Accommodating Different Learning Styles Using YouTube: An Approach to Helping Students Understand Ecological Systems Theory

Michael R. Langlais University of Nebraska – Kearney

Author Note

I would like to acknowledge Dr. Sylvia Asay for her comments and feedback with earlier versions of this manuscript.

ABSTRACT. Theories of the family, specifically ecological systems theory, can be difficult for students to grasp, particularly when instructors only use lecture methods. The activity this article discusses proposes a personalized experiential learning activity that appeals to students with various learning styles. The activity should help all students understand and apply early models of ecological systems theory, which includes microsystem, mesosystem, exosystem, macrosystem, and chronosystem. After discussing each subsystem and bi-directional influences between individuals and the environment with students, instructors have students watch a popular YouTube video portraying family conflict or support. Students work in pairs or small groups to analyze family behavior depicted in the video, according to each ecological systems theory subsystem. Students write responses and discuss them with the class. Formal and informal evaluations conducted after using this YouTube-based approach demonstrate students' understanding and retention of, and interest in, ecological systems theory.

Keywords: ecological systems theory, experiental learning, family conflict, family support

Direct correspondence to Michael R. Langlais at langlaismr@unk.edu.

Accommodating Different Learning Styles Using YouTube: An Approach to Helping Students Understand Ecological Systems Theory

Background

Over the past academic year, my first as a tenure-track assistant professor at a university in the rural Midwestern United States, I taught two undergraduate courses focusing on intimate and family relationships. I taught one first-year 100-level course focusing on close relationships and a 300-level general education course on marriage and family relationships (open to all levels of students). Although both courses fulfill the department's degree requirements, both are options for the university's general education curriculum. As a result, various students take these classes, not just those students from the family science department.

Over the past two semesters, these courses have usually equaled or exceeded maximum enrollment, ranging from 25 to 30 students. Although most students who took these courses were young adults who lived on campus, about 5% of students taking the courses were non-traditional students, including a few middle-aged adults returning to earn degrees. Students' ethnic backgrounds were mostly Caucasian but also included African-American, Hispanic, and Asian-American. Although three of four students enrolled in the classes were female, this gender ratio was higher than for most courses in the family science department. Although I used the prescribed teaching approach in both of these courses, no students were enrolled in both courses simultaneously during this academic year. Students rated the activity highly at the end of the semester through formal and informal methods. Students also demonstrated understanding of theoretical material based on exam responses at the middle and the end of the course.

Objectives

This pedagogical approach will (a) allow engagement with multimedia sources, which appeals to current generations of students; (b) promote student retention and understanding of material by providing opportunities for interaction with others, and (c) give students chances to explain how context influences individual and family behaviors, which creates opportunities to connect course concepts to situations students encounter outside the classroom.

Activity Rationale

A consistent theme in the pedagogical literature states that when teachers only lecture, this is not conducive to student understanding or retaining of information. Instead, educators should incorporate personalized approaches tailored to students' individual learning needs (Allcock & Hulme, 2010; Darling & Cassidy, 2014; Duncan & Goddard, 2011). To increase their teaching effectiveness, researchers encourage educators to be sensitive to different learning styles: visual, aural, read/write, and kinesthetic (Leite, Svinicki, & Shi, 2010). Teaching geared to various learning styles is associated with (a) better educational outcomes (Vasileva-Stojanovska, Malinovski, Vasileva, Jovevski, & Trajkojik, 2015), (b) higher levels of retention during and after semesters (Darling & Cassidy, 2014), and (c) better overall understanding of

course material (Leite et al., 2010). Therefore, educators should use personalized approaches that engage with different learning styles to help students learn and understand theories in family sciences.

The purpose of this activity is to introduce basic models of ecological systems theory to students. Ecological systems theory is complex. Over several decades, the theory has evolved from an ecological model of human development composed of five different subsystems that interact with individuals (i.e., microsystem, mesosystem, exosystem, macrosystem, and chronosystem; Bronfenbrenner, 1979; 1986), to a bioecological model that focuses on proximal processes (Rosa & Tudge, 2013). When introducing ecological systems theory to students, I describe early theory foundations before explaining its evolution. A key component of the earliest ecological models are the bi-directional influences between individuals and the environment. These influences explain how context affects individual and family behavior (Bronfenbrenner, 1979). For example, each subsystem of ecological systems theory can contribute information about why a husband might be abusive toward his wife. At the microsystem level, which examines the direct relationship between the husband and the wife, abusive behavior can be ascribed to spousal conflict resulting from infidelity. This explanation is bi-directional; a spouse may become abusive after discovering infidelity or the abuse may prompt a spouse to cheat on a partner. At the mesosystem level, which examines relationships between two or more microsystems, abusive behavior could be ascribed to a spouse's stressful job. In this example, stress from one microsystem (job) results in abusive behavior in a different microsystem (home). Describing and analyzing these subsystems provides a foundation for understanding the importance of context in human development (Rosa & Tudge, 2013).

Students report high levels of interest in material that incorporates technology such as YouTube videos (Darling & Cassidy, 2014; Duncan & Goddard, 2011). Using YouTube videos is especially conducive to learning if the videos are recent, popular, and humorous. The current generation of students (often called "millennials" or "generation Z") responds well to multimedia sources and exhibits more focus in classes that incorporate videos compared to classes that do not (Darling & Cassidy, 2014). Importantly, students learn more when they must analyze and integrate course material in relation to videos instead of simply watching videos (Darling & Cassidy, 2014; Rehmat & Bailey, 2014). For this proposed activity, students watch a YouTube video of conflict or support in the context of families and work with other students to suggest explanations for individual or family behavior, according to subsystems of ecological systems theory.

Procedure

Before the class period in which they discuss ecological systems theory, educators select a YouTube video, preferably a humorous one, portraying family support or family conflict. The YouTube website provides a list currently popular and highly rated videos, which helps with selection. This list appears on the YouTube home page as a row of videos with the description, "Popular Right Now." About ten videos, ranked according to popularity over three-day periods, are available on the list. Before showing students the selected video, educators describe each subsystem of ecological theory with a graphic referencing each subsystem (Figure 1). The educator describes and provides examples for each subsystem succinctly. For instance, after

describing the macrosystem, which focuses on influence of cultures, attitudes, and values on individual development, an educator may describe how two parents who do not love each other may remain married because their religious beliefs strongly discourage divorce.

Next, students watch the selected YouTube video. To prevent students from doing the same activities with the same videos (for example, if a student is enrolled in the 100-and 300-level courses during the same semester, or if students are currently enrolled in the 100-level course and enroll in the 300-course in a future semester), educators should choose different videos each time they perform this activity. Next, students work together to provide explanations (according to each theory subsystem) for individual or family behavior displayed in the video. Students may work in pairs (for large classroom sizes) or small groups (for small classroom sizes). There are no expected responses because students are encouraged to "think outside of the box" to explain creatively how each subsystem can affect individual and family behaviors. Students write explanations corresponding to each subsystem to prepare for class discussion. Student explanations should be interpreted using a bi-directional lens. Next, students share explanations with the rest of the class. After discussion, educators explain the activity's purpose by emphasizing that not all problems occur because of microsystem influences. Rather, several indirect, contextual influences contribute to individual and family behaviors; this is one of the main tenets of ecological systems theory (Rosa & Tudge, 2013).

The instructor evaluates students on their knowledge of ecological systems theory using essay methods on two exams: one corresponds to the theoretical module and the other is the final exam. Students receive an example of a behavior and are asked to provide bi-directional explanations for the behavior based on each subsystem of ecological systems theory. Examples can include family support (such as a child visiting her or his grandparent in a nursing home) to family conflict (such as a teenager skipping school). Students conclude this essay response by describing the importance of ecological systems theory.

Methodology Example

To explain this activity, I provide two examples used in class: one example illustrates family conflict and another demonstrates family support. One video students found appealing (based on informal evaluations) is *Psycho Kid Ruins Thanksgiving* (Ridgeway, 2014), which depicts family conflict. The video setting is a Thanksgiving meal with a mom, dad, son, and about eight other extended family relatives. During the meal, the father encourages his young adult son to get a job. The son disrespects his father and mother in front of the rest of the family (for instance, by insulting the home-cooked Thanksgiving meal by saying, "Wal-Mart does a bang up job") and eventually "freaks out" by throwing food at his parents and turning over the dinner table, spilling food all over the rest of the family members. After watching this video, students work together to explain the son's behavior by providing explanations pertinent to each of the five subsystems. The educator puts students into pairs or small groups at her or his discretion. Students record responses so they can subsequently discuss their ideas with the rest of the class.

Students provide various rationales that could explain the son's behavior in the video. For example, students commonly state, as a microsystem influence, that the father and the son do not

like each other. Students also explain that the son and father have different values, where the father values hard work and prayer and the son does not, which best represents macrosystem influence. Students are encouraged to think of interpretations that are not evident in the video. For example, students explain that the father is stressed because he lost his job and needs help with family finances (the video does not mention this), which prompts more assertive behavior towards his son about getting a job. This assertiveness provoked his son's negative behavior, an influence associated with the mesosystem. After students share explanations with the class that emphasize the bi-directional impact of their examples, the educator describes the importance of understanding how context can prevent family conflict based on concepts from ecological systems theory.

Another example used in class that students rated highly on informal evaluations is a Super Bowl commercial showing different fathers quickly saving their children from immediate harm (Viral Videos, 2014). In one video, a father swiftly catches his son who is about to ride his bike into the path of a truck. Students discuss and record explanations for the fathers' abilities to rescue and support their children. Examples range from the father having a healthy, loving relationship with his child (microsystem) to the over-protective nature of the father owing to his recent loss of a loved one (chronosystem). As with the previous example, students provide bidirectional explanations for their responses. When using an example of conflict or support, educators discuss the importance of understanding contextual influences to diminish the possibility of dysfunctional outcomes and to encourage healthy individual and family development.

Activity Evaluation

I used formal testing and student assessments (formal and informal) during the course to evaluate this approach. To evaluate their understanding and retention of material, I gave students long essay questions on exams. I also used informal evaluation methods to talk with students about which approaches to the class worked best for their learning. In the middle of and the end of the semester, I asked students to reflect on and describe activities that best helped them learn the material. Students also completed formal course evaluations at the end of the semester.

Over the past academic year, students who attended this lecture in both courses scored higher on exams compared to students who did not participate in the activity. Through informal evaluations, almost all students discussed how watching and applying course materials to YouTube videos, especially for introducing ecological systems theory, promoted their understanding and retention. Last semester, one student stated that my course was her third course that discussed ecological systems theory, and that this activity helped the student comprehend the theory's importance and applicability for the first time. Based on responses from formal evaluations, students expressed appreciation for my including multimedia sources to help them understand complex course material.

Conclusion

This activity provides several benefits to students. First, this approach allows students of all learning styles to understand a complex theory in family science. Second, students can work together to apply the theory to specific individual or family behaviors. Third, research demonstrates the need to incorporate multimedia in classrooms to appeal to the current generation of students (Darling & Cassidy, 2014; Duncan & Goddard, 2011). By accommodating different learning styles, promoting interaction with other students, and using current YouTube videos, this experiential learning approach increases student understanding, knowledge, and retention of the foundations of ecological systems theory.

Instructors can use this personalized approach in any class format regardless of class composition and major. Students appreciate breaks from lectures because focus usually wanes after 15 minutes (Darling & Cassidy, 2014). Although students took a quiz that states their learning styles at the beginning of each semester, I did not use that information directly for this activity. Putting students in pairs or groups based on learning styles may be beneficial. For example, the teacher places a visual learner, an aural learner, a kinesthetic learner, and a reading/writing learner into a group (assuming equal distribution of each learning style) to complete this activity. I recommend that educators planning to adapt this method form pairs or groups that allow students to work with peers who have different learning styles. Future educators should also use quantitative approaches to further validate effectiveness of this activity. In sum, activities performed in the classroom, such as the activity described here, should accommodate various learning styles so that all students can maximize learning with course concepts, particularly difficult topics such as theories of the family.

Michael R. Langlais is an Assistant Professor in Family Studies at the University of Nebraska – Kearney, 2508 12th Ave., Otto Olsen 205B, Kearney, NE 68849.

References

- Allcock, S. J., & Hulme, J. A. (2010). Learning styles in the classroom: Educational benefit or planning exercise? *Psychology Teaching Review*, *16*, 67-79.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge: Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723-742. doi:10.1037/0012-1649.22.6.723.
- Darling, C. A. & Cassidy, D. (2014). *Family life education: Working with families across the lifespan* (3rd edition). Long Grove, IL: Waveland Press.
- Duncan, S. F. & Goddard, H. W. (2011). *Family life education: Principles and practices for effective outreach* (2nd edition). Thousand Oaks, CA: Sage Publications.
- Leite, W. L., Svinicki, M., & Shi, Y. (2010). Attempted validation of the scores of the VARK: Learning styles inventory with multitrait–multimethod confirmatory factor analysis models. *Educational and Psychological Measurement*, 70, 323-339. doi: <u>10.1177/0013164409344507</u>
- Rehmat, A. P., & Bailey, J. M. (2014). Technology integration in a science classroom: Preservice teachers' perceptions. *Journal of Science Education and Technology*, 23, 744-755. doi: <u>10.1007/s10956-014-9507-7</u>
- Ridgeway, J. [McJuggerNuggets]. (2014, November 27). *Psycho Kid ruins Thanksgiving* [Video file]. Retrieved from <u>https://www.youtube.com/watch?v=TUCUsNx1HTs</u>.
- Rosa, E. M., & Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. *Journal of Family Theory & Review*, 5, 243-258. doi:10.1111/jftr.12022.
- Siegler, R., Deloache, J., & Eisenberg, N. (2006). *How children develop* (2nd ed.). New York: Catherine Woods.
- Vasileva-Stojanovska, T., Malinovski, T., Vasileva, M., Jovevski, D., & Trajkovik, V. (2015). Impact of satisfaction, personality and learning style on educational outcomes in a blended learning environment. *Learning and Individual Differences*, 38, 127-135. doi: 10.1016/j.lindif.2015.01.018
- Viral Videos. (2014, January 27). 2015 Hyundai Genesis Super Bowl TV Ad "Dad's Sixth Sense" [Video file]. Retrieved from <u>https://www.youtube.com/watch?v=SGrR92sulx0</u>.



Figure 1. Example graphic of ecological systems theory. Adapted from *How Children Develop* (pg. 366), by R. Siegler, J. Deloache, and N. Eisenberg, 2006, 2nd edition, New York: Catherine Woods. Copyright 2006 by Catherine Woods, Worth Publishers.