

Stepping Back to Let the Learning Happen: A Learning Practice in Higher Education

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This paper discusses the application of innovative methods of instruction to a learning practice in higher education. Learning principles and other aspects of course design are highlighted to provide a foundation emphasizing the role of the instructor, the need for learner activity, and other aspects of the cognitivist and socio-cultural approaches to learning. Elements of course design and delivery emphasize the importance for the learner to experiment with the course material. Outcomes suggest that granting students the freedom to take leadership roles within the course allows for more shared leadership and learning within a positive and challenging environment.

Keywords: Higher Education, Learning, Leadership, Course Design, Course Delivery, Classroom Pedagogy

INTRODUCTION

This paper will examine the application of innovative methods of instruction to a learning practice in higher education (Jennings & Wagnier, 2011; Wortham, 2003; Greene, 2012). The practice is a research methods course designed for both traditional and non-traditional students that was taught during the Fall 2018 semester at a large, private higher education institution in the Northeastern United States. Due to the limited time frame of a one-semester course, the decision was made to focus almost exclusively on qualitative research. The main course deliverables consisted of an individual field study, a group field study, and a research design proposal (which included a conceptual framework and various iterations). These deliverables were joined by class assignments, attendance and participation, and a final exam (requiring the learner to design a research study and to analyze their own research design proposal) to round out the assessment of the learner in the course.

This practice was designed for the learner to: 1.) Gain a broader personal understanding of and appreciation for research techniques and processes; and 2.) learn to apply course material through the lens of personal experience. Additionally, this learning practice operated under the following assumptions embedded in the course: 1.) The learner has an interest in learning about research; 2.) The learner will find ways to apply course material to their personal experience; and 3.) The selected material for the course is suitable for learning about research techniques and processes.

In making the decision to take an alternative approach to designing this learning practice, it was important to not rely exclusively on lectures for course delivery. For decades, educators and educational researchers have questioned the effectiveness of teaching methods that are entirely lecture-based (Barr & Tagg, 1995). Despite innovations in technology enabling alternative techniques for instruction, lectures prevail as the primary method for teaching adult learners (Bligh, 2000; Whalley, 2016). Educators and

researchers have come to recognize the "complexities of teaching and learning for understanding as opposed to just knowledge retention" (Ritchhart, Church, & Morrison, 2011, p. 7). If the goal of teaching is to engender understanding, educators must move from rote memorization of knowledge and facts, known as "surface learning," toward "deep learning," where understanding is developed through "active and constructive processes" (Ritchhart et al., 2011, p. 7). Roehl, Reddy, and Shannon (2013) purport that to achieve this objective, educators must shift from a teaching-centered paradigm toward a learner-centered paradigm.

The introduction of any new strategy requires a shift in the minds of both educators and students. Instructors must be willing to experiment with alternative strategies in the classroom (Roehl, Reddy, & Shannon, 2013). Effective application of competencies such as critical thinking and collaboration is more likely if the skills were developed during an individual's academic career (Blair, 2012). A study by Wilson and Korn (2007) found that student attention does not necessarily decline during lectures, but that instructors need to consider individual differences in attention when designing their courses.

This practice made use of progressive principles of learning to design the course overall, while utilizing the 70:20:10 framework as a guide for delivering the course material (Wortham, 2003; Greene, 2012; Jennings & Wagnier, 2011). Although it can be argued that the instructor should be at the center of the classroom environment, having the courage to step back as an instructor allowed for a more shared and distributive form of leadership and learning in a positive and challenging environment (Bass, 1999; Yukl, 1998; Manz & Sims, 1987; Pearce, Perry, & Sims, 2001). The following sections will provide an overview of the framework and design of the practice, in addition to discussion of the outcomes and implications yielded from the practice.

FRAMEWORK

Course Design: Learning Principles

According to Piaget (1977), the growth of cognitive structures is determined by activity, which serves as the functioning of those structures. This course on research techniques and processes proceeds from a cognitivist theory of learning. The primary activity is the research design proposal, which seeks to increase the learner's interest in research overall. This approach, by definition, is cognitivist in nature due to the onus placed on the learner to develop his/her own mental representation of effective research techniques and processes as it relates to them individually. According to Wortham (2003), learners within the cognitivist theory of learning are expected to form their own mental models based upon the material being presented. The course encouraged the learner to take ownership over how they want to develop as a researcher and respond to situations by making use of the tools from the course in order to construct representative models of their own design.

Wortham (2003) presents characteristics of the cognitivist approach to learning, including the idea that the learner is seeking to refine and augment his/her existing mental models. Also, Wortham (2003) notes that people must want to learn and cannot be forced to do so. This concept is central to cognitivism. The freedom of choice with the research design proposal clearly proceeds from a cognitivist understanding of learning in that it allows the learner to select the material from the course that they feel best fits within their conceptual frame for their research design proposal. The conceptual frame consisted of a brief review of the following: Research question(s); literature; methodology; assumptions; goals; and positionality of researcher. Wortham (2003) notes that under the cognitivist learning theory, the role of the teacher should be to act as a competent practitioner using tools, allowing the learner to do things he/she might not otherwise be able to do. Greene (2012) refers to this as the 'Ideal Apprenticeship,' which consists of three elements: Deep Observation; Skills Acquisition; and Experimentation. These elements were integrated into the learning practice using experiential learning activities and are further discussed in the 'Outcomes' section.

Course Delivery: 70:20:10 Framework

Jennings and Wargnier (2011) discuss a theory where the focus of the classroom is shifted from the instructor to the learner. The 70:20:10 framework is an organizational tool employed to address performance issues, and it asserts that most learning occurs in the “workplace” rather than in formal learning situations (Arets, Jennings, & Heijnen, 2015). For the purposes of this learning practice, “workplace” was modified to “application,” as in the application of research techniques and processes toward the creation of well-scoped conceptual frameworks and ultimately executable research designs. The 70:20:10 framework also shifts the emphasis from ‘know-what’ learning towards more effective ‘know-how’ learning (Arrets et al., 2015). This framework purports that approximately 70% of time spent within a learning environment should focus on “experiential learning,” 20% on “social learning,” and 10% on “formal learning” (Jennings & Wargnier, 2011). “Experiential learning” refers to the time devoted to experimenting with the course material; “social learning” encompasses opportunities for learners to learn from one another and receive feedback from the instructor; and “formal learning” covers any direct forms of instruction such as lecturing.

As an illustration, this learning practice of research techniques and processes met once a week for three hours. In accordance with the 70:20:10 framework, approximately 120 minutes should be spent on experimentation, 40 minutes on opportunities for social learning, and 20 minutes of formal instruction (lecture, etc.). In thinking about how this framework can be applied with regard to time, it is important to note that the timing is supposed to serve as a general idea, and it should not be followed literally. Rather, the breakdown serves as a guideline for how to design class meetings. So, in thinking of the aforementioned illustration, the actual timing would vary based upon what was most pertinent, but the majority of class time would be devoted to the students actively working in some way.

The information presented on the learning principles involved in the design of this learning practice help to provide a theoretical foundation which emphasizes the role of the instructor, the need for learner activity, and other aspects of the cognitivist approach to learning. The use of the 70:20:10 framework directly addresses the issues of over-lecturing in the academic learning environment by challenging the instructor to plan for more two-way communication during class meetings as opposed to relying primarily on one-way communication (Adler, 1993). Overall, the information in this section presents an overview of the literature used to design this learning practice of research techniques and processes.

DESIGN OF PRACTICE

In order to understand the elements of the design of any learning environment, it is important to consider the manner in which knowledge is acquired (i.e., the learning happens). Sfard (1998) discusses the idea of knowledge being acquired through activity. With a focus on the activity, the learner is able to construct a mental model based upon personal experience. Brown, Collins, and Duguid (1989) make the argument that conceptual knowledge is contextually tied to the learner’s experience within the learning environment. With this in mind, the course on research techniques and processes attempted to use cues from everyday life and specific work examples within the learning environment in an effort to assist the learner in applying the concepts to life outside of the learning environment, thereby creating a personal mental model of effective research techniques and processes. During experiential learning, educators engage learners in direct experience and direct their focus on learning reflection to increase their knowledge, skills, and values (Dewey, 1938). According to Kolb and Kolb (2005), the learning process is a continuous cycle of experiencing and exploring. This practice used experiential learning-based activities in order to provide to the learner opportunities for practical application. The 70:20:10 framework help to accentuate the direct experience aspects of experiential learning.

The experiential learning component serves as the foundation for the elements of the design of the learning practice. These elements of design of the learning environment include the tasks, degrees of contextualization, degrees of structure, tools, and teacher-learner interactions in use in this practice.

Tasks

A task represents that in which a learner engages within a learning practice. The task should function as a method of representation and practice for the transfer of knowledge (Anderson, Reder, & Simon, 1996). The primary task in this learning practice is the research design proposal (and conceptual framework), which incorporated the vast majority of course material.

Degree of Contextualization

This learning practice placed the learner within the context of an aspiring effective researcher. Brown et al. (1989) make the argument that knowledge is situated within the activity and context in which it was created and is being used. This learning practice was designed to afford the learner an opportunity to obtain knowledge about effective research techniques and processes. This type of design requires a moderate degree of context in order to properly shape the environment for the learner without the need to have high contextualization since effective research techniques and processes transfer and apply across multiple topics and disciplines of study.

Degree of Structure

Conole, Dyke, Oliver, & Seale (2004) discuss how the contents of a course provide a structured guiding framework, or toolkit, for the learner, and that this highly structured framework is available to the learner with the potential to transform his/her existing mental models. The class meetings of this practice were presented with a high degree of structure to adhere to the 70:20:10 framework, but the emphasis on experiential learning allowed for a great deal of adapting the structure to more-closely align with participant needs.

Tools

Kozulin and Presseisen (1995) make a case for the vital importance of independent thinking skills, which can be developed by providing access to the appropriate tools (i.e., human, psychological, and/or material resources) made available by the instructor to support the learner in accomplishing tasks. The instructor introduced curated versions of each topic supported by multimedia with the ability to make real-time changes to available content as needed.

Participants

The participants involved in this learning practice were the instructor and the learner. The instructor is charged with delivering a course designed to encourage interest in and understanding of research techniques and processes.

Teacher-Learner Interactions

Within a cognitivist learning environment, the overarching aim is for the instructor to provide the opportunity for the learner to integrate new experience with his/her own developing mental models (Wortham, 2003). This learning practice relied upon the interactions between the learner and the instructor, with an adequate amount of time devoted to learner-learner interactions. The role of the instructor was to facilitate discussion of topics and provide examples when appropriate. The role of the learner was to form an understanding of research techniques and processes through practical application and experiential learning.

The primary objective for the elements of design in this learning practice was to assist the learner in constructing a personal model for effective research techniques and processes. The intended goals and assumptions were met and will be further discussed in the next section.

OUTCOMES

The outcomes for this learning practice consisted of the goals and assumptions. To review, this practice was designed for the learner to: 1.) Gain a broader personal understanding of and appreciation for research techniques and processes; and 2.) learn to apply course material through the lens of personal experience. The first goal comes directly from the charge given by the department in which the practice was housed. The second goal prompted the design for the practice and its incorporation of innovative instructional methods, many of which are used in corporate training and leadership development programs. Additionally, this learning practice operated under the following assumptions embedded in the course: 1.) The learner has an interest in learning about research; 2.) The learner will find ways to apply course material to their personal experience; and 3.) The selected material for the course is suitable for learning about research techniques and processes. Based on the outcomes of this learning practice, regardless of whether the learner developed an interest, they were able to successfully apply the material, also demonstrating the suitability of the course material.

If forced to estimate the factors of the 70:20:10 framework, this learning practice most likely was 60:20:20 since some aspects of research require more discussion of concepts (e.g., lecture), but a large amount of time during class was devoted to “doing.” Many students appreciated how this impacted the type of work they would need to do outside of class versus inside of class. Sometimes the framework was useful to use in big chunks of time, but mostly it was very effective in helping to break up the time students would spend experimenting. A typical class might start with a short review of past topics with an overview of what would be covered. Then, students would work on applying the concepts to their research ideas, with a few built-in interruptions by the instructor to give opportunities for social learning and to explain concepts further by taking questions or similar at the end to de-brief.

Regarding Greene’s (2012) ‘Ideal Apprenticeship,’ each element was integrated into the learning practice. ‘Deep Observation’ encouraged the learner to form a conceptual understanding of the course material and gain insight as to how this material can be applied toward research techniques and processes. ‘Skills Acquisition’ consisted largely of extensive practice on the part of the learner, working alongside other learners within the course. This manner of learning more closely resembles the socio-cultural theory of learning; where the instructor provides the scaffolding for the learner to model and apply to their individual project (Vygotsky, 1997). ‘Experimentation’ consisted of the learner becoming more comfortable with exposure to criticism regarding their research design and topic overall, from the instructor as well as from the other learners in the course. The progress of each learner in the course regarding comfort in giving and receiving constructive criticism was substantial, and this was a key take-away for most students in the course. Overall, these elements were a useful addition to the learning principles and framework for course delivery.

A content analysis of anecdotal data provided from student feedback throughout the course was conducted (Neuendorf, 2016). Overall, comments were organized as relating to either the course design or the course delivery. These will be summarized below.

Outcomes: Course Design

Many participants commented on forming a better understanding of research techniques and processes; particularly, how the basic components can be applied to almost any well-scoped research idea, question(s), or otherwise. For example, the research aspects of documentary films were highlighted to allow students to see the application of research toward something with which they were familiar. The decision to focus almost exclusively on qualitative research came after learning that participants did not have a strong understanding of the research process; based on feedback from students, this was a good decision, as it allowed for more depth of understanding and experimentation. Participants noted how being able to work on a research design for a topic of interest to them helped to increase their overall understanding of each step involved., which is in line with the cognitivist approach to learning (i.e., mental models of research design). Many comments in appreciation of the brevity and focus of the course tools were made, along with the exposure to useful resources for research such as Google Scholar.

Outcomes: Course Delivery

Most participants referred to the format and structure of this practice as a refreshing alternative to “normal” courses, characterized as being much more lecture-based and less “hands-on.” There were several positive comments related to the “hands-on” approach of the course, and how it allowed for more learning versus a lecture-based course since it involved instructing to learn and not instructing to memorize. The practice had many non-traditional college students who work full-time, and many commented on how the format allowed them to both learn new skills and refine existing skills within the bounds of the class meeting (except for out-of-class assignments such as the field studies). There were a number of comments showing appreciation for the time allotted during class to work on individual research ideas, and how this not only helped to better understand the course material, but also how this served as a form of “professional development” by allowing opportunities to interact with, give feedback to, or receive feedback from other participants in the practice. For example, a great deal of class time was devoted to research question(s) refinement. Participants wrote their conceptual frames on whiteboards around the room, and time was allotted for each student to present their ideas and take questions and suggestions from others including the instructor. When asked at the end of the semester about what was most memorable from the course, almost all participants noted the research question(s) refinement process.

IMPLICATIONS

It is important for classroom leadership to consider course design as well as the course delivery elements when creating a learning practice. Revens (1972) helped to define the concept of “action learning,” which states that workers who are experiencing an issue can be helped by others by way of working together through the adversity in order resolve the issue. Action learning was used in this learning practice by learners working together to refine each other’s conceptual frame and research design proposals, and this was received favorably by all participants.

For this learning practice, the instructor decided to use transformational leadership and to allow for leadership to be shared within the learning environment, which fostered self-leadership and thought leadership among the learners themselves in the process (Bass, 1999; Yukl, 1998; Stewart, Courtright, & Manz, 2018; Richtermeyer, 2011). Transformational leadership is displayed when the leader envisions a desirable future, articulates how it can be reached, sets an example to be followed, sets high standards of performance, and shows determination and confidence; Followers want to identify with such leadership (Bass, 1999). In shared leadership contexts, the agents of influence are often peers of the targets of influence (Bass, 1990; Yukl, 1998; Payne, 2019). Self-leadership is defined as a comprehensive self-influence process capturing how individuals motivate themselves to complete work that is naturally motivating or work that must be done but is not naturally motivating (Stewart, Courtright, & Manz, 2018). Thought leadership involves bringing forth well-scoped and often innovative ideas in a variety of ways (Richtermeyer, 2011). The outcomes of this learning practice suggest that the aforementioned aspects of more distributive forms of leadership as noted above allow for a more wholistic learning experience, thereby allowing learners to take more active roles in the learning process under the direction and facilitation of the instructor.

CONCLUSION

Based on the aforementioned leadership implications, the following key learnings are yielded from analysis of this learning practice:

- 1) Outcomes suggest that leadership principles can be successfully applied to the structure of a learning practice in higher education.
- 2) Instructors have the discretion to take a transformational leadership approach when designing and delivering courses.
- 3) The learner can share in the leadership of the learning practice as the example from which other participants in the practice learn, thereby helping to address common errors collectively.
- 4) Learners can learn a great deal from their peers in a learning practice with the appropriate course design and course delivery elements.
- 5) Instructors should allow for the learner to experiment with the course material in a way that encourages self-influence processes for the learner to explore personal motivational affects related to work completion.
- 6) Instructors should make use of learner deliverables to encourage thought leadership by allowing for all participants to serve as specialists to one another in some form within the learning practice.

The examination of this learning practice identified a variety of useful implications and key learnings, many of which are applicable to leadership concepts. Overall, the selected format of the learning practice helped to highlight an alternative to the lecture-based format while also placing the focus on the learning itself (Roehl et al., 2013). It should be noted the selected course design and delivery elements outlined in this learning practice were possible given the small number of participants and might be more difficult to employ with a larger number of participants, though not impossible. Recommendations for improving this learning practice include the incorporation of more socio-cultural learning elements to increase social learning and more effective use of behaviorism elements to better manage learner's grasp of the material prior to experimentation (Vygotsky, 1997; Skinner, 1954). It is hoped that this practice can serve as an example of what is possible when classroom leadership is willing to step back to let the learning happen.

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