I probably should have read Jonassen, Campbell and Davidson before I wrote my first post, as I am definitely more in line with their thinking and argument. Their discussion resonates with me because I believe it is impossible to fully create a true reality or context given the unnatural nature of intervention; and that the mere effort to do so and to convey it through any medium alters and constrains the reality, reducing (Husserl) and distorting it (p. 4). We cannot predict with complete certainty the outcomes because we cannot control every variable. We also cannot give every student access to every natural learning environment so as to allow them to learn without intervention. Since this is true (and Heisenberg's Uncertainty Prinicple as applied to instructional delivery rings only too true) what is the alternative?

I do see the starting point residing in a holistic approach to the learning process (p. 4)— in an attempt to understand and truly begin to see the system as a whole (how a change in any one part affects all others), rather than as merely constituent parts. Donella H. Meadows in her book, *Thinking in Systems: A Primer*, using an example of a slinky, writes: "The answer clearly lies within the Slinky itself. The hands that manipulate it suppress or release some behavior that is latent within the structure of the spring." She goes on to explain that this relationship between structure and behavior is the basis of systems theory and that when we understand the way systems work, we can impact the behavior (2008, p. 1). The learning system is so interconnected that separating out media or methods (or any other variable for that matter) is irrational. It may be convenient when trying to isolate variables for research, but, it cannot give a clear picture of the problem or potential solutions. As Salomon (1991) indicated and Kozma (1994, p. 9) fleshes out, by using a systemic approach, and Guttman's Smallest Space Analysis methodology, it may be possible to establish measurable relationships as instructional interventions are introduced over time and thereby begin to more accurately predict effect.

Citations

Kozma, R. B. (1994). Will media influence learning? Reframing the debate. Educational Technology Research and Development, 42(2), 7-19.
    doi:10.1007/BF02299087

Jonassen, D. H., Campbell, J. P., & Davidson, M. E. (1997). Learning with media: Restructuring the debate. Retrieved March 11, 2015, from http%3A%2F%2Feric.ed.gov%2F%3Fid%3DEJ488325

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I find the stand-off puzzling, to be honest. An analogy might be as follows: Food for space flights is packaged in pouches especially designed for use in space. The pouch preserves, houses, and provides a convenient delivery system for the food. While the design of the pouch may be changed/adjusted, without the pouch there would be no nourishment for the astronauts. Its importance is equal to that of the food because it is integral to the process. Likewise, media (whether a teacher's voice/a picture/a video/etc.) are integral to the process. Without a method of delivery, knowledge, skills and/or attitudes would remain with the designer. Method in this case is equivalent to media and one is useless without the other. Research for both is a given.

While I agree with Kozma's contention that the social interplay of the medium with the coginitive processes as well as the increasingly social structure of the learning environments and capabilities of media need to be studied if for no other reason than to optimize the efficiency of the most appropriate pairings of method to medium to environment to user; I found the learner to be virtually absent in both discussions. Although more present in the Kozma article, still he views the design process as a "dynamic, creative interaction (conversation) between the designer, the situation, and the medium..." and only brings in the end-user once the learner interacts with the design object (p. 11). But, more troubling than that in today's learner-centered, participatory culture (Jenkins, 2009), is a seeming disregard for learner affinity (to/with/for) media. Surely it must play a role. The importance the learner places on the medium, and the experience the learner has in using/manipulating the vehicle may transform a mere receptacle or delivery mechanism (Lee, W. W., 2012) into as crucial a factor as a chosen methodology. It may preclude the use of a given vehicle because the learner has become so "one" with a particular vehicle that he/she may become non-responsive to another. If we are not able to freely study the trends occuring in media as they relate to learning, what will we do when we see our once proven methodologies begin to fail?

A final thought as to this debate arises from reading Louis Guttman's article entitled *Measurement as Structural Theory* (1971). In it, he emphasizes the need to examine the data structures from multiple disciplines with an eye for new hypotheses as we encounter new problems: "No fixed a priori collection of abstract, contentless, techniques or principles can be universally appropriate for scientific progress" (p. 331). It is probably not in the best interest of education to refrain from studying media's relationship to learning in this rapidly changing, technological environment; and, I do not believe Clark's work is devalued in the process.

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process, and organizations: Interventions, performance support tools, case studies. San Francisco,
CA: Pfeiffer, a Wiley imprint.

Hi, Christian,

I read your post with great interest and it really caused me to think about the role learning styles might play in the choice of media. So, I did some research (you may hate me)...

You said: "I do agree with Clark that we should use the less expensive way" but, you also wrote, "All students learn...in different ways. Some learn better visually compared to orally" (Vester, 2015).

Neither article focused on learning style specifically, yet, we know many educators consider it to be important. In fact, over 70 models have been proposed with considerations far beyond the standard visual, auditory or kinesthetic tendancies (Wilson, 2011). Morrison contends that the "manner of instruction can be more important that the types of learning activities selected" (Morrison, Sweeney and Hefferman, 2006); and, Alaka (citing Kolb when assessing the value of learning styles in a law school setting) hypothesizes that it may even be more beneficial to present information in a variety of styles because it better prepares students to adapt to ongoing and "unguided learning situations in a variety of settings" (2011, p. 168).

Given this line of reasoning—that 1) because some media span multiple learning styles; and, 2) the multiple representations can potentially enable a learner to become more versatile at receiving instruction—is it possible that versatility should play a role in the consideration/choice of medium and perhaps even be weighted more heavily than cost?

Thanks for making me think! Ter

Citation

Alaka, A. M. (2011). Learning Styles: What Difference Do the Differences Make? Charleston Law Review, 5(2), 133-172. Retrieved March 13, 2015, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1675168

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Vester, C., Forum Week 1 DQ 1: The great media debate, EDCI00566, Purdue University, 2015.

Wilson, M. L. (2011). Student's learning style preferences and teachers' instructional strategies: Correlations between matched styles and academic achievement (Doctoral dissertation, Liberty University) [Abstract]. (UMI No. 3482346)

Thread: Terri_Krause_Wk1_DQ1_The_Great_Media_Debate
Post: Terri_Krause_Wk1_DQ1_The_Great_Media_Debate
Author: **Terri Krause**
Posted Date: March 13, 2015 9:15 Thread: Terri_Krause_Wk1_DQ1_The_Great_Media_Debate
Post: Terri_Krause_Wk1_DQ1_The_Great_Media_Debate
Author: **Terri Krause**
Posted Date: March 14, 2015 9:23 AM
Status: Published
PM
Status: Published

Thanks, Jea, for taking time to respond! The site you mentioned includes the following four modalities: auditory, visual, kinesthetic and tactile. I have been thinking in terms of e-Learning for the past six months or so because I believe that will be my area of focus; but, I have felt at a loss when it comes to the tactile and kinesthetic modalities. It is easy to imagine instructional strategies that will appeal to visual and auditory learners. The tools and programs allow for the creation of great slideshows, Prezis, animations, movies, music, audio lectures, and so on. But, what of those learners who rely on movement or touch to wholly connect with the concepts? In a classroom, we can have the students dance, or move, or hop, or strum, etc. if it is determined that movement helps the instruction better traverse the learning path. But, what do we do for e-Learners? I suppose young children could engage in Wii types of instructional activities for some subjects, similar perhaps to *Just Dance.* And, tactile peripherals or touchscreens could be included with the instruction for math and spelling that would incorporate tracing and/or tapping. But, what of adult learners?

I was asked to work with a second grade student years ago, around the time learning styles were being introduced in the educational arena. Michael was a good student except when it came to spelling. His mother said he would study for hours before a spelling test (this is second grade, so you can see how desperate this child had to have been), and then would proceed to fail. He was so beside himself that he was starting to feign illness on spelling test day. His teacher said she had tried everything she knew to try and thought perhaps I might be able to help. I think she probably had just run out of ideas.

I had read an article about learning styles and decided to try a tactile approach since visual and auditory were obviously failing him. I brought playdough, rice, sand, and macaroni to our meeting and we went into the cafeteria to study. He formed his words with clay. He drew them with his finger in the sand. He formed the letters out of the macaroni, and then poured the rice into the palm of his hand and let it slowly flow out of his closed fist to form the words. We had fun and talked about the words and letters as he went through his list. The next day, he got every word right on his test, and his mother began to use this methodology with him at home. He remained successful.

This experience made me a believer. But, as a result , I am really conflicted as I conside e-Learning as my area of focus. How will I help the learners who need more/other than audio and visual? What activities can I build into the instruction that will give them true tactile or kinesthic experiences? Or, should I assume adult e-Learners will be vetted and will only be auditory and/or visual learners? With the movement toward e-Learning even in the lower levels, I think this is going to become more of an issue and is one that needs to be addressed. I know I did not give you an answer for the adult e-Learning environment; but, that is not because I have not been thinking about it. Thanks, Jea!

Citation"Learning Modalities." Learning Modalities. N.p., n.d. Web. 13 Mar. 2015.

Jea, this is a follow-up to my response to your question. I need to do some research and also to think through the potential, but I saw these gloves made for people who are visually and auditorily impaired so they can communicate on a news site tonight and think it may be able to be used to provide a tactile option for e-learning. Ter

Citation

"The Glove That Transmits 'touch' over the Internet." BBC Future. N.p., 13 Mar. 2015. Web. 14 Mar. 2015.

Hi, Jea, I guess when I think of tactile and kinesthetic modalities, I think of them in a pure sense. True movement and hands-on experiences. For me, using a keyboard is not the same as constructing something with my hands, or using them to form letters (as in the case of Michael). I don't know if we would have had the same results if I had given him a keyboard and told him to type in the words. That would be an interesting study.

I did think of another tool I saw and was intrigued by. I have not bought into it yet because the programming is sophisticated and the reviews say the results are less than purported. But, the concept behind Leap Motion is definitely heading in the right direction and the price ($79) for the user controller is really reasonable (if you already have a touch screen device). As more is written for it, I think it will become a very viable option for kinesthetic and tactile learners.

Thanks so much for your input, Jea~! Terri

Citation

"Leap Motion." Leap Motion. N.p., n.d. Web. 14 Mar. 2015.