. The same goes for ID. Everything in life is a process; nothing happens overnight; however, if you persevere you can reach your final destination.

“There is more to intelligence than calculative rationality.”\textsuperscript{1}

References
