

## Thoreau, Proteus and Learning Styles: Professional Development is a Journey, not a Destination

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As I sat in a group college admissions information session with my son, a high school senior, I found myself turning to my phone to check my work email—and I caught myself. Why was I bored? I had the motivation, for I had just spent considerable time driving my child to visit this fine institution of higher learning and conceivably, a sizeable amount of my paycheck could be soon routed to this very address. I briefly thought about it and quickly concluded that the admissions counselor’s monologue was not able to hold my attention due to the obvious fact that I was a visual learner and she was just not addressing my particular learning style preference. With that mental assurance in place, we finished with a campus tour and proceeded to drive to the next town on our circuit.

The introduction session at the next college started with triumph, a visually appealing video that had incredible images. Then a few slides filled with numbers and statistics later, my attention wandered and once again I found myself turning to my email and my phone. I caught myself again—what exactly had gone wrong with this particular session if they had addressed my self-perceived preferred modality?

I felt as lost as Thoreau in the woods after a snowstorm and wondered if I had somehow ended up on a road that would lead me to Siberia.

### Examination of Learning Styles

After coming back from my trip, I needed to find my bearings and envisage how I wanted to teach. A colleague recommended that I look into the Association of College and Research Libraries’ *5 Things You Should Read About Learning Styles* (2012). After perusing this nice 1-page summary, I started earnestly reading in full the five articles it listed and here is what I found that was meaningful to my situation.

Dembro and Howard (2007) noted that even though the validity of learning styles has been challenged, this cry of foul by researchers seems to have had a modest impact in the publishing world. The authors analyzed textbooks and concluded the infiltrations of this theory are deep rooted. To facilitate the broad acceptance and perpetuation of learning styles, the authors state that book and journal editors use *face validity* in which the “assessment is based on common-sense judgment of what appears to be valid to an untrained observer, but it is not a technical or a statistical assessment” (p. 103). I felt hoodwinked about my accepting too easily (along with apparently a host of publishers) the often blind integration of learning styles in higher education.

Krätzig and Arbuthnott (2006) looked at two different

studies to determine if students learn and remember more if instructors use certain teaching techniques based on the students’ perceived learning style. The authors’ findings indicated that even though people may be familiar with the concept and are able to articulate what they *think* their learning styles are, the reality of their indicated preferences is based on the context of the situation and that “people’s intuitions about their learning styles may be incorrectly attributed” (p. 245). Like Dembro and Howard, they concluded it is not necessary to know the particular learning preferences of students to increase performance, because in the end, teachers have to use multiple modalities in their instruction to keep the audience interested in the material. I now understand why I could never quite feel comfortable officially declaring my preference as being a definitive visual or a kinesthetic learner; I was never meant to pick between the two!

Sanderson (2011) provided a thorough literature review of leaning styles, which validated my growing skepticism. There are numerous models surrounding learning preferences, which take into account personality, cognitive style, situational environment and subject matter, all trying to determine if it is a fixed or a habitual preference within students. She stated the “net effect of this fragmentation is that many definitions, terms and models are a barrier to a coherent theory that can be used for teaching” (p. 378). I agree with the author’s statement “that there is no one thing that teachers can do to magically produce the learning” for “learning and teaching are both hard work, with no quick fixes” (p. 383).

Mestre (2010) investigated leaning objects (games, research guides, videos and so forth) created by librarians for online instruction. She questioned if these were able to accommodate diverse learners and support learning. Mestre’s usability study first had students take the VARK assessment and the NCSU Index of Learning Style Inventory. Results indicated the majority of students were identified as being multimodal learners and thus they want a variety of ways to engage and interact with online versions of learning objects and urged librarians to review “pedagogy associated with design, development and implementation to deliver instruction in an online environment” (p. 827).

Pashier, McDaniel, Rohrer and Bjork (2008) set out to identify valid learning-style assessments in school settings; however, the authors came to the conclusion “that the widespread use of learning-style measures in educational settings is unwise and a wasteful use of limited resources” (p. 117). This last article made clear to me that the unverified belief in the usefulness of visual-aural-kinesthetic learning styles over the years was analogous to a five-year-old’s belief in

Santa Claus. Grown-ups talk about Santa coming and leaving presents in the night. The milk and cookies are gone in the morning thus, Santa must be real!

## Finding My Way

While investigating and wrangling the misconceptions surrounding learning styles and effective instruction, I felt like I was trying to get a truthful answer from Proteus. The Greek sea god was able to foretell the future, but you had to grab him and hold on tight while he changed forms (lion, wild boar, snake, tree) before you could get the prophecy from him. It was not an easy task! The five articles mentioned above clearly articulated that not only was there no magic bullet for teaching, but that the “bullet” can lead you astray. I turned elsewhere for some more clarity and answers.

After participating on a panel at the 2012 ALA Annual Conference, librarian Char Booth stated in her blog (2013, February 13) that her investigation on the topic confirmed the “relatively obvious notion that people learn in different ways” and “the benefit of learning styles theory is that it reinforces two central aspects of strong teaching practice: engagement (keeping the participant interested in the scenario and content) and differentiation (changing it up, not relying on one delivery mode or teaching style).” I found this comforting, but still needed more.

I then sought out Daniel Willingham, a cognitive scientist and professor of psychology at the University of Virginia who is author of useful books such as *When Can You Trust the Experts: How to Tell Good Science from Bad in Education* and *Why Don't Students Like School?* He verified that the seemingly blind acceptance of learning styles is based on the psychological phenomenon called *confirmation bias*: “once we believe something; we unconsciously interpret ambiguous situations as being consistent with what we already believe” (2009, p. 121). In the book, he explained how his research translates into useful guidelines for instructors and I took away a few key points to help guide me on my journey.

Willingham pointed out, “most of the time students need to remember what things mean, not what they sound like or what they look like” (p. 120). He encourages instructors to ask themselves if they are providing the basic information/concepts in order for students to succeed and yield the greatest cognitive benefit. After few key concepts are identified, teachers have to then relate those ideas to what students already know. For example, students typically have a cursory knowledge of how to use a database, but the understanding of how results appear on their screen is limited and without depth. That’s why many librarians use the knowledge students have in searching Google to compare and contrast with using a database such as JSTOR. Some librarians also relate information seeking strategies for a research project to the similar number of resources they would seek in doing a non-“scholarly” task like planning a trip. According to the author, the more examples an instructor can provide to connect to

students’ background knowledge, the more effective the teacher will be to assist students create new knowledge (p. 68).

I surmised what was missing from the college admission sessions I attended was deeper meaning, as they only provided me with shallow knowledge and hence, lost my attention. They appealed to my senses, but not my mind. While I was being presented with different approaches and modalities, I was not receiving information that gave the in-depth significance behind the visit which I could not get from a website or a brochure. I already knew that the campus was lovely, its buildings tech-filled, and that the students were all above-average; I needed to know more about how, exactly, they dealt with issues such as what factors (e.g., changing majors) might impact my son’s (and thus my wallet’s) graduation date.

I also came to the conclusion that I had become unconsciously complacent in my teaching ability. Let me explain. I took downhill skiing and piano lessons as a child, but since then, I haven’t taken any lessons and “just did it”. While I am still a pretty good skier and can plunk out a tune or two on the ivories, I have not really improved on either hobby since I became an adult due to the infrequent manner of which I practice something new; the skills are simply being maintained. The same goes, too often, for my teaching prowess. Willingham points out “it appears that most teachers work on their teaching until it is above some threshold and they are satisfied with their proficiency” (p. 150). This does not necessarily make them a bad teacher (or a bad admissions session leader). It just may indicate they are not conscious of what they are doing (or not doing) and rely upon their solid footing to teach on autopilot. Just as we tie our shoes everyday without thinking, we manage to do a pretty good job of keeping our “teaching” shoes on our feet. But if we consciously thought about it, those “shoes” could fit even better.

Winston Churchill is credited for saying; “To improve is to change; to be perfect is to change often.” This review of learning styles has reminded me that teaching is a journey, so I need to change and seek wisdom from those who are willing to mentor and challenge my thoughts on teaching and how I approach instruction. The only way I will remain effective in the classroom, is to practice and purposely improve my skills. As Thoreau reflects, we must “learn the points of compass again as often as be awakes” for “not till we are lost...do we begin to find ourselves, and realize where we are and the infinite extent of our relations” (1950, p. 153). I know I will never reach my destination on this journey, but I will continue to enjoy each step along the path.

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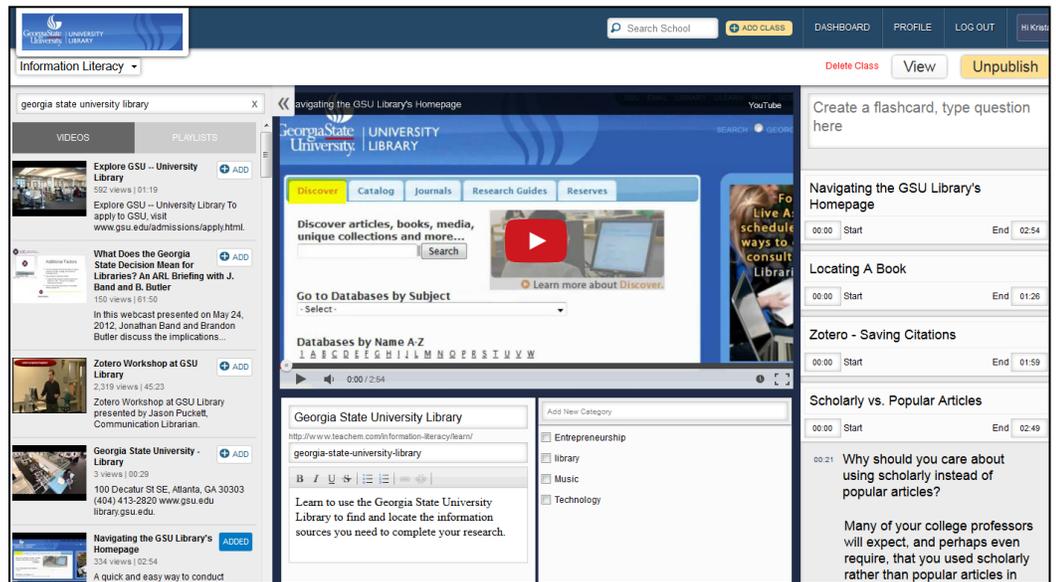
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(TechMatters...Continued from page 7)

**Figure 3:**  
**Teacher's Class Creation Dashboard**



**Figure 4:**  
**Student View of a Teachem Class**

