Self-Directed Learning: Pedagogical Influences on Graduate Student Perspectives

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ABSTRACT

Self-directed learning (SDL), while essential to graduate student success and continued professional development beyond the degree, is rarely addressed intentionally in the college curriculum. In this mixed-method study with 91 participants from two counseling-related degree programs, researchers examined the impact of integrating a unit focused on SDL. Students in both online and face-to-face courses reported their learning and experiences with the topic. Findings suggest that intentionally exposing students to SDL allows them to understand the concept and grow in awareness of its importance. Similar gains were reported regardless of course delivery format. Student perspectives discussed include student appreciation of the process of collaboration for professional growth, student understanding of the centrality of SDL for ongoing development, and student motivation to utilize SDL with those they work with in order to and expand personal agency.

KEYWORDS

Agency, Curriculum, Graduate Education, Pedagogy, Self-Directed Learning

OVERVIEW

For decades, it has been recognized that today's workforce requires self-directed learners (American Association of School Librarians, 2007; Fein, 2014; Guglielmino & Murdick, 1997), and many government policies, university mission statements, and accrediting organizations clearly state and recognize this need (Candy, 1991). "Accreditation standards for many professions now also examine preparation programs for evidence that they prepare their learners for continued, self-directed lifelong learning" (Guglielmino, 2008, p. 5). Among those touting self-directed learning's essential role in our future are prominent medical schools including Boston University and Johns Hopkins (Boston University School of Medicine, n.d.; Johns Hopkins Medical School, n.d.).

The 1975 insights of Knowles continue to reverberate within the context of this fast-paced, ever changing, global society. Knowles (1975) stated,

We are entering into a strange new world in which rapid change will be the only stable characteristic... It is no longer realistic to define the purpose of education as transmitting what is known... The main purpose of education must now be to develop the skills of inquiry (p. 15).

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Knowles' words only ring truer with time. In order to be well-prepared for the current technological, global environments that students are entering, students must be self-directed simply to keep up with the rapid pace of information expansion (Fein, 2014). DuBravac (2015) highlights that "...digital data will transform the human experience" (p. 49). What do these increasing challenges and demands mean for those in teaching in higher education? Pedagogically, what can be done to assist our students in understanding the imperative nature of being a self-directed learner?

PROBLEM

The researchers and authors of this study teach in different counseling fields where the concept of self-directed learning (SDL) is recognized as being important (American College Personnel Association, 2010; O'Halloran & Delaney, 2011), but where it typically does not find its way into the curriculum in an intentional manner. This absence of intentional SDL from the curriculum is not unusual, and research focusing on techniques that can be utilized in order to increase and develop student growth in this area has not been frequently investigated (Silen & Uhlen, 2008). Without more knowledge about specific ways educators can facilitate and develop students in their understanding of SDL, it is unlikely that the skills desired of the future workforce will be appropriately developed.

PURPOSE

With this in mind, the purpose of this mixed method study was to examine the impact of integrating a unit on self-directed learning (SDL) research into graduate counseling coursework. There were two questions the researchers sought to answer in this study.

- 1. To what extent does a unit on SDL impact graduate students in two different counseling-related helping fields?
- 2. Can similar pedagogical intervention strategies related to SDL be used in both face-to-face and online course structures?

CONCEPTUAL FRAMEWORK

The Role of SDL in Graduate Education

In 1975, Knowles' book on self-directed learning popularized the concept in adult education circles which are particularly relevant for graduate education. Since that time, various definitions for SDL have been presented in the literature (Kerka, 1999), but commonalities appear to focus on the need for learner ownership, autonomy, critical reflection, learner directed experiences, shift in power from teacher to learner, and student engagement (Brookfield, 1986; Candy, 1991; Carr, 1999; Hiemstra, 1980; Hyland & Kranzow, 2011). Self-directed learning is action-oriented, growing out of student critical reflection (Brookfield, 1981; Theil, 1984). It is not self-teaching, as some erroneously interpret the term; indeed, the faculty member/facilitator plays a key role in supporting learner self-direction (Fein, 2014; Silen & Uhlin, 2008). "The students need challenge, support and feedback in their struggle to become self-directed learners and thus require ongoing attention from faculty" (Silen & Uhlin, 2008, p. 462).

If graduate students can understand and be educated about self-directed learning, they will be better prepared to continue with their professional development beyond the walls of the institution.

Raidal and Volet (2009) affirm the imperative nature of a commitment to lifelong learning. They note that, "Students' capacity to engage in self-directed learning is viewed as a highly desirable goal of professional education because it is a requisite for continuous learning after graduation" (p. 578). It is commonly understood that graduates from programs in counseling must be self-directed in order to seek opportunities for professional growth on a regular basis (O'Halloran & Delaney, 2013). This is an important way for those in the helping fields to stay abreast of current professional knowledge maximizing competence and effectiveness.

It is essential that faculty members help students think about the environments beyond the classroom and also help them "cultivate a passion and thirst for acquiring knowledge, not simply during graduate school but throughout life" (Magolda & Magolda, 2011, p. 5). Dynan, Cate and Rhee (2008) are explicit when addressing self-directed learning and the role of faculty. "It is, at least in large part, up to professors to encourage and develop this skill in their students so that they will be equipped for educational opportunities and challenges beyond their formal education" (p. 100). A number of scholars (Chu & Tsai, 2009; Dynan et al., 2008; Kranzow & Hyland, 2009) have examined ways to successfully integrate self-directed learning into curriculum design, and findings indicate that intentional self-directed learning curriculum design can positively affect not only self-directed learning but also can lead to transformation.

In the face of new generations of learners with ever-broadening demands on their learning, faculty desiring to equip their students with tools that will serve them in a world driven by global competition will have to invoke structural change in their pedagogy (Dweck, 2009; Fein, 2014; Hyland & Kranzow, 2011). The continuum of power in the classroom will require re-invention. Understanding that the curriculum will become a vehicle for this re-invention is essential.

The Learning Context and Environment

These realities will also be true in both face-to-face and online learning environments. Chu and Tsai (2009) found that learners ready to take on the role of self-directed learner have a need for pedagogy which supports this type of learning. The curriculum which allows these students to flourish permits them the freedom to think independently, utilize many of the multiple resources available to them, and problem solve.

A number of studies have directly incorporated self-directed learning practices in a variety of learning environments for college students. For example, Hains and Smith (2012) oversaw the development of a student-designed class involving experiential education. During implementation of the course, students utilized journals, videos and reflective activities and generated eight learning outcomes to promote deeper learning. The research study served as a "catalyst for student development," allowing them to "take further ownership of their education" (p. 370). Additional research included 1) a semester-long study focusing on the direct impact of self-directed learning in real-life settings (Cremers, Wals, Wesselink, Nieveen, & Mulder, 2014), 2) perceptions of honor students who developed independent and open-ended projects in British Literature (Pruitt, 2013), 3) the importance of personal control over the learning process and its impact on motivation and desire to learn (Douglass & Morris, 2014), and 4) the use of non-traditional pedagogical tools such as blogs to promote self-directed learning and improve cognitive and social skills (Robertson, 2011).

SDL is closely intertwined with Problem-based learning (PBL), which has been identified as a key factor in the implementation of self-directed learning because of its emphasis on complex problems that cannot always be solved with ready-made solutions (Hmelo-Silver, 2004). According to Genareo and Lyons (2015), "This type of process-orientated, self-directed, and collaborative pedagogical strategy [PBL] can prepare our students for successful post undergraduate careers" (p. 1). Within the PBL framework, the classroom or online teacher takes the role of facilitator and students work both individually and in groups to achieve course goals. PBL's focus on student collaboration allows self-directed learning to move from a more traditional "self-study" framework to a deeper level of learning (Silen & Uhlin, 2008, p. 461). Hmelo-Silver (2004) noted that when utilized as a component of self-directed learning, PBL "offers the potential to help students develop flexible understanding

and lifelong learning skills" (p. 235). Medical students from the author's classroom study agreed, with one stating, "I think I did a good job with the differential diagnosis [in a biochemistry group experiment] and figuring out what we needed to know in order to rule things in and out. I thought I did a good job . . . and it worked well for the case" (Hmelo-Silver, 2004, p. 248).

METHODOLOGY

In this study, the authors used mixed methods in order to learn about the impact of a self-directed learning curriculum, and about its impact in different learning environments. As the research questions have yet to be addressed elsewhere in the literature, results could not be predicted. It was necessary to gather data in an inductive matter that would provide insight into our research questions as well as guide future research on the topic. Qualitative questions formed the foundation of the study, and some summative quantitative questions were also asked to help the researchers understand the students' overall valuing of the experience.

The authors began this study with the desire to transform the student understanding of the importance of SDL, and they desired to use their findings to improve the ways SDL concepts can be discussed in future courses. In this way, the research is also action research oriented because further cycles are intended which will utilize the results of this study.

Sample/Population

All 91 participants were graduate students in a counseling program—either a Marriage and Family Therapy (MFT) master's program or a College Counseling and Student Development (CCSD) master's program. Both programs are offered at the same private institution on the West Coast. There were 75 MFT students enrolled in four different sections of a foundational graduate research course, and all MFT students were taking the course online. There were 16 CCSD students all enrolled in a single section of a face-to-face course focused on improving intentional curricular interventions in co-curricular programs.

Procedures in the Online Course

In the online course, students worked both individually and in groups to complete an assignment which would require them to become familiar with the concepts of self-directed learning. In groups, students first selected one article to read from a provided menu of seven articles. The articles were specifically selected by the faculty because they clearly addressed the pedagogical value of incorporating SDL into learning environments for college students (Cremers et al., 2014; Douglass & Morris, 2014; Pruitt, 2013; Hains and Smith, 2012; Robertson, 2011), identified Problem-Based Learning as a crucial factor in the implementation of SDL (Silen & Uhlin, 2008; Hmelo-Silver, 2004) and were assessed to be of interest and readable for the research skill level of the students. While the selected articles clearly present the positive value of self-directed learning, the faculty were hopeful that exposing students to the topic and its benefits would help students to think deeply about the potential impact of SDL on their own futures as well as their clients' futures.

In the online course, the Jigsaw method was employed (see www.jignaw.org) as this teaching pedagogy has shown to foster positive learning experiences, can be used within any discipline, and encourages students to be responsible (Millis & Cottell, 1998; Tran & Lewis, 2012). After students read their article, they were asked to complete a series of questions about their learning, application of the material, and benefits and challenges of incorporating SDL into practice. (see Appendix). The 75 students worked in 20 separate groups with each section comprised of 16 to 20 students. Groups consisted of three to four members who, as a group, completed an assignment requiring qualitative and quantitative responses about their experience with SDL and the assignment.

Procedures in the Face-to-Face Course

In the face-to-face course, students selected two articles from the same menu of seven articles (which were options in the online class sections) and read them as part of their weekly assignment during week five of the course. In addition to reading two articles, students were asked to complete qualitative and quantitative questions about their experience with the SDL articles. Many of the items were the same as those from the online class, while others deviated to better fit the course content in the respective courses (e.g., face-to-face: "Please discuss at least one benefit of being a self-directed learner in the profession of student affairs/college counseling;" and online: "In your future work as a therapist, what would be the benefits and concerns of SDL in terms of your therapy work with clients?") During the next class session, students were organized into groups based on the articles they read (with those reading the same articles being in the same group). After discussion, students were asked to respond to a few additional questions about their experience with the reading and the group debrief.

Data Analysis

Once the SDL data was collected, the instructors analyzed the quantitative data in a spreadsheet. They then analyzed the qualitative student text responses by using qualitative content analysis (Schreier, 2012). As Schreier (2012) states with this method, "your research question specifies the angles from which you examine your data" (p. 4). Data was organized into categories as repeating responses to the questions became evident. Because there were two different courses, each instructor initially coded data into themes for their specific course. Themes were later compared to identify any overlapping themes between the two groups of counseling students.

MAJOR FINDINGS

The current study was conducted to address the following research questions: 1) To what extent does a unit on SDL impact graduate students in two different counseling related helping fields?; and 2) Can similar pedagogical intervention strategies related to SDL be used in both face-to-face and online course structures? Participants consisted of graduate students from two different courses at the same private university, including a face-to-face class in College Counseling/Student Affairs and an online course for students of Marriage and Family Therapy.

Qualitative Results

Three central themes emerged as the data across all course sections was examined. The dominant themes arising from the data include the centrality of collaboration in understanding and promoting self-directed learning, the belief that learning to be self-directed is essential for ongoing professional development and ethical practice, and helping others become more self-directed is a pathway for them to develop personal agency.

Centrality of Collaboration

Nearly all students in both classes noted the importance of collaboration in the development of their learning on the topic. In the face-to-face course, nine of the 13 student responses received indicated an awareness of the benefit of collaboration. In the online course, of the twenty group responses related to the unit learning, 18 of the groups mentioned that they felt collaboration (sometimes identified as exactly that and other times identified as "group work") helped students to develop their ability to be self-directed and/or that collaborating with others on the topic of self-directed learning helped them to better understand both the concept and the application of it. One student said, "Learning is not done best alone, and as an individual, but rather working with others" and another commented that collaboration "allows us to feel invested and responsible to members and to the work we do." Additional comments emphasized the importance of brainstorming: "It helps in bouncing ideas off of

one another," while others focused on the ability of SDL to "promote learning and seal in knowledge." A few groups questioned the choice of pedagogy that asked them to work with other class members on a topic they perceived to be best learned independently; however, even these groups noted the value of collaboration with other students on the unit. An example of these opposing views is that in the same group student responses included both, "It was interesting that we met in a group to discuss these questions because it is based on being an independent learner" and "group projects contribute to real life learning situations as well as social learning.

Essential to Lifelong Learning and Professional Development

The second theme that arose from the data in both of the courses pertained to the importance of self-directed learning for lifelong learning and professional development. Looking at responses in both online and face-to-face combined, the theme is present in two thirds of student responses. Since all students in both classes plan to enter helping fields that require continual learning and development on the part of the professional, the fact that students recognize their own need to be self-directed beyond their university is significant. One student states this very clearly noting,

As budding therapists, we all have and will continue to encounter clinical situations and particular populations that we do not entirely understand. Reading the SDL article highlights how valuable it is then, in this career, to develop the ability to self-teach and be a self-directed learner.

Breaking the responses down by course type, in the online course, 13 of the 20 groups mentioned that they will need to stay current and learn new information that affects their field, and that being self-directed will allow them to educate themselves. In the face-to-face course, 11 of the 16 students responding spoke of the professional development and lifelong learning that was possible when individuals are self-directed learners. Beyond the opportunity, 11 groups recognized this as essential for professional practice. One student said, "In the profession of student affairs, it is important for practitioners to ask questions, explore alternatives, make just decisions, reflect on learning, and use feedback to improve." While the student did not specifically use the language of "professional development" or "lifelong learning" the student did speak to the role that SDL should play in improving professional work. In the online course, students commented on the value of SDL in clinical counseling. "These skills allow us to help clients find their own solutions to problems," noted one student, "and empower them to build skills outside the therapy session."

Pathway to a Greater Sense of Agency

The third theme that was apparent as the data was examined is that as students better understood SDL, they saw value in using it with others to give them a greater sense of agency and empowerment. In both the online course with MFT students and the face-to-face course with CCSD students, the responses indicate that helping professionals see the potential for SDL in helping others become more independent and confident. Student groups commented on the ability of SDL to allow for "learning at one's own pace," "synthesizing and fine-tuning material," creation of an "emotional connection" with the information at hand and an "intrinsic drive" to learn important material. One group summed up this process, as follows: "We can further assist clients on how to self-monitor, evaluate their own behaviors or decisions, plan, and set personal goals."

Many students of both the online and face-to-face courses embraced the benefits of Self-Directed Learning as they heralded its importance in the three theme areas of collaboration, professional development, and agency and empowerment. One of the face-to-face groups noted the importance of seeking out opportunities for gaining knowledge: "We must put on a 'learning' lens and see the learning that can occur all around us. Modeling this is key for students to develop their own practices of SDL." And in the final summary of their project, one group offered the following insight:

Self-directed learning is more than gaining information, especially in the context of a group where personality and responsiveness play a major role. There seemed to be an undeniable responsibility, not just for the individual, but for the group as a whole. We did not just learn about SDL; we lived it.

Quantitative Results

Students from the online and face-to-face courses were asked to rate their impressions of the SDL project. Online participants provided both individual and group scores and were generally enthusiastic about their experiences. The average of the 20 group scores was 8.33/ 10 (with 10 representing the most favorable score) and the individual average was 7.75. In the face-to-face class, students provided only an individual rating of their group experience and the average of 16 student scores was 7.88. Because these scores do not distinguish between student understanding of SDL concepts and reflections on collaboration in groups, no meaningful interpretation can be made about the depth of SDL-based knowledge gained from this project. From the degree of enthusiasm for SDL as evidenced by qualitative comments, however, it can be hoped that the lessons learned from the study will positively impact students' future work as professionals.

CONCLUSION

The authors began this research with a desire to know the impact of intentional pedagogy on SDL would have an impact on graduate students in counseling related fields. While literature on this specific topic is sparse, it suggests that exposure to the concept would be beneficial to the current and future growth of graduate students in the helping fields (Hmelo-Silver, 2004; Kranzow & Hyland, 2009).

The researchers initially assumed that students would benefit from exchanging ideas with each other on the topic of SDL, which is why the group portion of the pedagogy was central in both courses and in all sections. The student responses certainly reinforced this assumption and bring to the forefront the learning that took place within the groups. This is consistent with literature in SDL and PBL which emphasizes the learning potential in collaborative groups (Genario & Lyons, 2015). The concept of SDL as a pedagogy was new to many of them, and having the opportunity to discuss the article readings with others helped them to understand it and highlight its importance.

While the majority in the face-to-face course mentioned the importance of collaboration (69%), the percentage is quite a bit lower than the percentage of students in the online courses (where 90% mentioned its importance). It is possible that collaboration is a naturally occurring phenomenon in small face-to-face courses whereas with online courses, it may need to be more intentional for it to take place. Future inclusion of SDL content into courses should consider this and be intentional about time for students to discuss their learnings with each other either in a technology rich or face-to-face environment.

Reading about SDL from authors who also recognize its importance in the future success of professionals appears to reinforce the need for them to be self-directed learners. Many articulated that faculty will not always be there to help them make a professional decision, that knowledge is everincreasing, and that they must become self-directed learners if they are to remain current and practice ethically in their respective helping fields. Faculty in the helping fields may wish to begin introducing concepts of SDL into courses from the beginning of a program to ensure students continually think about the essential role it will play in their future.

While literature presents clearly that graduates from counseling programs need to be self-directed learners (O'Halloran & Delaney, 2013), it was promising to see the graduate students in both courses come to this realization on their own. In reading about SDL from authors who discuss its importance in the future success of professionals, students appear to be reinforcing the concept that they need to be self-directed learners. Many students articulated that faculty will not always be there to help them make a professional decision, that knowledge is ever-increasing, and that they must become SDL

if they are to remain current and practice ethically in their respective helping fields. Faculty in the helping fields may wish to begin introducing concepts of SDL into courses from the beginning of a program to ensure students continually think about the essential role it will play in their future success.

Perhaps the greatest take-away for students was that they came to understand the importance of passing on the content and the process of SDL because they see it as a means to helping others find empowerment and personal agency. Just as Hains and Smith (2012) designed their courses to empower students, the students in this study came to understand how SLD can empower their clients in the real world.

The second question which the researchers sought to answer while they conducted this study was whether similar pedagogical intervention strategies related to SDL could be used in both face-to-face and online course structures. The findings suggest that the answer to this question is "yes." In spite of the fact that the students were in very different courses with differing course formats, the student impact of the SDL curriculum appears consistent in many ways. Both courses used article readings, collaborative discussion, and critical reflection assignments to engage the students in the topic. While the percentage of students emphasizing different learning outcomes from the SDL exposure varied, the themes were clearly overlapping across the classes. Importantly, this suggests that these types of pedagogical interventions can be utilized to impact students in their thinking about the importance of SDL regardless of the course delivery method.

Limitations and Future Directions

There are a number of limitations inherent in the current study. First, the participant base involved students from two distinct professions and it would be difficult to generalize the findings of this study beyond these populations. Second, there was no demographic breakdown of students, making it difficult to ascertain learning outcomes based on ethnic background, age, etc. Third, because this was approached as a curricular and pedagogical intervention strategy, several components were grouped together making it difficult to know the impact of each individual component. For example, each group was responsible for reading a different article that focused on specific aspects of SDL, and it is unclear whether some articles were more influential than others in student learning. Similarly, the 3-part study procedure incorporated individual reading, discussions of the article as a group and then individual and collaborative reflection. It is not possible to determine which of these steps contributed most and least to student comprehension of SDL concepts. Finally, while it appears likely that this type of intervention would translate to many different courses utilizing various delivery methods, the authors cannot have complete confidence that the findings from the study would be similar for other programs (e.g., outside of therapy-based or college counseling disciplines).

The authors offer three suggestions for those interested in furthering research in this area. First, future studies of SDL should incorporate both a broad variety of learning styles and ethnic backgrounds in order to meet the needs of a greater cross-section of students and professionals. Second, expanding the length of the study seems prudent. This curricular intervention took place as a unit week. Since this appeared to influence students positively, increasing the emphasis on SDL so that it encompasses either a full semester (and incorporates a review of key points at routine intervals to augment student learning) or prioritizing SDL as a dedicated program outcome that can be taught and measured across the course curriculum would allow more opportunity for students to grow in their understanding and appreciation of SDL. Lastly, follow-up and longitudinal studies would be beneficial in determining how and to what extent students utilize SDL practices in their chosen field.

Final Thoughts

Graduate students entering today's ever-changing, global economy must be prepared to drive their own learning. This study offers one curricular intervention to both help our students understand self-direction and guide our students toward self-direction. The findings suggest that exposure and experience with the concepts of SDL can not only benefit students, but for those in the counseling

fields, it can also provide a pathway to further empowering and supporting those they will assist. While there is still much to learn about this topic, this research provides some insight into effective pedagogical interventions.

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APPENDIX

(Note: Since courses were both for students preparing to be counselors in one way or another, there was overlap in terms of the questions; however, since the courses were quite different in content [research methods vs. using literature to inform curriculum], not all questions were overlapping or suitable for inclusion in this research article. Below is the list of overlapping questions considered in the data)

- Please identify 2 elements of this course which have either encouraged you to become a Self-Directed Learner or hindered your ability to engage in self-directed learning.
- Please discuss why you feel you are being asked to read about and discuss SDL in this class.
- In your future work as a counselor (or educator or therapist), what would be one or two direct benefits of SDL in your work with clients? Alternatively, what concerns might be raised about encouraging SDL in your future work?
- On a scale of 1 (totally negative) to 10 (totally positive), how would you rate your group experience regarding the SDL? Additionally, how would each member rate their individual SDL experience? (Please include any additional feedback here from a group or individual perspective, as well).
- Provide a closing paragraph/summary of what you learned from the experience. How did your group experience help/not help your understanding/learning of SDL?