Using Experiential Learning to Ensure Learning Transfer

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Abstract

By increasing learning transfer through the use experiential learning assignments, cadets’ will not only understand theories and concepts from PL300: Military Leadership more thoroughly, but they will also be more likely to identify the value of their new knowledge in applied settings. Additionally, cadets will be more likely to retain the information from class and apply it to their current and future leadership roles. Results of the study are discussed.

Introduction

It seems obvious that leadership should be studied at West Point; after all it is the “premier leadership institution” in the United States of America. However that does not mean the best way to study leadership is always clear, even at West Point. In PL300: Military Leadership the traditional goals of the course are twofold. First, the course strives to ensure that cadets leave the course as leaders who are “more self-aware.” Second, and more ambitious, cadets must leave the class as better leaders able to apply the lessons they learn on leadership throughout the course to their own leadership situations. The bottom-line is that PL300: Military Leadership does not try to merely increase the cadet’s knowledge of leadership, but tries to leave them a better leader after their PL300 experience.

In the past more traditional approaches (tests, quizzes, case studies, and papers) were used to test student learning, but they did not force students to see the applicability of their learning to their own leadership situation. As part of a larger and continued effort to reinforce the second goal of the course, different assignments were incorporated into one experimental section of the course in academic year 12-2. Based on information from the learning transfer and experiential learning literatures this study aims to assist students to see the linkages between the course concepts and their personal leadership situations. The basic idea is that if students are forced to reflect on their current roles as a leader and how they can apply information from class, they will be more likely to look for opportunities to apply their learning and their learning will be further reinforced through that personal application.

The literature on learning transfer indicates that in many situations training/instruction are high quality but often fails to help students bridge the gap between the learning environment and application (Mosel, 1957; Baldwin & Ford, 1988; Wick, Pollock, & Jefferson 2010). The failure to bridge this gap is important because if students do not see the applicability of what they are learning it is unlikely that they will use the information to their advantage and they are also much less likely to retain that information long term. To reiterate, ensuring learning transfer is important because it helps students understand the value of the information based on its applicability, increases student use and retention of information, and can help to ensure changes in the behavior of the student (Wick et al., 2010). There are three essential elements that are necessary to ensure that learning transfer occurs; the ability to use the information, the motivation to use the information, and the proper work environment (Wick et al., 2010). The
goal of this study was to address all three of these elements in the classroom or through resources as an extension of the classroom environment.

How to successfully address the key elements of learning transfer is a major question. Based on the applied nature of successful learning transfer described above, the literature on experiential learning is relevant to the focus of this class and this study. Experiential learning is a process where new knowledge is created through the transformation of actual experience (Kolb, 1984; Kolb & Kolb, 2005; Kayes, 2002). Essentially, experiential learning will help to bridge the gap between learning in the classroom to the identification of the applied value of an individual’s new knowledge. These key factors guided the approach in the classroom and the series of exercises used in this study. Further, to ensure successful experiential learning takes place, the instructor must create a positive climate, provide clear objectives, provide the necessary resources, and share the experiences with the learner (Quinn & Shurville, 2009). Ultimately, the use of experience helps to improve the individual’s knowledge, skills, and abilities (KSAs). The increased individual KSAs then helps to improve their organization through their performance (Kayes, 2002). Based on this train of thought, the goal in this case is to not only improve the individual cadet leader development experience in PL300, but it also has the potential to reap benefits for the Corps of Cadets and the Army based on the individual increase in the performance of these leaders.

Method

Participants

During semester 12-2, four sections of PL300: Military Leadership were used to examine the successful introduction of new class exercises. One section, with 16 cadets, was designated as the experimental section and three sections, with 39 cadets total, were designated as the control section. Student demographics were fairly similar with no significant differences when examining race, gender, academic major, or core squad affiliation.

Procedure

During semester 12-2 the control and experimental sections completed a slightly different series of assignments in PL300: Military Leadership. The major assignments for the course remained the same across sections and all instruction methods remained the same across sections to limit variance as a result of teaching methods. (See Appendix A for further details on assignments for each section) Specifically, the experimental section was required to complete four “application stories” on an online system called Resultsengine. These “application stories” required cadets to identify situations where they could apply concepts from the course to their own leadership situations, to describe the situation, to reflect on the success of their application, and to assess how what they learned will help them in the future as a leader. The experimental section did not complete one assignment called the “leader reflective exercise” and had fewer points allocated toward instructor assigned case studies than the control sections. Otherwise specific effort was taken to limit the differences between sections.

When completing the “application stories,” cadets were required to answer a series of questions via the online system Resultsengine (see Appendix B for the specific questions). The system was accessible via any internet connection. All the cadets needed were the website address and their individual account name/password. The cadets answered questions designed to prompt discussion by forcing them to lay out current leadership challenges they faced, to relate
their understanding of a specific concept or theory, and to explain how they used that concept or theory from the course to better understand and manage their leadership challenges.

All sections of the course were required to identify a mentor who aided their reflection on assignments throughout the semester. In the experimental section, the cadets granted their mentor access to the Resultsengine system and gave them the ability to view their entries/comments. The mentor was able to read the cadet’s entry and then respond with specific thoughts on the cadet’s approach to the situation and answer any questions that the cadet asked them to address. Also, the instructor monitored the system and observed the interaction between the cadet and the mentor. As a result, the instructor gained an increased level of insight into each cadet’s understanding of course material and their ability to apply that material to their own leadership situation.

**Analysis**

To examine this study both qualitative and quantitative methods were utilized. Instructor observations on the performance of cadets were captured throughout the semester and recorded. Additionally, a series of questions were asked via a self-report survey administered to both the experimental and control sections at the end of the semester. The survey results were analyzed using an Analysis of Variance (ANOVA). The two sections were compared to see whether there were significant differences between groups. (See Appendix C for the complete survey)

**Results**

The quantitative results of the survey showed that there were in fact differences between the perceptions of the two groups. Figure 1 shows the responses to all questions that captured significant differences between the experimental and control groups.

**Figure 1: End of Course Survey**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean Response per Group</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Required to look for opportunities</td>
<td>• E = 4.45</td>
<td>.042</td>
</tr>
<tr>
<td></td>
<td>• C = 4.08</td>
<td></td>
</tr>
<tr>
<td>2: Taught to look for opportunities &amp; report</td>
<td>• E = 4.36</td>
<td>.079</td>
</tr>
<tr>
<td></td>
<td>• C = 4.06</td>
<td></td>
</tr>
<tr>
<td>4: Shared clear/detailed examples w/Mentor</td>
<td>• E = 4.18</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>• C = 4.02</td>
<td></td>
</tr>
<tr>
<td>6: Strong expectation to apply course content</td>
<td>• E = 4.64</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>• C = 3.79</td>
<td></td>
</tr>
<tr>
<td>9: PL300 provides process to apply &amp; report use of course content</td>
<td>• E = 4.55</td>
<td>.040</td>
</tr>
<tr>
<td></td>
<td>• C = 3.71</td>
<td></td>
</tr>
<tr>
<td>10: Instructor gave specific feedback on my application</td>
<td>• E = 4.45</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>• C = 4.06</td>
<td></td>
</tr>
</tbody>
</table>

*when controlling for Gender, GPA, Military GPA, PT GPA, and PL300 Grade*
Cadets in the experimental section perceived an increased requirement to look for opportunities to apply their learning, perceived that they were taught to look for those opportunities and report on those opportunities at a higher level than the control group, felt an increased requirement to share those examples with their mentor, felt a stronger expectation to apply course content, and perceived that they got more specific feedback on the application of their learning. However, there were not statistically significant differences in the overall grades of the sections in PL300 at the end of the semester. There was an attempt to measure learning and the likelihood to apply PL300 concepts in a more longitudinal manner, but limited response rates made it impossible to glean any statistically significant information.

On the qualitative side, the experience of the cadets in the experimental sections was an extremely positive addition to the PL300 course. It increased the instructor’s opportunity to observe the cadets’ application of course content and made that application specific to each cadet’s personal situation. Additionally, the required assignments increased the interaction between the mentors and their cadets. Many of the cadets received in-depth responses, praise, and constructive comments from their mentors that were captured in one place and given highly relevant context for each cadet. This feedback seemed to be well received and valuable to the cadets based on conversations with their instructor in class. Cadets referred to this feedback in class and on later assignments in the course. Also, based on instructor observations, cadets in the experimental section were more likely to share personal experiences in the classroom during open class discussions. That is not to say they were more likely to participate in the class, but when they did participate, they seemed primed to tie a personal context to course material as they explained a concept or asked a question.

Discussion

Ultimately, the results of this study were mixed. On the one hand the overall course grades for the cadets did not differ from one section to another. However, it is possible that the right outcomes were not measured. It is not accurate to say that a higher course grade in PL300 indicates an increased level of performance as a leader. To truly measure improvement as a leader a baseline measure would need to be issued prior to the semester and then measured again at the end of the semester. The increase in leader performance from time one to time two could then be compared between the two groups. However, that is beyond the scope of this study. Additionally, it would be interesting to test learning at the end of the summer and see if the experimental section or the control section retained information from the course longer. Also, it would be telling to examine which section was more likely to apply their new knowledge from the course to their summer leadership detail. Unfortunately, low response rates on additional surveys made it impossible to analyze these questions.

There is value in the information gained from the end of course survey. As the results indicate, there were differences between the groups. Generally, cadets in the experimental section perceived an increased focus on the application of their learning to their personal situations, an increased need to reflect on that information with their mentor, they had more avenues to capture personal application, and that they received higher levels of personal feedback on their application. This was a self-report survey so it needs to be interpreted with some caution, but the results seem to support the principles of learning transfer and experiential learning.

Based on the key elements of learning transfer identified by Wick and colleagues 2010, the cadets had the ability to use information from the course based on the exercises, they were at
least somewhat motivated, at a minimum, by the transactional allocation of course points to the assignments, and the course environment supported their application of the course concepts through open class discussions and through furthering each cadet’s relationship with their mentor. Regarding experiential learning, the cadets received clear guidance from their instructor, they were given time and a system to help them report their application of course concepts, and the experience was shared through increased levels of feedback and class discussion (Quinn & Shurville, 2009).

**Conclusion**

A few additional lessons learned were captured during the course of this study that should be incorporated into any future efforts. Instructors should take specific actions to communicate expectations with mentors directly. Some mentors were unclear of their roles based on only conversations with cadets. An instructor’s guide to being a mentor should be developed and distributed at the beginning of the semester. It is crucial that instructors and mentors are proactive and prompt with feedback for their cadets. The value of feedback seemed to fade the longer it occurred after the submission of their application story. It is helpful for the instructor to provide reminders to both the cadets and their mentors. Last, if it is clear that a cadet is struggling with the assignments it is critical to actively encourage them to come in for additional instruction. A face to face meeting often cleared up issues that written feedback could not.

Based on the adherence to several key elements of the learning transfer and experiential learning literature there are some positive indications that the new assignments used in this study were beneficial to cadet learning in relation to PL300: Military Leadership. However, further testing is necessary to truly assess the total value/contribution of the applied learning assignments described in this study. Longitudinal measures need to be introduced to obtain a better baseline of information to enable analyses of performance over time. Additionally, different metrics need to be developed to accurately measure the effectiveness of the teaching methods described in this study. Overall, this study provides potentially helpful information on instructor practices in the classroom and assignments that will help cadets be better leaders at the end of their PL300: Military Leadership experience.
References


Appendix A

Course Requirements

Control Group Graded Events:

<table>
<thead>
<tr>
<th>Event</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEADER DEVELOPMENT PORTFOLIO</td>
<td>400</td>
</tr>
<tr>
<td>Journey Line and Narrative (JL)</td>
<td>100</td>
</tr>
<tr>
<td>Leader Reflective Exercise (LRE)</td>
<td>100</td>
</tr>
<tr>
<td>Leader Philosophy Paper (LPP)</td>
<td>200</td>
</tr>
<tr>
<td>MIDTERM EXAM</td>
<td>200</td>
</tr>
<tr>
<td>TEE</td>
<td>250</td>
</tr>
<tr>
<td>INSTRUCTOR POINTS (Participation/Preparation)</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1000</strong></td>
</tr>
</tbody>
</table>

Experimental Group Graded Events:

<table>
<thead>
<tr>
<th>Event</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEADER DEVELOPMENT PORTFOLIO</td>
<td>500</td>
</tr>
<tr>
<td>Journey Line and Narrative (JL)</td>
<td>100</td>
</tr>
<tr>
<td>Results Engine (RE)</td>
<td>125</td>
</tr>
<tr>
<td>Application Story (AS)</td>
<td>75</td>
</tr>
<tr>
<td>Leader Philosophy Paper (LPP)</td>
<td>200</td>
</tr>
<tr>
<td>MIDTERM EXAM</td>
<td>200</td>
</tr>
<tr>
<td>TEE</td>
<td>250</td>
</tr>
<tr>
<td>INSTRUCTOR POINTS (Participation/Preparation)</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1000</strong></td>
</tr>
</tbody>
</table>
Appendix B

Application Story Questions

1. What framework, concept, or theory did you apply from PL 300?

2. Describe the situation and outcome from the application of this learning.

3. How has this experience improved you as a leader?

4. Characterize your progress (pick one from: Just Starting, Early Win, Visible Application, or Valuable Improvement)

5. How will you use what you learned from this experience going forward to become a better leader?
Appendix C

Student Survey

12-2 Update Cadet Survey Questions:

Name: 
Hour: 

Statement 1: PL300 required me to look for opportunities in my current leadership situations to apply what I learned in class.

Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)

Statement 2: PL300 taught me to look for specific opportunities to apply learning from the course and then report on my experience of doing so.

Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)

Statement 3: PL300 caused me to apply specific meaningful frameworks, theories, and concepts to my personal leadership situations.

Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)
Statement 4: On multiple occasions, I shared with my mentor clear and detailed examples of my application of lessons from PL300 to my personal leadership situations.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)

Statement 5: PL 300 expected me to demonstrate and report my improvement as a leader to my instructor in writing.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)

Statement 6: In PL300, how strong was the expectation for you to apply your learning and report on how course theories, frameworks, and models aided your ability to handle your current leadership situations?
Not Expected, Minimally Expected, Moderately Expected, Clearly Expected, Highly Expected (1-5)

Statement 7: Compared to other sections of PL300, our section was expected to provide much deeper feedback on our application of PL300 concepts to our personal situations.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)
Statement 8: What PL300 concepts did you apply during the semester? Write down all that apply:

Statement 9: PL300 provided a process to apply and report specific times when I put the frameworks, theories, and concepts I learned during the semester into practice.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)

Statement 10: My instructor gave me specific feedback on PL300 lessons that I put into practice in my personal leadership situations.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)

Statement 11: During class discussions in PL300, how often did your classmates bring in specific examples of when they connected or put into practice lessons from the course to their personal leadership situations?
Never, Rarely, Sometimes, Often, Very Often (1-5)

Statement 12: What was the expectation for you describe specific examples of your application of PL300 lessons to demonstrate your improvement as a leader?
Not Expected, Minimally Expected, Moderately Expected, Expected, Highly Expected (1-5)

Statement 13: By applying course concepts to my personal leadership situations I improved as a leader over the course of the semester.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)
**Statement 14:** The frameworks, theories, and concepts presented in PL300 are more than just common sense.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)

**Statement 15:** The frameworks, theories, and concepts presented in PL300 are immediately applicable to current leadership challenges I face.
Strong Disagree, Disagree, Neither Agree or Disagree, Agree, Strongly Agree (1-5)