Self-Directed Learning as a Form of Self-Leadership: An Exploratory Study in a First-Year Experience Student Success Course

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First-year college students are often thrust into self-directed learning experiences that require them to more effectively lead themselves, even though much of their formal learning to that point has been teacher-directed in nature (Moebius-Clune, Elsevier, Crawford, Trautmann, Schindelbeck, & van Es, 2011; Dembo & Seli, 2013). Consequently, many first-year experience courses aim to teach self-awareness, self-efficacy, and self-direction, which are important contributors to self-leadership (Ross, 2014, Lee & Kim, 2016). Using a pre-post qualitative survey, this study evaluated the influences of how students perceive information (sensing and intuition), assignment flexibility submission (i.e., written, audio, video, creative, etc.) and active learning (e.g. metacognitive, problem-based, etc.) assignments on the self-directed learning of 83 students enrolled in four sections of a first-year student success course at Utah Valley University. There was a 35% increase in positive student perceptions towards assignment flexibility submission among sensing students and a 46% increase among the intuition students. When students evaluated their own level of self-directed learning after a semester of active learning assignments and assignment submission flexibility, 85% felt self-directed while 11% felt indifferent and 4% did not feel self-directed in their learning. The implications of this study may encourage first-year experience course instructors to implement more active learning assignments and assignment submission flexibility which may increase student self-direction and ultimately, self-leadership after high school.
The concept of self-leadership has been associated with higher-level standards that guide one’s behavior (authenticity), self-led intentions and behaviors that lead to responsible ends (taking responsibility for one’s behavior) and an overall expansion of one’s capacity to direct the self (Manz, 2015). Effectiveness in self-leadership is positively correlated to engagement in self-directed learning tasks (Lee & Kim, 2016; Kim, 2014). In high school, students generally move from a teacher-directed setting with little exposure to higher cognitive skill-building (Moebius-Clune, Elsevier, Crawford, Trautmann, Schindelbeck, & van Es, 2011) to a much more student-directed setting in college (Dembo & Seli, 2013). Similarly, because first-year college students enrolled in university success courses commonly have little to no prior self-directed learning experience, some believe college professors should give them greater structure and guidance leading to improved learning (Alberts, Hazen, & Theobald, 2010). Yet, so many college students continue to choose surface level learning out of habit, unconsciously or for other reasons (Horner, Zavodska, & Rushing, 2005).

The seminal works of Perry (1970) and King and Kitchener (1994) on cognitive development and reflective judgment has shown that college students commonly experience four stages of development. They enter college in a dualistic state, seeing there is a right and wrong way to do things and typically look to the instructor to tell them the answer. As students move through the initial part of the multiplicity stage they begin to face uncertainty and often do not possess the skills to deal with it. As undergraduate students progress through the multiplicity stage they may look for evidence to support an argument but often do not take time to think critically about the supporting evidence or how it compares to their own viewpoints. Some undergraduate students may enter the stage of relativism where they actively construct knowledge and meaning from information and their own experiences (Fosmire, 2013), similar to active learning, and in the process become more self-directed (Bembenutty, 2011) and self-motivated in their learning (Dembo & Seli, 2013), thus demonstrating increased self-leadership.
Curriculum in higher education revolves around learning outcomes. Instructors employ various forms of pedagogy to help students accomplish these learning outcomes. One of the common ways instructors facilitate and assess student understanding of and competency with learning outcomes is by way of regular assignments. Students, on the other hand, generally view assignments as a means to a grade. Consequently, the instructors routinely create and assess the assignments to determine if learning outcomes are accomplished and students routinely submit the assignments to earn a desired grade. While there is a growing trend in first-year experience pedagogies where professors who have incorporated student feedback in assignment design have seen increased self-directed learning among their students (Hutchison, 2016), these assignments are often based on feedback professors have gathered after assignments have been submitted. However, when students engage in a metacognitive process of becoming aware of learning outcomes, thinking about their own learning goals, and even sharing power with the instructor by contributing to the assignment design, they become even more self-directed in their learning (Tolman & Lee, 2013).

Research also reinforces “the current perceptions that different personality traits are most suited for different tasks” (Ahmed, Campbell, Jaffar, Alkobaisi, & Campbell, 2010, p. 249). Specifically, the psychological type theory that originated with Jung (1971) and was further explored in the Myers-Briggs Type Indicator (Myers & McCaulley, 1985), discusses two perceiving functions (sensing and intuition) or ways people take in information. This is particularly important when considering the learning relationship between the teacher and the student. One study (Tilley, Francis, Robbins, & Jones, 2011) that explored sensing and intuition found teachers were using their own cognitive experiences to shape their students instead of guiding the students to progress through their own cognitive experiences. In another related study (Francis & Smith, 2017), teachers in a religious setting presented their students with a learning experience where the information was left to their own discussion, creative manipulation, synthesis and interpretation. The sensing students, who typically are more sequential, fact-based, and are generally not quick to speculate, were in one group and struggling with designing their own interpretation while the intuition students, who
typically see things that are not there and enjoy developing ideas from only a few data points, were in another group and enjoying a fruitful, progressive learning experience. While some research addresses the student perceiving functions of sensing and intuition on pedagogy and learning, research does not appear to evaluate the influences of student sensing and intuition on their own experience of self-directed learning in a first-year college student setting. Therefore, the research question for this study is: Do assignment submission flexibility and active learning assignments change student perceiving towards self-directed learning in a first-year experience student success course?

**Method**

*Participants and Procedures*

The participants in this study included 83 (31 or 37% males and 52 or 63% females) students from four sections of a first-year experience student success course taught by the same instructor during the fall 2011 semester at Utah Valley University. Utah Valley University is a public open enrollment institution with just over 37,000 students, which at the time of data collection was the largest public four-year institution in the state of Utah. About 10% of this student population enrolls in the university student success course each academic year. Table 1 outlines some of the demographic attributes of the participants in this study.

**Demographic Attributes of Participants**

<table>
<thead>
<tr>
<th></th>
<th>Single</th>
<th>Married</th>
<th>Separated/ Divorced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
<td>81%</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>Freshman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-traditional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-identified</td>
<td>82%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>standing</td>
<td></td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>White</td>
<td>86%</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Hispanic/ Latino</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1
The only major difference between each section was four different peer mentors assigned to co-facilitate the class with the instructor. Peer-to-peer mentoring is a common best practice among first-year courses where student mentors assist the professor with teaching lessons; connect students to each other, to campus resources and opportunities; and overall, help students successfully transition to college (Larkin & Dwyer, 2016). While each peer mentor facilitated differently, the instructor was responsible for and approved all peer instruction and facilitation. Each section of the course followed the same syllabus and the same general pace of teaching and topics. The students enrolled in each section voluntarily participated in this study without any incentive (e.g. assigned points or extra credit).

Course Context and Measures

The students were exposed to three common first-year experience objectives throughout the course (i.e., self-awareness, learning skills and strategies, and connectivity to campus resources and events). In fact, this course is intended to provide metacognitive and self-directed experiences early and often so the learning skills and strategies are explored through the context of the students’ own experiences with their perceiving functions, assignment submission flexibility, and active learning assignments as defined below:

Perceiving Functions. Student perceiving functions were assessed by an adapted version of the Myers-Briggs Type Indicator* (MBTI) by Pelley and Dalley (1997). Specifically, this measure focused on the way students sensed (S) or intuited (N) information based on two statements, “I am very uncomfortable when part of my learning is left to my imagination” (S) and “I am bored when everything I am supposed to learn is presented explicitly” (N).

Assignment Submission Flexibility. Students were given the opportunity to submit assignments in a format of their choosing. For example, a student could submit artwork, a traditional written paper, photos, audio or video files, songs, etc. As long as each assignment provided sufficient written, audio or video self-reflection and demonstrated a reasonable exploration of one or more of the three course objectives, the student could submit the assignment in any format.
**Active Learning Assignments.** Bonwell and Eison (1991) popularized this epistemological approach. Barr and Tagg (1995) also made a significant contribution in the field of active learning, specifically for undergraduate college students. Examples of active learning in the classroom included class discussion, think-pair-share and other group-based learning, along with debates, videos, music, and many other activities. The instructor and mentor in each section spent the first week of class focusing on relationship-building activities and reinforced this approach by using active learning activities throughout the course. Since the 1990s, research has suggested that students be given more guidance early in the semester and then increased practice as time passes (Renkl, Atkinson, Maier, & Staley, 2002). However, the assignments and learning activities in this class infused a synthesized approach of the two ideas (i.e. Bonwell & Eison and Renkl et al.) of active learning from the ‘90s and early 2000s. Students were given parameters and grading criteria, shown examples of what former students had submitted for the same assignment, and then given complete autonomy to explore and submit the assignment.

**Self-Directed Learning.** Self-directed learning is a construct where students were given opportunities in and outside of class to remember, understand, and apply the principles aligned with the course learning objectives. Specifically, students were invited to practice and apply principles (e.g. note-taking, test-taking, reading and memory strategies, etc.) in their assignments from this course as well as other courses over a period of time (often 2-3 weeks), thus giving students regular opportunities to self-analyze and evaluate the principles in the context of their own life and design learning approaches that were most effective for increasing their student success. Students were asked to evaluate the effectiveness of their self-directed approach and determine opportunities for improvement.

**Data Collection and Analysis**

Data were gathered by way of three primary measures and triangulated to address the research question. In addition to data from the survey on perceiving functions from the MBTI, a pre-post survey (see Appendix) of primarily open-ended questions was administered in class to gather additional information about assignment submission flexibility, active learning assignments, self-directed learning and student success. A
single rater (the professor of all four sections) triangulated the data and presented the findings to each of the four sections of student success courses. Using grounded theory, open-ended responses were initially open coded to identify all potential themes, then using axial coding, themes were categorized and selective coding was used to identify the primary categories (Strauss & Corbin, 1990). In addition to the student comments on the pre-post surveys, comments from the anonymous end-of-semester student evaluations were also collected and analyzed as a fourth source of data.

**Results**

It was anticipated that students who identified themselves as S (Sensing) in the MBTI might struggle with or otherwise be opposed to the instructor’s assignment submission flexibility, active learning assignments, and self-directed learning. Likewise, it was anticipated that students who identified themselves as N (Intuition) in the MBTI would openly welcome assignment submission flexibility, active learning assignments, and self-directed learning.

<table>
<thead>
<tr>
<th>Pers. Type</th>
<th>No Response</th>
<th>Indifferent</th>
<th>Negative/ No</th>
<th>Positive/ Yes</th>
<th>More Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>S</td>
<td>1% (1)</td>
<td>5% (4)</td>
<td>0</td>
<td>37% (31)</td>
</tr>
<tr>
<td>Post</td>
<td>S</td>
<td>1% (1)</td>
<td>0</td>
<td>1% (1)</td>
<td>28% (23)</td>
</tr>
<tr>
<td>Self-Directed Learning</td>
<td>S</td>
<td>7% (6)</td>
<td>6% (5)</td>
<td>1% (1)</td>
<td>29% (24)</td>
</tr>
<tr>
<td>Pre</td>
<td>N</td>
<td>0</td>
<td>1% (1)</td>
<td>0</td>
<td>55% (46)</td>
</tr>
<tr>
<td>Post</td>
<td>N</td>
<td>0</td>
<td>1% (1)</td>
<td>0</td>
<td>30% (25)</td>
</tr>
<tr>
<td>Self-Directed Learning</td>
<td>N</td>
<td>1% (1)</td>
<td>4% (3)</td>
<td>2% (2)</td>
<td>49% (41)</td>
</tr>
</tbody>
</table>

Table 2.
There were 36 students who identified themselves as S and 47 as N with the following reaction towards self-directed learning based on assignment submission flexibility. The response options of indifferent, negative/no, positive/yes were included on the pre-survey and on the post-survey, the option of more positive was added to allow participants to identify if the assignment submission flexibility had increased their positive reaction towards their own self-directed approach to learning (as outlined above) since the beginning of the course. While coding the comments it was clear if a student was indifferent, negative or positive towards assignment flexibility and self-directed learning.

Even though one might have expected the S students to not enjoy assignment submission flexibility and would prefer that the instructor tell them exactly what to do and how to do it, this was not the case. In fact, 31 of the 36 S students looked upon assignment flexibility positively from the beginning while in the post survey, 23 looked on it positively with 11 looking at assignment flexibility even more positively, which is a 35% increase. Specifically, some S students explained the positive change from pre- to post-survey:

“When I started I wanted to be told what to do, and now as time has gone by I have been able to express it in my own way.”

“Yes. At first I was not a fan of being flexible, but over time I branched out and had a lot more fun turning in my assignments in other ways.”

“I thought it was a little scary at first but I quickly grew to like it.”

Similarly, one might expect the N students to openly embrace this approach to learning. In the pre-survey 46 already had positive views towards assignment flexibility with 21 viewing it even more positively in the post-survey, which is a 46% increase. Some of the N students described how they felt about the change in views from pre- to post-survey:

“I’ve never had it before so it was a great new experience.”

“Yes, because it allowed me to understand and learn the materials the best way I can.”

“Yes. I learned to appreciate it more through the semester.”
When it came to self-directed learning through assignment submission flexibility and active learning assignments, 65 (85%) of the students specified they felt self-directed in their learning while only 3 (4%) indicated they did not feel self-directed. Interestingly, of the two N students who indicated they didn’t feel self-directed, one may not have understood the relationship between learning and the learner (“I don’t feel I have much ownership. I’m a student not a teacher.”) and the other student admittedly did not put forth the effort (“I don’t feel I have pushed myself to learn as hard as I normally do.”). The one S student who did not feel self-directed said, “I felt like I had more pressure to become more creative with my assignments” (when it is possible the student may have just wanted to be told what to do).

There were 8 students (5 S and 3 N) or 11% who claimed they felt indifferent about self-directed learning assignments. The indifferent S students described, “I did not care” or “I take ownership in all my learning. I don’t think flexibility really has an effect on it.” In other words, regardless of the assignment submission flexibility extended, some students may be apathetic towards learning in general while other students may already choose to be more self-directed in their learning without the need or invitation from the instructor. The indifferent N students were similar in their responses as they described they preferred choosing assignment ease (“I feel like it is offered to me but I don’t take it. Like I said, papers are easier and quicker.”); apathy towards the work (“This course was way awesome. I just didn’t put 100% into it.”); and possibly a misunderstanding of the intention of assignment flexibility (“I don’t think I ever feel like I have ownership cause I’ll worry, then think of an excuse I have to use if necessary.”).

Of the students who indicated they felt self-directed in their learning through assignment submission flexibility, one S student made reference to feeling in control (“I felt like I was in charge of my learning and not under someone else’s control.”). Similarly, another talked about getting out of his comfort zone (“I stepped out of my comfort zone a couple times due to the flexibility of assignments.”), which is a very positive cognitive experience. Similarly, the N students who felt assignment flexibility contributed toward self-directed learning made statements like the following:
“I felt that I was able to further find what my learning styles were. I came to this course unsure what they really were, but I feel I have a better understanding now of how to study and learn in class.”

“It helped me actually work towards learning.”

“I had to take full ownership. Without it, I couldn’t do the assignment.”

“I knew the teacher was only concerned with what I learned and had faith in my ability to show that [through assignment flexibility].”

The findings of this study and the overall outcomes of this approach to teaching first-year students also align with the majority of student comments left in the anonymous annual student rating of instruction at the end of the semester, such as:

“He let us do the homework assignments anyway we wanted. It let me be able to really get into what the assignment was about, (so that I actually can use it in my personal life)”

“Everything we did was helpful, the class is all about learning about who you are as a student and helps you jump into college. We were able to have freedom to do what we wanted based on our learning types with our assignments.”

“I think he honestly was one of the first teachers that I can say respected my thoughts, struggles, etc. He really is great to work with, and teaches in a way that any student can appreciate!”

“Also in the classroom it was so helpful to not only find one way but other ways to do different things like studying skills; we learned more than 5 different ways to help us and he had all of us experiment on them and talk about it in the classroom to let others know how it worked out for us, which to me was very helpful.”

“He has taught me to use school skills toward my life and it has been great! He even let us turn in assignments the way we wanted to. I found this method more effective and interesting than other classes where you don't have a choice.”
Discussion

The combination of active learning assignments, student awareness of sensing and intuition, and assignment submission flexibility suggest an increase in student self-directed learning. By increasing self-directed learning through assignment submission flexibility and active learning assignments, students engaged at a much higher cognitive level, which may have prepared them to become more self-regulated learners and more well-prepared with the foundational knowledge and related skills that can lead to improved student success and overall self-leadership. Additional research is needed to explore these variables as well as the impact of student perceiving functions on progression through the cognitive development stages as they relate to self-directed learning and student persistence to graduation.

Limitations

One of the limitations of this study is the student perceiving functions of sensing and intuition only had one measure for each. It would have been more comprehensive to include multiple questions or statements where the student self-identified as sensing or intuition. Another limitation of this study is that it was merely exploratory, evaluating only four of 20+ total sections of the same university student success course. What is more, there also needs to be one or more comparison groups. With the addition of more sections and comparison groups in future studies, the data might be more generalizable to similar populations.

Implications

First-year experience students commonly enroll in courses intended to help them develop their own self-awareness, learning skills and strategies, and improve their connectivity to campus and its resources. However, how often do these courses actually create the environment for students to become self-directed learners (Dembo & Seli, 2013)? Based on the results of this study and future exploration of similar studies with comparison groups, if the findings hold true, first-year experience programs should evaluate the way instructors, share power with their students to design assignments through active learning, as well as assignment submission flexibility. One of the most profound outcomes from this study was that students explored and experienced self-awareness, learning skills
and strategies, and connectivity to campus resources and services in a self-directed learning environment, instead of just being lectured about these learning outcomes. Beyond the first-year experience courses, other instructors, both at the secondary and post-secondary levels, could evaluate the way they create their own learning environments to facilitate self-directed learning experiences. While this study is not generalizable, the results and implications are transferable and deserve additional consideration in a larger study that includes a sample more representative of higher education nationally and even internationally.

**Conclusion**

First-year students generally come from a very teacher-directed learning environment in high school and are expected to immediately transition to a self-directed learning environment to be successful (Dembo & Seli, 2013). While first-year students may be less familiar with higher cognitive active learning experiences, this study provides transferable evidence to the larger first-year student context suggesting students are ready and willing to engage in self-directed learning practices and need to be given the opportunity to do so. In particular, first-year faculty (and teachers at all levels) need to evaluate their own pedagogy and the self-directed learning experiences they provide to help students explore and create their own personalized and foundational learning skills and strategies and ultimately lead themselves to success in their other classes and in life.
References


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References

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APPENDIX

1. Myers-Briggs Type Indicator® MBTI
   S  I am very uncomfortable when part of my learning is left to my imagination
   N  I am bored when everything I am supposed to learn is presented explicitly

2. Student Survey: If you need more space, please write on the back of this paper.
   1. Gender (circle): Male  Female
      Marital Status (circle): Single  Married  Divorced/Separated
   2. Primary Ethnicity (circle): White  Hispanic  Asian  African American  Native American  Other:
   3. Status (circle): First-semester Freshman  Returning to school after time away
      Other Freshman  Sophomore  Junior  Senior
   4. Qualify for Pell Grant?  Yes  No
   5. What is your definition of assignment flexibility?
   6. Is there assignment flexibility in this course? (Please circle) Yes  No (if NO, skip to #13)
   7. What was your initial reaction to assignment flexibility in this course?
   8. Did your feelings towards assignment flexibility change over time in this course? Why or why not?
   9. Describe the circumstances, if at all, when you took advantage of the assignment flexibility in this course. (Give specific examples and reasons from your personal experience)
  10. In this course, describe your learning experience with flexible assignments as compared to your learning experience with non-flexible assignments.
  11. Describe how you felt towards the ownership of your own learning as a result of assignment flexibility in this course.
  12. Describe your own feelings towards your overall student success as a result of assignment flexibility in this course.
  13. Do you have assignment flexibility in other classes? (If no, why do you think you don’t? If yes, describe the assignment flexibility you experience.)
  14. Regardless of how you feel about assignment flexibility, describe the reasons for your final grade in this class (i.e. overall success or lack thereof).