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2014

A Tableau vivant of Il Classrooms: The multimodal/multisensory Experience for the learning of threshold concepts

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Keywords: active learning, threshold concepts, concept mapping, background music, affective domain, dialogue, rhetoric, academic writing, play theory

A Tableau Vivant: A Multimodal/Multisensory IL Experience for the Teaching and Learning of Threshold Concepts

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The Association of College and Research Libraries' (ACRL) release of the Draft Framework for Information Literacy (IL) for Higher Education well positions those who teach IL to reflect on identifying and defining learning. What is learning? Is it a stagnant, finite event or is it a process? Are there always artifacts that are tangible testaments to the act of learning? If not, then how do we measure it? Does teacher bias hinder learning and our understanding of students and what they know? I present my journey and how I found answers to these questions in the philosophy of rhetoric espoused with the pedagogy of threshold concepts and how that union reshaped my definition of teaching and learning. I conclude by presenting a multi-modal, multi-sensory lesson plan that integrates the above philosophies into meaningful learning activities.

Philosophical shift: From ontology to phenomenology

After many years of teaching IL for a baccalaureate level writing class, English (Engl.) 1050, I began to experience a certain discomfort that I fondly refer to as “curricular combat fatigue” which came after many failed attempts to transform a stale skills-based lesson plan into an active, conceptual learning experience. I was met with hundreds of unengaged, unimpressed faces that asked, “**Why am I here?**” Since I relied heavily on lessons that celebrated performance, I, like the students, was stuck in an ontologically-skewed teaching model that isolated the present from the past. That disconnect prevented me from answering why they were in my classroom. I had to shift away from product-focused teaching and embrace a phenomenological approach that emphasizes the process of learning. Process should contextualize performance. I was naïve to think I could effectively teach and expect them to perform when I had no idea where they came from academically. I started my journey by responding to their question with another, “**How did you get here?**”

As I transitioned into this new way of thinking about teaching, preliminary pedagogical forensics led me to discover that I brought many biases into the classroom regarding their experience. I graduated from high school in 1988 and only had written one research paper (a five-page typed paper for my AP English class). I assumed that my students would have had, at minimum, that experience in common. However, as I began to informally ask about their experience with research and writing, it appeared that there was no common experience. Responses varied so greatly that it necessitated a formal assessment. I didn't need to assess past tangible data like the high school GPAs and SAT scores already tracked and accessible by the university. I wanted to collect uninvestigated experiential data that contextualized their current performance. I anticipated that it would help me identify different skills to teach. Instead, it lead me towards a philosophical conversion of how I define teaching and learning.

The study

Western Michigan University is a mid-sized doctoral granting university with an average FTE of 25,000. Data was collected using an anonymous web-based survey, consisting of 10 multiple-choice questions. Data collection has been ongoing for six semesters and will continue for another academic year. Approximately 2300 freshmen enroll in Engl.1050 during the academic year, representing nearly 55% of the entire freshmen class. There are approximately 120 sections of Engl.1050 offered each academic year. During this study, 66 sections requested library instruction, 19 of which participated in the study. (Appendix A: Survey Questions) For the purposes of this study, questions 1, 6, and 7 were of most interest to me.

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LOEX-2014

Figure 1: Survey data

Learning that 30 % had never used a library and that 18% had never written a research paper precipitated that I revisit IL student learning outcomes (SLO) for Engl. 1050. Not anticipating such high percentages, I was at a loss for what to do next. Based on the statistical validity of the sample size, I was confident that this pattern represented the general population. If they had never written a research paper or used a library, then I was an alien pedaling alien wares and skills in an alien language. My bias had blinded me. I was not seeing the critical first step. I needed to contextualize IL skills into Engl. 1050 and give research a purpose that students could understand.

Giving IL a purpose: The academic dialogue

Armed with this information, I revisited the curriculum for Engl.1050 in hopes of finding meaning with which to contextualize IL. My first attempt found a foothold in concept mapping as a way to identify a research question but I was still heavily focused on foreign, isolated skills. I was closer but not able to articulate an all-encompassing purpose. Not discouraged, I visited the curriculum for Engl. 1050 again and now sought purpose in the broader academic setting. This is when I found the overarching purpose for Engl. 1050 and subsequently for IL in that course. It was the “academic dialogue.” Engl. 1050 prepares students for the rigors of academic writing, which prepares them to engage in thoughtful dialogue with the academic community at large. I now needed to better understand the academic dialogue.

Understanding the academic dialogue

In the rich tradition of rhetoric, dialogue is critical inquiry that challenges, refutes, or champions established truth. Dialogic inquiry also encompasses complicit dissemination of known erroneous information, also known as agnotology. Engaging in dialogical inquiry has many roles. The Socratic view of dialogue is the critical evaluation of knowledge, empowering readers to seek a solution. Responsibility in the dialogue lies with the reader. For Aristotle, dialogue is the art of persuasion, putting responsibility on the author. Students take on many of these roles; as reader, writer, and researcher and need to be aware that responsibilities shift constantly. By engaging in the academic dialogue, students constantly make ethical choices between truth and non-truths. They learn how to scrutinize and manipulate truth and non-truth by developing an articulate, well-reasoned, persuasive academic voice.

The theory that I wanted to incorporate into Engl. 1050 IL was simple: the exchange of ideas expressed through a well-developed, accountable voice. My challenge was to identify how I could use IL to help them be successful participants in that academic dialogue and to adapt this theory into applicable learning moments.

Turning to threshold concepts: Translating theory into applied teaching and learning

Before identifying specific SLOs, I had to figure out how to teach. I turned to the pedagogy of threshold concepts, which emphasize progressive learning and process, not performance.

Figure 2: Threshold Concepts

Threshold concepts are teaching moments that are not based on skills so much as they depend on the transitional, irreversible cognitive impact for students. “Threshold concepts are akin to a portal opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding or interpreting, or viewing something without which the learner cannot progress” (Meyer & Land, 2003). Threshold concepts are integrative in that they help students make connections in a given discipline and think about what concepts will prove their mastery in that discipline. Students can ask themselves, what must I know? should know? could know?” (Meyer, 2008). Threshold concepts are also liminal learning spaces because they happen in places of transition, the breeding ground for critical thinking where new knowledge is created.

I did not realize that my search to contextualize IL was actually discovering a threshold concept. The “academic dialogue” is a threshold concept. In fact, it is a meta-threshold concept with sub-categories. This pedagogy unlocked the mysteries of effectively

teaching IL and validated my efforts in looking more globally at the Engl. 1050 IL classroom. It also confirmed my suspicion that it was more meaningful to move away from skills-based teaching. If we agree that the goal for Engl. 1050 is to help younger scholars become successful, responsible participants in the academic dialogue, then IL has a purpose and is essential to successfully participate in the academic dialogue. Those who teach IL are essential to that process.

Minimizing risk in the learning space

Determining to develop a holistic approach to teaching and to creating an active learning environment posed several problems. Observation told me that students were already uncomfortable in the liminal learning space. Risk is scary to these young, binary thinkers who are hesitant to think abstractly (Perry, 1998). To minimize the discomfort and deemphasize performance, I provided an atmosphere where risk was minimized by making it playful and focused on experimentation and creativity. Piaget (1998) defines play as spontaneous, for pleasure, unorganized, free of conflicts or failure. Pulling play theory into the classroom shifts the focus onto trial and error. Play theory also supports the development of academic dialogue because it can require engagement with others.

Students experience a certain “stuckness” during the research process. It is a pre-research stage where ideas are congealing (Land, 2008). To break its barrier, it is useful to teach to the affective domain, where “behavior and learning ... stem[s] from emotions and feelings, as opposed to physical and intellectual abilities” (Unger, 2007). Playing background music during certain parts of the class is one way to achieve that.

Music has been shown to have both physiological and psychological effects on the cognitive and learning processes. Listening to music “produces an optimal level of adrenalin in the brain, causing high arousal,” which improves mood and overall attitude (Clarke, Dibbin, & Pitts, 2010, p. 94). This *cognitive arousal* prepares the brain for learning (O’Sullivan, 2008). From Langan & Sachs, 2013

A Tableau Vivant: A multi-modal/multi-sensory lesson plan for IL threshold concepts

The lesson plan that follows mindfully incorporates the major concepts and pedagogical theories presented above into a classroom that fosters creativity by incorporating visual and auditory elements. The lesson can be a one-time session or taught over several sessions. It runs for about one hour and forty minutes, the time allotted for Engl. 1050. I’ve provided a chart that indicates old IL language with the new framework language. I also indicate materials needed, time allotted, activities, and supporting pedagogies.

Figure 3: Mapping pedagogies & SLOs

1. Getting unstuck: Concept mapping

It seems the hardest IL question is, “I don’t know where to start.” Maybe students don’t understand the assignment, how to organize thoughts, or where to look for information. As teachers, we should be addressing the concept of stuckness, stepping away from the old language of narrowing down a research question. Concept mapping is a pre-writing, pre-research activity that allows students to play with a topic, find potential narrative threads, and identify information gaps by exploring what they already know and what they want to know. With background music playing, 15 minutes of group work at the white board allows students to engage in a preliminary, risk-free dialogue about their research project. The librarian and instructor circulate to offer guidance. They are also making new connections between ideas. It is in these connections where we find new knowledge being born (Novak, 1998). In this creative and playful environment, students relax during this pre-research step and claim ownership and responsibility over their project.

Images 1 & 2: Students working on concept maps

2. Developing a voice: Journaling

Students build on the concept mapping experience with a journaling exercise as a way to distill their ideas and write a preliminary thesis statement. Journaling reaches the affective domain and allows students to be non-committal while still retaining a personal

connection to the argument. They are prompted to write a one-paragraph diary entry about their topic without me using the term “thesis statement.” I give them an example and once they are satisfied with their journal entry, it is entered onto a class blog. The blog allows for commentary from the class, again encouraging the idea of dialogue. The emphasis now is on developing a more formal voice in the academic dialogue while still maintaining that the academic dialogue is a process and may need to be edited at some point.

3. Commodity and hierarchy of information: Editing a Wikipedia article

The library is a marketplace where information is traded. There is a hierarchy to information and the academic dialogue requires certain information. Comparing the process and not the product of creating different types of information such as an academic article and a Wikipedia entry contextualizes the trustworthiness of information. After watching a video on the peer review publishing process, students edit a Wikipedia article, to emphasize in real time that they are now accountable and complicit in the promotion of non/truth.

4. Trial & Error: Hashtags & failed searches

A relevant method to demonstrate the importance of keywords is to compare them to hashtags. After watching a video on hashtags, students identify different information gaps that represent potential articles they need. They are then asked to compose a tweet for each article they need and then give that tweet several hashtags and post it to the class Twitter account.

5. Trust & Agency: Becoming flexible and adaptable researchers

To build on this idea, students then compare results when searching different open/deep web layers such as google.com, scholar.google.com, library discovery searches, and library subject databases. Student identify truths that match with their research agenda.

6. Open lab

After demonstrating basic features of key resources, the remaining time is reserved for open lab. Students are able to search on their own with support as needed.

Conclusion

Initial feedback from teaching faculty is promising. They were also shocked by the results of the survey. They, too, admitted to defining information literacy as database heavy and disconnected from the writing process. One faculty member said that traditional IL is “all about application with very little context, if any at all.” By focusing on pre-research such as thesis statements and using concept mapping, librarians go “above and beyond” expectations. Faculty also indicated that assessment is now possible. They “will be able to see if students have improved in developing a thesis statement, adhering to a thesis statement, and then finding documentation to adequately back up the claims they are making.” Future collaboration is anticipated.

My teaching philosophy is distilled to one sentence: there is a certain responsibility in participating in the academic dialogue. To participate, students must develop an academic voice full of integrity. IL teachers must provide a learning environment free of bias where students can explore truths, test their argument, and find their voice. I’ve presented my adaptation of theory into a holistic lesson plan that challenges students to think critically and challenges me to move away from passive teaching. Threshold concepts allow for an integrative approach and helped me merge IL and Rhetoric curricula, which were traditionally isolated from one another.

Bonnie Nardi (1999) defines librarians as the keystone species in the information ecology. The academic dialogue is one of the most important modes of communication in the ecology of higher education. Students need a safe place to explore their voice, learn how to be true to their voice, and evolve into more refined thinkers. This epistemological shift was freeing. I could reject the consumerist mindset I had toward IL. If we, as a profession, are radically changing how to define the act of learning information literacy, we must accept that acquiring knowledge, no matter the discipline, is not a commodity or product, it is a process.

REFERENCES

- Adler-Kassner, L., Majewski, J. & Koshnick D. (2012). "The value of troublesome knowledge." *Composition Forum*, 26. Retrieved from <http://compositionforum.com/issue/26/troublesome-knowledge-threshold.php>
- American College and Research Libraries. (2014). "Draft Framework for Information Literacy for Higher Education." Retrieved from <http://acrl.ala.org/ilstandards/wp-content/uploads/2014/02/Framework-for-IL-for-HE-Draft-1-Part-1.pdf>
- Clark, E., Dibben, N., & Pitts, S. (2010). *Music and mind in everyday life*. Oxford, NY: Oxford University Press.
- Land, R., Meyer, J., & Smith, J. (2008). *Threshold concepts within the discipline*. Rotterdam: Sense Publishers.
- Langan, K. (2014). "Concept mapping in the higher ed classroom." Retrieved from <http://prezi.com/ynod9qczywmt/concept-mapping-in-the-higher-ed-classroom/>
- Langan, K., Sachs, D. (2013). "Opening Pandora's stream: Piping music into the information literacy classroom." *Public Services Quarterly*, 9(2), 89-109. doi: 10.1080/15228959.2013.785876
- NBC. Late Night with Jimmy Fallon. (2013). "#Hashtag" with Jimmy Fallon & Justin Timberlake." Retrieved from <http://www.youtube.com/fallontonight>
- Lather, P. (1998). Critical pedagogy and its complicities: A praxis of stuck places. *Educational Theory*, 48(4), 487-497. doi:10.1111/j.1741-5446.1998.00487.x
- Meyer, J., & Land, R. (2003). "Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines." Enhancing teaching learning environments in undergraduate courses project. University of Edinburgh.
- Meyer, J., Land, R., & Baillie, C. (2010). *Threshold concepts and transformational learning*. Rotterdam: Sense Publishers.
- Nardi, B. A., & O'Day, V. L. (1999). *Information ecologies: Using technology with heart*. Cambridge, MA: MIT Press.
- Novak, Joseph. (1998). *Learning, creating, and using knowledge: concept maps as facilitative tools in schools and corporations*. Mahwah, N.J.: L. Erlbaum Associates.
- Perry, W. G. (1998). *Forms of intellectual and ethical development in the college years: A schema* (1st ed.). San Francisco, Calif.: Jossey-Bass Publishers.
- Piaget, J. (1999). *Play, dreams, and imitation in childhood*. London: Routledge.
- Proctor, R., & Schiebinger, L. L. (Eds.). (2008). *Agnotology: The making and unmaking of ignorance*. Stanford, CA.: Stanford University Press.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International journal of instructional technology and distance learning*, 2(1), 3-10. Retrieved from: http://www.ingedewaard.net/papers/connectivism/2005_siemens_ALearningTheoryForTheDigitalAge.pdf
- Unger, H. G. (2007). Affective domain. In *The encyclopedia of American education* (3rd ed., Vol. 1, p. 34). New York, NY: Facts on File.
- Wisker, G., & Savin Baden, M. (2009). Priceless conceptual thresholds: Beyond the 'stuck place' in writing, *London Review of Education*, 7:3, 235-247. doi: 10.1080/14748460903290207
- Vygotsky, L.S. (1978), *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard UP.

APPENDIX A: SURVEY QUESTIONS

1. What is your class standing
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Other
2. When did you graduate from high school
 - a. 1-3 years ago
 - b. 4-6 years ago
 - c. 7-10 years ago
 - d. Over 10 years ago
3. Have you been to Waldo Library before?
 - a. Yes
 - b. No
4. If yes, did you use library materials?
 - a. Yes
 - b. No
5. If no, then why did you come to the library?
 - a. Printing
 - b. Elearning
 - c. Individual/Group Study
 - d. Killing time before/after class
 - e. A combination of these
6. Did you use your high school media center/library to help with an assignment?
 - a. Yes
 - b. No
7. Did you write a research paper in high school – at least 5 pages and it included a bibliography?
 - a. Yes
 - b. No
8. If yes, how many research papers did you write in high school?
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5 or more
9. Have you ever had a library class before?
 - a. Yes
 - b. No
10. If yes, where?
 - a. WMU for FYS
 - b. WMU for another class
 - c. High School
 - d. Elsewhere

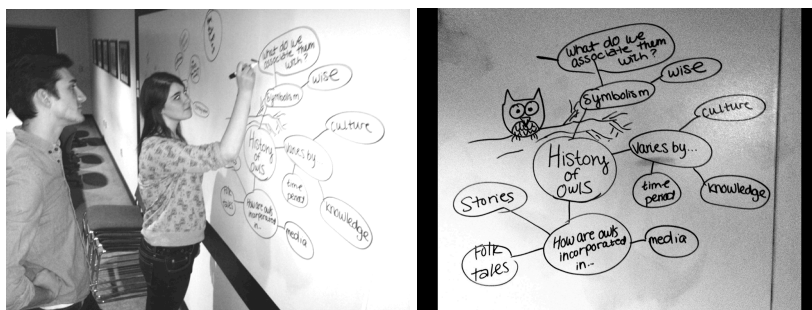
Figure 1: Survey data
5.3% margin of error & 95% confidence rate

	Question	Yes	No
Q 1.	Traditional freshmen? Total valid responses: 287	n=258 percent = 86%	n=29 percent = 14%
Q. 6	Used a library to complete an assignment Total valid responses: 295	n= 205 percent = 70%	n= 90 percent = 30%
Q. 7	Wrote a research paper in high school Valid responses: 296	n= 242 percent = 82%	n=54 percent = 18%

Figure 2 Threshold Concepts
Land, Meyer, & Smith, 2008

Transformational	TCs represent an ontological shift in the way a student sees a problem.
Unforgettable	TCs are a part of a process. Students build on threshold concepts in order to advance on to more challenging ways of thinking.
Irreversible	You cannot unlearn a TC.
Liminal	TCs are transitional, in the space of transition, outside established knowledge.
Troublesome	TCs are uncomfortable for students who are forced into new sway of thinking. Troublesome can also mean knowledge that is counter-intuitive to the students.
Integrative	TCs help students make connections in a discipline and think about what concepts will prove your mastery in a given discipline. What must I know? Should know? Could know?
Bounded to a discipline	TCs are discipline specific.

Images 1 & 2: Students creating concept maps
Video of class can be found at: <http://libguides.wmich.edu/profile/katelangan>



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