Case Study #2 Lehigh University LST 403

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Case Study 2 presents an interesting problem. Denny Clifford is hired by Dr. Cynthia Oakes to create instructional materials for local middle school teachers. The material needs to contain a constructivist theory, follow science reform initiatives, and require minimum time from Dr. Oakes. These requirements are just some of what Denny is supposed to do; yet, he is unsure how to tackle the problem. I created a concept map as if I was Denny, brainstorming for our next meeting. Dr. Oakes seems to be a difficult woman to please, but once the code of constructivism was cracked, the answer is stress-free. First, explanation about the main issue Denny faces will be discussed. Then, clarification about why I chose webinars, as my possible solution, will be examined.

Denny is an experienced design consultant. Therefore, he understands how to interpret the ideas of others to create something new. Yet, after several meetings with Dr. Oakes he still cannot wrap his head around what is required of him. Denny is failing to realize how constructivism truly works. According to Reiser & Dempsey (2011), constructivism theory of learning "is based on the idea that knowledge is constructed by the knower based on mental activity" (p. 45). In simpler terms, constructivist learning is an active process, requiring collaboration in authentic learning situations. When the learner is presented a problem, they will work through the challenge taking primary responsibility for creating their own learning. This is rather different then Denny had understood. He is trying to create a resource with learning objectives, direct instruction, and criterion-referenced assessment (Ertmer, 2007). Criterionreferenced test would, for example, report student performance according to the individual student's correct answers on a question. This is completely opposite of Cynthia's idea. She wants learning environments where teachers are figuring out how to apply their learning to any context. There is no right or wrong answer. Rather, independent application of a teaching process is applied throughout multiple areas of learning. The solution I propose is based on the constructivist theory.

Reiser & Dempsey (2011) noted, for high quality teaching to be successful in this theory, learners should be "supported in their efforts, have access to knowledgeable mentors, information resources, and supportive incentive/management structure to make this change successful" (p. 48). Thus, I recommend Denny create a webinar series. Knowing Cynthia's love is in research; Denny can present her with Pang's (2009) findings on web-based learning. The webinars can use previous published articles by Cynthia as part of their information resources. Denny can add interviews from the previous teachers, as well as, use them for instructors. Similar to PD360, live conferencing, and audio PowerPoint's allow them to be mentors for new teachers. This also offers the possibility of going national like Cynthia envisioned. Due to 24 different video lessons, acquiring knowledge in various, authentic, learning experiences can be applied. Knowing teachers are busy, web sessions can be 30 minutes after school. Teachers are able to watch them alone or collaborate with grade levels. Teacher Created Institute is a good example. If possible, master's credit, from Cynthia's university, can be given as an incentive. After teachers have reached a certain level of credits, Cynthia can hold a face-to-face workshop. Otherwise, she can always submit a video training. This freedom allows Cynthia to be a guide on the side while continuing her research. Reiser & Dempsey (2011) noted for successful design of constructivist learning experiences, field-testing is important. The list of new participants given to Denny can be an immediate study for Cynthia. New articles published, along with new teachers each year, keeps this an ongoing program.

Webinars kill two birds with one stone; it incorporates all of Denny's needs and Cynthia's wants. Teachers are working within a constructivist theory, which will help students learn.

Reference:

Ertmer, P. A., & Quinn, J. (2007). *The ID case book: Case studies in instructional design*.

Upper Saddle River, NJ: Pearson.

Reiser, R. A., & Dempsey, J. V. (2012). *Trends and issues in instructional design and technology*. Boston: Pearson.

Pang, K. (2009). Video-driven multimedia, web-based training in the corporate sector:

Pedagogical equivalence and component effectiveness. *The International Review Of Research In Open And Distance Learning, 10*(3), Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/629/1265

Resources:

PD360: http://www.schoolimprovement.com/products/pd360/

Teacher Created Institute: http://www.teachtci.com/webinars/index.html