An Examination of the Outcomes of the Undergraduate Leadership Teaching Assistant (ULTA) Experience as a High-Impact Practice in Leadership Education

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Abstract

The Undergraduate Leadership Teaching Assistant (ULTA) experience offers students a high-impact opportunity to develop, practice, and evaluate their leadership knowledge, skills, and abilities. The purpose of this qualitative study was to examine outcomes of the ULTA experience as a high-impact practice for students studying leadership. Weekly journal entries of eight ULTAs were analyzed to assess their perspectives on the experience. Findings revealed the ULTAs developed cognitive skills through the generation of mostly divergent discussion questions on the knowledge and comprehension level of the Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al, 1956). ULTAs applied their learning from the experience to both personal and professional roles and intend to model behaviors in seven skill areas: (a) communication; (b) active listening; (c) mentoring; (d) responsibility; (e) followership; (f) professionalism; and (g) collaboration.

Introduction

Leadership is a skill for which colleges and universities aspire to develop in their students as evidenced by the number of institutions who highlight leadership as part of their mission statements (Astin & Astin, 2000; Council for the Advancement of Standards in Higher Education, 2012; International Leadership Association, 2014). The collegiate environment is composed of many initiatives to facilitate leadership development among college students (Dugan & Komives, 2007). However, these initiatives are not always validated and more assessment of our efforts is needed (Riggio, 2008). The *National Leadership Education Research Agenda* outlines the need for leadership education research to explore curriculum development frameworks that enhance the leadership education transfer of learning (Andenoro et al., 2013). In regards to transfer of learning, research is also needed to provide insights into "environments that support and facilitate curriculum delivery" (Andenoro et al., 2013, p. 5). Furthermore, empirical research on innovative and learner-centered pedagogical approaches in leadership education is necessary.

In response to the changing demands of the twenty-first century, institutions of higher education have adopted a variety of learning assessments and educational practices targeting specific learning outcomes. High-impact practices are a growing trend in higher education and are considered active learning experiences that increase student retention and student engagement in higher education (Kuh, 2008). High-impact practices meet eight key elements and are associated with academic learning outcomes. While many high-impact practices have been documented and examined for academic learning outcomes (e.g., learning communities, service learning, student-faculty research, study abroad, internships, and senior experiences), other high-impact practices exist that offer similar benefits which should be identified and their impacts verified (Kuh, O'Donnell, & Reed, 2013).

Several high-impact practices used by leadership educators are centered around service-learning and civic engagement activities focused on social change (Hoover & Webster, 2004; Langone, 2004; Seemiller, 2006; Webster, Bruce, & Hoover, 2006; & Sessa, Matos, & Hopkins, 2009). In this case, service-learning is the high-impact practice and vehicle through which students learn leadership.

Capstone courses are another type of high-impact practice used by leadership educators. These capstone courses help students apply their leadership skills and create projects which demonstrate their leadership learning (Gifford, Cannon, Stedman, & Telg, 2011; Moore, Odom, & Wied, 2011). Leadership educators also commonly use high-impact practices of group or team projects and learning communities to help students develop leadership (Coers, Lorensen, & Anderson, 2009; Nahavandi, 2006; Weeks & Kelsey, 2007).

An undergraduate leadership teaching assistant (ULTA) experience has been identified as a high-impact experience for students studying leadership (Odom, Ho, & Moore, 2014). Despite suggesting the use of undergraduate teaching assistants in courses, little research exists evaluating the impact of undergraduate teaching assistant experiences in leadership education (Firmin, 2008; Schalk, McGinnis, Harring, Hendrickson, & Smith, 2009). It has been suggested undergraduate teaching assistants can provide a mutually reinforcing benefit between faculty

members and students (Fingerson & Culley, 2001; Roberts, Lilly, & Rollins, 1995). Yet, few research studies evaluate the impact of undergraduate teaching assistant experiences on student leadership learning. Arguably, an ULTA experience includes a variety of responsibilities and provides an opportunity for leadership students to apply course material and further develop their understanding of personal leadership strengths and weakness, two important objectives for an agricultural leadership program (Morgan, King, Rudd, & Kaufman, 2013). The ULTA experience at Texas A&M University in the Department of Agricultural Leadership, Education, and Communications has the following objectives:

- Develop skills that will be valuable in a future career (communication, creativity, critical thinking, problem-solving, teamwork, and interpersonal/intrapersonal skills).
- Deepen understanding of the leadership field of study.
- Broaden points of view of teaching leadership.
- Experience working with a diverse audience (Odom et al., 2014).

This study examines the outcomes of an ULTA experience as a high-impact practice for undergraduate students studying leadership in an effort to document the impact of this experience on student learning. Kuh, O'Donnell, and Reed (2013) advocated for the identification and empirical validation of additional high-impact practices that are offered at postsecondary institutions.

Conceptual Framework

Preparing students for long-term "college success" involves not only whether students have earned their degree but "whether graduates are in fact achieving the level of preparation—in terms of knowledge, capabilities, and personal qualities—that will enable them to both thrive and contribute in a fast-changing economy and in turbulent, highly demanding global, societal, and often personal contexts" (Kuh, 2008, p. 2). Essential student learning outcomes needed for student success have been identified through dialogues with faculty, employers, and accreditors. These student learning outcomes have been connected with some high-impact practices (Kuh, 2008). Essential student learning outcomes identified by Liberal Education and America's Promise (LEAP) and summarized in the American Association of Colleges and Universities (AAC&U) reports *Liberal Education Outcomes: A Preliminary Report on Student Achievement in College* (AAC&U, 2005) and *High-Impact Educational Practices: What They Are, and Why They Matter* (Kuh, 2008) served as the conceptual framework for this study. The reports recommended college students achieve outcomes in four major areas within their undergraduate studies: (a) knowledge of human cultures and the physical and natural world; (b) intellectual and practical world; (c) personal and social responsibility; and (d) integrative and applied learning.

More specifically, the knowledge of human cultures and the physical and natural world was described as the study of both contemporary and enduring questions in the fields of sciences, social sciences, mathematics, humanities, arts, histories, and languages (AAC&U, 2005; Kuh, 2008). Intellectual and practical skills included written and oral communication, inquiry and analysis, critical and creative thinking, quantitative literacy, information literacy, teamwork and problem solving, and integration of learning (AAC&U, 2005; Kuh, 2008). The personal and social responsibility outcome included aspects such as local and global civic knowledge and

engagement, intercultural knowledge and competence, ethical reasoning and actions, and foundations and skills for lifelong learning all "anchored through active involvement with diverse communities and real-world challenges" (Kuh, 2008, p. 4). The Integrative and applied learning outcome appeared in Kuh (2008) and was described as "synthesis and advanced accomplishment across general and specialized studies demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems" (p. 4).

Despite the fact that numerous faculty, employers, and accreditors endorse such learning outcomes, many employers rated college graduates as ready for entry-level positions, but lacking the skills needed for promotion (Kuh, 2008). George Kuh (2008) argued pedagogical practices, such as high-impact practices, should be put in place to meet the essential learning outcomes. Specific high-impact practices can foster and have been linked to the four essential learning outcomes. However, no individual high-impact practice has been linked to all essential learning outcomes (Kuh, 2008). This study explored how undergraduate students developed competencies in the essential learning outcomes through their high-impact experience as an ULTA.

Purpose

The purpose of this study was to examine outcomes of the ULTA experience as a high-impact practice for students studying leadership. This study aimed to assess the learning process and outcomes of an ULTA experience as it relates to a high-impact practice for students studying leadership. Specifically, this study addressed the following objectives:

1. Describe students' intellectual and practical skills through the ULTA experience;
2. Describe students' perspectives of their growth in personal and social responsibility through the ULTA experience; and
3. Describe students' perspectives on their ability to integrate and apply learning through the ULTA experience.

Methods

A basic qualitative design was used for this study (Merriam, 2009). The purpose of qualitative research is to understand "how people make sense out of their lives, delineate the process (rather than the outcome or product) of meaning-making, and describe how people interpret what they experience" (Merriam, 2009, p. 14). A central tenet of a basic qualitative study is "individuals construct reality in interaction with their social worlds" (Merriam, 2009, p. 22). Because the researchers were interested in understanding leadership outcomes from the perspective of ULTAs, a qualitative framework was chosen as the most effective means to examine the research objectives.

According to Klienke (2008), "leadership is particularly well suited for qualitative analyses because of the multidisciplinary nature of the field which has to be more open about paradigmatic assumptions, methodological preferences, and ideological commitments than many single disciplines" (p. 368). With this in mind, the researchers chose to frame this study in the qualitative research paradigm of phenomenology. Phenomenology is a study of "how human

beings make sense of experience and transform experience into consciousness" (Patton, 2002, p. 104).

Population and Sample

The population for the study included ULTAs in the Department of Agricultural Leadership, Education, and Communications at Texas A&M University. This was a purposeful sample with a criterion-based selection process (Merriam, 2009). According to Merriam (2009), "the criteria you establish for purposeful sampling directly reflect the purpose of the study and guide in the identification of information-rich cases" (pp. 77-78). The criterion for this study was that all participants must have participated as an ULTA in a leadership course at Texas A&M University for the fall 2012 semester. There were eight students who met this criteria including seven upperclassmen and one sophomore. The weekly journal entries of the ULTAs served as the data for this study. ULTAs were given the same prompts to respond to each week. Through these prompts, ULTAs reflected on their past experience (class responsibilities for the previous week) as well as their thoughts on future experiences (class responsibilities for the upcoming week).

The following prompts were used for student reflections prior to class each week:

1. Think about the specific topics for this week. Design two questions you could use to engage students on two important points relevant to the topic(s).
2. How can you help students to better understand the material for this week? What examples could you share related to the class topic(s)?
3. Think about your role as a leader. What characteristic will you try to model and/or develop this week? Explain why you chose this characteristic.

Reflection prompts after class each week consisted of the following:

1. What skill did you work on this week (communication, creativity, critical thinking, problem-solving, interpersonal or intrapersonal skills)?
2. Reflect upon the one characteristic you chose to model/develop as a leader. Include discussion on whether you still feel the same about the importance of that one characteristic chosen.
3. How has this TA experience given you a perspective on leadership this week (think about all of your leadership coursework)?
4. How can you apply what you have learned through your TA experience to other areas of your life?

All ULTAs responded to the reflection prompts and turned them in to their instructor weekly. These reflections were used for data analysis. Prior to data analysis, ULTA names were removed from the journals and assigned a code to protect the confidentiality of the individual.

Data Analysis

This study used content analysis, "a technique that enables researchers to study human behavior in an indirect way through an analysis of their communications" (Fraenkel & Wallen, 2009, p. 472). Both inductive and deductive content analyses were conducted on the eight ULTA journals because "data analysis is a complex process that involves moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and meaning" (Merriam, 2009, p. 176).

The inductive analysis of data for this study used an open coding technique (Strauss, 1987). The open coding technique or constant comparative method includes four stages: (a) comparing data applicable to each category, (b), integrating categories and their properties, (c) delimiting the theory, and (d) writing the theory (Strauss, 1987). Providing codes, themes, and narratives is one method used to interpret content analysis data (Fraenkel & Wallen, 2009) and is used in this study to report the findings from the inductive content analysis.

Deductive content analysis analyzes data using an existing framework (Patton, 2002). Deductive content analysis was conducted on the specific section of the ULTA journals asking ULTAs to develop questions that could be used to engage students in the class about course content. Frequencies and percentages and/or proportion of particular occurrences to total occurrences is one method of interpreting content analysis data (Fraenkel & Wallen, 2009) and is used in this study to report the findings from the deductive content analysis. The Taxonomy of Educational Objectives: Cognitive Domain (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956) and Productive Thinking Factors (Guilford, 1957) were the frameworks used as the deductive lens in this study.

The Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al., 1956) is a hierarchical framework for categorizing levels of thinking and can be used as a framework for assessing ULTAs' intellectual and practical skills. The taxonomy consists of six major categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. Knowledge is the lowest level of thinking and involves the recall of previously learned subject matter. At the comprehension level, students have an understanding of the subject matter and can explain the facts or ideas in their own words. The third level of the taxonomy is application, which focuses on students applying the learned material to other situations. Analysis requires students to break the subject matter into separate components and make inferences based on the information. The fifth level of thinking is synthesis where students create a new pattern or alternative solution by combining the components of the subject matter together. Evaluation is the highest level of thinking and requires students to use criteria to make judgments about the value of the subject matter.

Productive-thinking factors of creativity (Guilford, 1957) were also used as a deductive lens to evaluate the types of questions asked by the ULTAs. Guilford (1957) outlined two separate thought processes used by individuals: divergent and convergent thinking. These thought processes have been attributed to different types of cognitive processes (Guilford, 1957). Divergent thinking relates to those thoughts displaying multiple solutions; there is not one right answer and it allows for open-ended responses. Convergent thinking describes those thoughts

having short, concise, concrete answers. Divergent thinking is linked to greater amounts of creativity (Guilford, 1957).

To establish inter-rater reliability, three researchers conducted separate hand-coded content analysis. Data was then extracted from its original source and categorized into core consistencies (Lincoln & Guba, 1985). Inter-rater reliability or the triangulation of analysis, in which "two or more persons independently analyze the same qualitative data and compare their findings" (Patton, 2002, p. 560) adds to the reliability of data analysis. Peer-debriefing and triangulation were used to increase credibility within the study. An audit trail was maintained and kept with each coded document to increase dependability and confirmability (Lincoln & Guba, 1985).

Findings

This study sought to examine outcomes of the ULTA experience as a high-impact practice for students studying leadership. The first objective of the study was to describe students' intellectual and practical skills through the ULTA experience.

Intellectual and Practical Skills

Students documented their intellectual and practical skills by creating weekly questions for leadership classroom discussions. To achieve this objective, the researchers analyzed the weekly journal entries to describe the cognitive level of questions generated by ULTAs for leadership classroom discussions. Journals were shared with the instructor prior to the scheduled course meetings to help generate classroom discussion. The deductive lens of The Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al., 1956) and the Productive-Thinking Factors (Guilford, 1957) were used to describe the level of questions generated by students. Inductive analysis was utilized for the remaining outcomes.

To describe the level of questions generated by ULTAs for leadership classroom discussions, journals were examined using Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al., 1956). There were a total of 120 questions developed by ULTAs. The analysis, synthesis, and evaluation levels are considered to encourage higher order thinking in learners (Talbert, Vaughn, Croom, & Lee, 2007). The breakdown in questions according to the Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al., 1956) is indicated in Table 1. Most questions were at the knowledge and comprehension level. There were no questions asked at the synthesis and evaluation levels.

Table 1.
Description of Questions Generated by ULTAs *Using the Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al, 1956)*

	Questions Generated	
Level of Bloom's Taxonomy	*f*	%
Knowledge	25	20.8
Comprehension	53	44.2
Application	30	25.0
Analysis	12	10.0
Synthesis	0	0.0
Evaluation	0	0.0
Total	120	100.0

The ULTAs questions were also examined to describe whether they were divergent or convergent (see Table 2). Divergent questions are open-ended and lead to more discussion. Convergent questions are generally close-ended questions which have a definitive answer. Most questions generated by the ULTAs in this study were divergent.

Table 2.
Description of Questions Generated by ULTAs *Using the Productive-Thinking Factors (Guilford, 1957)*

	Questions Generated	
Productive-Thinking Factor	*f*	%
Convergent	30	25.0
Divergent	90	75.0
Total	120	100.0

Personal and Social Responsibility

The second objective of the study was to describe students' perspectives on their growth in personal and social responsibility through the ULTA experience. Specifically, this objective examined the leadership characteristics ULTAs purported to model in the classroom and leadership perspectives gained through the experience. ULTA journal entries were examined for characteristics they intended to practice and model for the upcoming class sessions. Data analysis of student reflections indicated seven major categories: (a) communication; (b) active listening; (c) mentoring; (d) responsibility; (e) followership; (f) professionalism, and (g) collaboration. One student reflected about followership and mentoring:

> This week I will model the characteristics of followership. A good leader has to be able to learn when to follow. Meaning I will follow the instructions of the professor and show attentiveness in class. In the hopes of leading the students by example I will also try to develop the characteristics of mentoring by being of aid to the students in any question or concerns they might have. (ULTA 5)

This journal entry reflects the category of professionalism and responsibility how this student strives to be effective when giving feedback:

> This week I am going to try and be more effective in the feedback that I give. Many times I misinterpret the meanings of positive feedback. Even though my feedback is positive, it might not actually be very useful. I need to be more effective with my responses and contribute more. This is crucial, especially when striving towards exceptional followership. (ULTA 12)

Another ULTA journal entry focused on communication:

> Communication was key this week as it was the first time my group and I interacted. I feel that overall this was received well, and I still feel that communication is important to make a first impression as a TA. (ULTA 8)

ULTA 5 chose to model characteristics of active listening and mentoring: "…active listener because I want to fully understand where they are coming from when they speak about their project and mentoring by helping them to be in the tight direction if they need help on that."

There were two main themes which emerged from the content analysis related to how ULTAs perceived the experience impacted their perspective on leadership: Personal Leadership and Professional Leadership.

Personal Leadership Perspectives. In the personal leadership theme, students discussed the following types of perspectives: personal definition of leadership, leading with strengths, awareness/attentiveness/preparedness, balance and priorities, values and ethics, role ambiguity, seeing the big picture, creativity, and confidence. The following quote related to confidence:

> My perspective on leadership as a TA has been "tested" as I was literally thrown into doing a values discussion. I did not know I was going to have to lead my own discussion, but I had the confidence and background knowledge about values to lead the discussion. (ULTA 7)

Another quote related to awareness/attentiveness/preparedness:

> It has shown me that people respect you as a leader when you respect yourself and them as well. I believe respecting others is a very vital part of being successful. Not only in the workforce, but also life in general. I can use this in all areas of life such as with my co-workers and family members. (ULTA 10)

Development of a personal definition of leadership was evident by ULTA 5's reflection: "A good leader learns to be unselfish and have the best interest of others in mind and helps them in their development." ULTA 12 also reflected on how they have established their own personal definition of leadership through the ULTA experience, "I feel as though I have started in a very different, but fun and interactive form of leadership development. I am also starting to implement

my own definition when interacting with students." ULTA 12 also discussed the importance of values in their personal development as a leader:

> When I pursue a career, I need to make sure that my values are similar to those of the organization. At the very least, I should at least not have a problem with any of their core values because that could potentially be a deal breaker in the future with my campus organizations. I should be aware of values before making any ethical decisions.

ULTA 14 discussed their perspective on the need for creativity in different contexts:

> As a leader, especially at higher levels, you are required to deal with a lot of conceptual and "big picture" work. This is the type of work that leads a company to the top of their industry. Creativity can be a huge fuel to this success. Being able to come up with creative solutions is a huge advantage in brainstorming and innovation.

Professional Leadership Perspectives. In the professional leadership theme, students discussed the following types of perspectives: integrated learning, teaching, guiding followers, observing examples of teaching, teams and peer groups, working towards common goals, working with college-level individuals, and service to others. One student's journal reflected how they applied the ULTA experience to working with college-level individuals:

> The TA experience these past weeks has taught me that at times, your leadership expectations and duties may change instantly even though I knew that the rest of the teaching staff was going to be gone. I did not realize how many questions I was going to need to address while they were gone (especially questions that needed answers from other instructors). It is important to remain composed and to act as professional and knowledgeable as possible in order to maintain respect and credibility. (ULTA 12)

Another ULTA reflected on how the experience provided them with a perspective on guiding followers:

> This week while helping the students work on their life purposes I experienced the leadership perspective of an instructor. One thing I learned is that everyone receives and interprets information a bit differently. As a leader you have to learn to adapt to the different styles of each individual and see their work through their eyes. (ULTA 5)

ULTA 12 also discussed how they gained perspective on guiding followers: "…you don't ever have to show your positional power-even though you have it. On the contrary, I believe you can be a more effective leader if you focus on developing relationships with subordinates rather than using your authority." ULTA 14 reflected on the observation of examples of teaching: "I feel it is extremely important to lead by example. [Professor] does a fantastic job of talking the talk and walking the walk. Following in [their] footsteps is something I aspire to be able to do." ULTA 7 discussed the experience of teaching and how it was a way to demonstrate professionalism:

> My TA experience has amplified this week because I got to actually teach. I enjoyed it and found it to be a great way to exercise my professionalism. It was also nice to work with ULTA as a team in our lesson.

Integrative and Applied Learning

The third objective of the study was to describe students' perspectives of their integrative and applied learning through the ULTA experience. Specifically, this objective examined how students apply learning from being an ULTA to other areas of their life. ULTAs reflected in their journals on situations where they could apply learning acquired through their ULTA experience. Four broad themes emerged: (a) student roles; (b) work environment; (c) social/community interactions; and (d) personal life.

Student Roles. Students expressed being able to apply their learning to being a leader in student organizations, mentoring roles, leading and teaching peers, and in teams for other classes. The following is a quote related specifically to teaching peers:

> I served as a leader among my peers, which has given me the confidence to lead others. I learned that teaching my peers is much more difficult and to take a stand with someone my age, as opposed to my group back home. (ULTA 14)

One ULTA reflected on being able to apply what they had learned to their student organization:

> I will be able to understand how to work on different styles of leadership. I am more aware now and understand that if a leader is not concerned about relationship building, even though I am, I must learn to adjust and modify my style of followership. I must be open. (ULTA 12)

Work Environment. Work environment was another situation where students would apply what they are learning. In this theme, ULTAs specifically addressed followership, open and professional communication including writing, feedback, emails, and presentation, teams in an office, and personal vs. organization values. ULTA 5 discussed using what they learned for their future business: "Everything I learned this semester as a TA, I will be certain to use when I begin building my own business after I graduate. "The following is a quote from one of the ULTAs in regard to applying their learning to the work environment:

> Today I learned about how to keep a group's attention when speaking. This skill can be used for the rest of my life whether it's giving a presentation at work or trying to entertain people; it's nice to know how you can interest people. (ULTA 10)

> ULTA 10 also reflected on the importance of communicating values in future employment roles:

"…if you're the owner of a company and you have certain values but never communicate those values to employees, your company will not be in line with your values 100% like wished." Furthermore, ULTA 12 discussed the importance of clarifying their values in their future work environments:

> When I pursue a career, I need to make sure that my values are similar to those of the organization. At the very least, I should at least not have a problem with any of their core values because that could potentially be a deal breaker in the future with my campus organizations. I should be aware of values before making any ethical decisions.

Social/Community Interaction. Social/community interaction was a third theme that emerged from the findings regarding where students can apply what they are learning. Specifically in this theme, students discussed how to apply what they have learned to relationships, active and engaged interactions, appreciation of differences, and using skills for the greater good. The following is a quote from a student addressing the development of skills to build relationships:

> This week, the most important lesson I learned was that you don't have to ever show your positional power-even though you have it. On the contrary, I believe you can be a more effective leader if you focus on developing relationships with subordinates rather than using your authority. Respect power is greater than positional power. (ULTA 12)

Personal Life. The final theme which emerged from examining the ULTAs application of learning is in their personal life. Students discussed using what they have learned for time management, decision-making, ethics and values, adaptability, adjusting their vision, and with family. Here is a quote from one of the ULTAs in regard to their life vision:

> This TA experience has given me more that I could ever have asked for. Learning how and what it takes to be a great leader and getting to actually apply that knowledge, I truly feel will help me as I embark on new chapters of my life. I was able to further foster the multifaceted assets of student learning to expand my knowledge and understanding of leadership education. (ULTA 14)

Conclusions and Implications

This study sought to examine outcomes of the ULTA experience as a high-impact practice for students studying leadership. ULTAs weekly journal entries were analyzed to describe how ULTAs developed competencies in the student learning outcomes as identified by LEAP (AAC&U, 2005; Kuh, 2008). The ULTA practice is an active learning experience that engages students in the leadership classroom and facilitates students' development of essential learning outcomes (AAC&U, 2005; Kuh, 2008; Odom et al., 2014). Accordingly, a quality learning experience deepens student learning and raises level of performance and success (Kuh, 2008). The need for empirical validation of additional high-impact practices offered at postsecondary institutions has been supported by Kuh (2008). Correspondingly, the findings of this study support the ULTA experience as a high-impact practice that facilitates three of the essential learning outcomes as identified by employers (AAC&U, 2005; Kuh, 2008).

The intellectual and practical skills learning outcome is composed of written and oral communication, inquiry and analysis, critical and creative thinking, quantitative literacy, information literacy, teamwork and problem solving, and integration of learning (AAC&U,

2005; Kuh, 2008). In this study, ULTAs demonstrated their intellectual and practical skills in the area of inquiry and analysis. Student outcomes in intellectual and practical skills were documented through the weekly questions generated by ULTAs and shared with the instructor to be used for leadership classroom discussion. Questions were analyzed through the lens of The Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al., 1956) and the Productive-Thinking Factors (Guilford, 1957). Based on the results of this study, the majority of the questions ULTAs identified were lower-order questions (Talbert, et al., 2007) using the Taxonomy of Educational Objectives: Cognitive Domain (Bloom et al., 1956). The fact that the majority of the questions asked by ULTAs were at the knowledge and comprehension levels is not surprising. Elliott (2005) noted, "the vast majority of current teaching activity aims at the knowledge and comprehension levels" (pp. 42-43). It is encouraging that the majority of the questions generated by ULTAs were divergent questions in relation to productive-thinking factors (Guilford, 1957). Divergent questions tend to encourage students to talk more about leadership, one of the five broad ways Jackson and Parry (2011) identified as ways to go about studying leadership. It is important to note in this study, ULTAs were given no prior background or training in Bloom's Taxonomy of Learning in the Cognitive Domain. Future ULTAs could benefit from training in this content and would be more realistically able to engage students to think at higher levels in the classroom.

The essential learning outcome of personal and social responsibility consists of learning about civic knowledge and engagement, intercultural knowledge and competence, ethical reasoning and action, and foundations and skills for lifelong learning (AAC&U, 2005; Kuh, 2008). In this study, ULTAs demonstrated personal and social responsibility in the area of foundations and skills for lifelong learning through their reflection of leadership characteristics they intended to model in the classroom and the perspectives gained regarding personal and professional leadership. There were seven major areas ULTAs purported to model including communication, active listening, mentoring, responsibility, followership, professionalism, and collaboration. The ULTA experience helped students develop a sense of ethical and civic responsibility by presenting them with real-world situations and requiring them to be actively involved with a diverse group of students, situations documented by Kuh (2008) as contributing to student developing in this learning outcome.

Integrative and applied learning is the essential learning outcome pertaining to the application of knowledge, skills, and responsibilities to new environments (Kuh, 2008). ULTAs demonstrated their ability to integrate and apply learning through the ULTA experience. An ULTA experience in leadership education provides a valuable environment to practice leadership and identify other situations to apply their learning. Kuh (2008) noted that the integrative and applied learning outcome is "demonstrated through the application of knowledge, skills, and responsibilities to new setting and complex problems" (p. 4). The ULTAs in this study shared their perspectives on applying their learning from the ULTA experience to student roles, their work environment, social/community interactions, and their personal life indicating they could document learning in the integrative and applied learning outcome.

One essential learning outcome for students is knowledge of human cultures and the physical and natural world. This learning outcome pertains to the study of questions in the fields of sciences, social sciences, mathematics, humanities, arts, histories, and languages (AAC&U,

2005; Kuh, 2008). The study of leadership as a social science began in the early 1930s (House & Aditya, 1997). This study found no evidence that ULTAs developed this learning outcome through their engagement in the ULTA experience. While participants did learn about students in their respective courses, they did not explicitly refer to knowledge gained regarding human cultures and the physical and natural world. If leadership educators desire for their ULTAs to develop this learning outcome, intentional design and development of processes should occur.

The findings of this study support the experience of ULTAs as a high-impact experience for students studying leadership (Kuh, 2008; Odom et al., 2014). ULTAs in this study demonstrated some level of competency in three of the essential learning outcomes (AAC&U, 2005; Kuh, 2008). Other high-impact practices have been linked to specific essential learning outcomes, but no other high-impact practice has been linked to all essential learning outcomes (Kuh, 2008). Employers have endorsed the essential learning outcomes and believe these are skills needed by college graduates upon graduation (AAC&U, 2005; Kuh, 2008). The findings of this study suggest that an ULTA experience can facilitate the development of essential learning outcomes which prepare students for employment after graduation from college.

The ULTA experience is one curriculum framework leadership educators can use to enhance transfer of learning for leadership (Andenoro et al., 2013). As high-impact practices are a growing trend in higher education (Kuh, 2008) and many colleges and universities highlight leadership as part of their mission statements, the ULTA experience is a pedagogical approach that should be considered by leadership educators as a means to help students develop their leadership skills in college.

Recommendations for Research

Based on the findings of this study, there are a number of recommendations for further research. First, while this study provided a snapshot of the undergraduate teaching assistant in leadership education, it was limited to one data collection method. Thus, scholars can expand on this research and conduct individual interviews or focus group sessions and even use quantitative measures on larger samples to gain a more in-depth understanding of the ULTA experience. An instrument should be developed to quantitatively measure outcomes of the ULTA experience.

It is also recommended that more inquiry be conducted into what makes an effective ULTA. Other peer education programs, such as supplemental instruction, require peer leaders to be enrolled as an undergraduate, maintain an above average GPA, demonstrate good interpersonal communication skills, successfully completed the course they are working with, and be available to attend all course sessions (Congos & Stout, 2001). Are these minimum qualifications enough to ensure a successful ULTA experience for both the student and the instructor?

Follow-up research should be conducted with ULTAs to assess the impact of their experience on their future choices. For example, did the ULTA experience lead to graduate school and/or a future career in academia? Or, did the experience discourage ULTAs from pursuing careers in education?

This study found no evidence that ULTAs developed the essential learning outcome of knowledge of human cultures and the physical and natural world. Research should investigate how to facilitate this learning through the ULTA experience.

A valuable area for research is understanding the impact of the ULTA experience from the perspectives of the students enrolled in the leadership courses. Examining the leadership students' attitudes and perceptions of their ULTA may provide useful information for course preparation and selection of future ULTAs. This area of research is also suggested by the National Leadership Education Research Agenda (Andenoro et al., 2013).

Lastly, the perspectives of instructors who utilize ULTAs in their courses should be examined. Research should be conducted to determine the outcomes instructors believe ULTAs gain through serving in this capacity.

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