Student Leadership Development: A literature review and focus group interview on leadership education

Megan Matthews

University of Wyoming, ahouseal@uwyo.edu

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Student Leadership Development:

A literature review and focus group interview on leadership education

By

Megan Matthews

M.S., University of Wyoming, 2015

Plan B Project

Submitted in partial fulfillment of the requirements for the degree of Masters in Science in Natural Science in the Science and Mathematics Teaching Center of the University of Wyoming, 2015

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Committee Members:

Katherine Muir Welsh, Ph. D. Chair
Doug Wachob, Ph. D.
Joy Barnes Johnson, Ph. D.
Leslie Cook, M.A.
ABSTRACT

Leadership education is a crucial component of student development. There are many skills and competencies included in leadership development. Student leadership development (SLD) and education provides students with opportunities to demonstrate and develop their leadership skills at a young age. There is currently an argument for combining student leadership development opportunities into the formal education model (Bowman, 2014; Brungardt, 1997; Dyment, Morse, Shaw, & Smith, 2014; Ponder et. al., 2011; Seemiller & Murray, 2013; Van Velsor & Wright, 2012; Whitehead, 2009).

To explore the changing landscape of leadership education, I conducted a literature review in order to provide working definitions, the importance and history of SLD, examples of institutions providing leadership education programs, and how educators might engage in leadership education. Then the literature review informed the creation of a website that presented the research and resources of leadership education. In addition, this project aimed to address leadership education at Teton Science Schools (TSS). Focus group interviews discussed current leadership education at TSS and how the website resource (www.tinyurl.com/sldevelopment) and research could be used as a resource for TSS instructors.

In addition to the website, I made several recommendations. (a) TSS needs to define their philosophy of leadership at the senior management level and let that guide clear goals and outcomes for all students in each program area; (b) TSS needs to explore assessing its leadership education outcomes; (c) Concrete examples and lesson plans need to be added to the website; and (d) There should be a focus on the link between place-based education and leadership education.
This work is dedicated to those that taught me to lead in ways I never knew.
Acknowledgments

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Chapter 1

Introduction

What is the purpose of education? Since I have been in graduate school this question has been asked by professors, faculty, mentors, and peers. While this broad question is not the focus of this paper, I think it is an important question for all educators to ask themselves. Why are we here; what do we hope to accomplish with the students we teach? I believe leadership is a big part of what some educators hope to accomplish with students. There are so many ideas and skills wrapped up in the concepts of leadership development. It is not just about teaching a student how to be the captain or a student government official, out in front leading a team or small group. Leadership is about much more. It is about understanding systems, people, and knowing right from wrong.

When I was a graduate student at Teton Science Schools, I had the opportunity to work with an incredibly diverse group of students. As part of a month long course I led with five other graduate students, we camped in Yellowstone National Park for several nights. While we were there we explored human systems and management of wildlife including wolves in the Greater Yellowstone Ecosystem. There is a lot of controversy around the reintroduction of wolves to this area and the management that has followed. In a group discussion on that controversy, I had all students share their own beliefs. One student from La Paz, Mexico was especially reluctant to talk. When I finally convinced him that he would have to share and he read his reflection on the issue, everyone in the
course—instructors and students alike—where blown away by his insight, maturity, and thoughtfulness. His response and beliefs were quite different from the rest of the group. The students themselves commended him for sharing and in that moment he was celebrated for the character he displayed. That is leadership. Leadership was not only displayed by one student who shared a belief that was different, but also everyone in the group who respected, appreciated, and acknowledged the strength it took for that one student displayed leadership.

Student leadership development (SLD) is the focus of this paper. The goal of this project is to inform readers, specifically TSS instructors, of the importance of SLD and how to implement student leadership education.

It is crucial to identify and define key terms related to leadership. I used the following definition of leadership in this project: putting yourself and those around you in a position to succeed with integrity. Within leadership are skills and competencies that make up what it takes to put you and others in a position to succeed with integrity. In this way leadership is not only focused on outcomes, but interactions, relationships, ethics, and knowing right from wrong. The definition of SLD is comprised of the experiences, created by educators and particular life experiences that cause people to change their behaviors and actions towards this idea of leadership. To contrast, leadership education is a set of experiences specifically created by educators—educator interventions (Figure 1). In some ways these two ideas within SLD overlap, such as teachers crafting real-life challenges within educational programs or through mentorship or advising of students through their personal real-life experiences.
Leadership training is recognized as learning activities such as ropes courses, team-building games, group discussions, and other specific leadership interventions. Leadership training is very explicit or overt about leadership education and the goals for students. Educator interventions can also be covert, in which the educator teaches leadership skills disguised in group work, classroom discussions, or journal reflections. The educator may not actually tell students they are engaging in leadership but are still access those skills within students. I also talk about field education. Field education is the practice of teaching students in the field, where the concepts students are learning are actually occurring and not necessarily in the confines of the classroom.
Leadership

Typically the education system has relied on extracurricular activities—student government, sports, and clubs—to create leadership development or education opportunities and experiences for students (Van Velsor & Wright, 2012; Whitehead, 2009). More recent literature argues for combining student leadership development opportunities into the formal education model (Bowman, 2014; Brungardt, 1997; Dyment, Morse, Shaw, & Smith, 2014; Ponder et al., 2011; Seemiller & Murray, 2013; Van Velsor & Wright, 2012; Whitehead, 2009). Van Velsor & Wright, 2012 identified essential competencies for future leaders: adaptability, effective communication, learning ability, and multicultural awareness. Students in our education system now will have to deal with complex problems and they will need those competencies and skills to do so (Bowman, 2014). As one researcher writes, “leadership reveals a social conscience anchored in a commitment to humanity” (Bowman, 2014, p. 60).

Field education programs are often characterized by their ability to leverage leadership development within their curriculum. This puts field education programs and organizations in a unique position to add to the field of SLD. Organizations like Outward Bound have been revolutionary in leadership development for all ages for many years now (Welsh, 2007). Teton Science Schools (TSS) is another organization that is impacting students in similar ways. TSS is different because its mission is not expedition or adventure driven. TSS is the same category though because their instructors teach curriculum while taking students hiking, backpacking, and canoeing. While Outward Bound focuses on outdoor skills and explicit leadership, TSS builds their Field Education on three different pillars: 1.) Community and Leadership Development, 2.) Connection to
Place, and 3.) Field Science Practices. Because TSS teaches these three pillars simultaneously in low-risk scenarios and also has education program areas such as a prekindergarten-twelfth grade school and another community school, it puts TSS in a unique position to provide leadership education insight to classroom-based teachers. TSS defines leadership as, “Leadership is the art of skillfully inspiring a group towards a shared vision” (Teton Science Schools, 2014a, p. 1). The definition I described for this project is slightly different, as I looked to include more literature and resources. I think inspiring a group towards a goal is just one part of the responsibility of a leader. To do this with integrity is what makes successful and respectable leaders.

**Goals of the Project**

This project came out of a personal interest (see Appendix A) in TSS leadership curriculum, and a mutual interest from TSS in their own leadership curriculum. While TSS was interested in learning about impacts of their leadership program, there needed to be more clarification from TSS before that goal could be explored thoroughly in research. The goal of this International Review Board approved project, was to conduct a literature review on SLD and from that, create an executive summary of the literature reviewed in the form of a website (see Appendix B) ([http://www.tinyurl.com/SLDevelopment](http://www.tinyurl.com/SLDevelopment)). To put the executive summary, or website resource, into context and use, a focus group interview was conducted with Field Education faculty members at TSS. This interview allowed for active professionals in the field to share their feedback. As a final product, I have created a website of important resources on SLD informed by a focus group interview with professionals in the field. The website serves specifically as a resource for
educators at TSS, but contains enough information to be of interest to educators outside that organization as well.

Outline of Paper

In the following pages I present my research paper. In Chapter Two I present the literature that I reviewed on SLD. In the following chapter I discuss the methods for finding these resources and for conducting the focus group interview that came to inform the website resource. A discussion and analysis of the website creation and alteration process based on the focus group interview can be found in Chapter Four. Chapter Five is a discussion on the implications for this project and recommendations that I make moving forward.
Chapter 2

Literature Review

Introduction

This literature review is to inform the reader of what is current in the field of SLD, argue relevance and significance of the issue, and provide a context (O’Leary, 2010). I will review the history of SLD, its importance to students, educators and leading programs in this field, and how educators can successfully use SLD. Thomson, 2012 (p. 97) wrote, “What teachers do cannot be separated from why they think they are doing it. And the why and what are intimately connected with what students actually learn.” Therefore, this literature review is focused first on why we should consider SLD, and then what educators do to teach it.

History of Student Leadership Development

Until the 1950s leadership was viewed with an industrial point of view (Eich, 2008; Ingleton, 2013; Rosch & Caza, 2012). The industrial paradigm of leadership was focused on a hierarchy model, based on control and division of labor (Rosch & Caza, 2012). This idea of leadership led to SLD being focused on particular students—white Caucasian male athletes especially (Whitehead, 2009). Because of this past paradigm, the education system has relied on extracurricular activities to engage certain students, such as athletes and school government participants, in leadership education and development (Van Velsor & Wright, 2012; Whitehead, 2009).
Since the 1950s, there has been a shift in our understanding of leadership. Today there is a post-industrial orientation to leadership, which is a leadership orientation focused on relationships, trust, and ethics (Rosch & Caza, 2012). This new view on leadership can be applied to wider audiences; it is viewed as learnable, and can be focused on capacities expanding leadership education and training opportunities to a wider audience (Ingleton, 2013).

In response to building competencies and capacities, the Council for the Advancement of Standards of Education (CAS) published their first book of educational standards in 1986 (Komives & Smedick, 2012). It was not until 1996 that the first student leadership standard was adopted (Komives & Smedick, 2012). In their standards for Student Leadership Programs, CAS stated that programs must advance students in four categories: foundations of leadership, personal development, interpersonal development, and development of groups, organizations, and systems (Komives & Smedick, 2012). Komives and Smedick contend that the use of these standards gives credibility and reliability to SLD programs or the organizations running the programs. From these standards grew the “International Leadership Association’s Guiding Questions for Leadership Education Programs” (International Leadership Association, 2009). These guiding questions on context, conceptual framework, content, teaching and learning, and outcomes and assessment were used to evaluate leadership programs (International Leadership Association, 2009). These standards and developments are focused on the college level, pushing universities to engage more frequently in leadership development (Ingleton, 2013). More recent literature argues for combining SLD opportunities into the formal education model at younger ages (Bowman, 2014; Brungardt, 1997; Dyment et
al., 2014; Ponder et al., 2011; Seemiller & Murray, 2013; Van Velsor & Wright, 2012; Whitehead, 2009).

The Why: The Importance of Leadership Development

As Thomson (2012) stated, what we do cannot be stripped from why we do it. Several sources discuss the importance of SLD in adolescents or youth and that SLD does not have to be limited to certain students (Bowman, 2014; Ingleton, 2013; Kass & Grandzol, 2011; Rosch & Caza, 2012; Van Velsor & Wright, 2012; Welsh, 2007; Whitehead, 2009). Rosch and Caza cite a research study done in 2007 that showed 80% of U.S. citizens feel our society needs more leadership in order to avoid a “national decline” (Rosch & Caza, 2012). Bowman, 2014 states that leadership is a huge responsibility for our education system faced with global challenges such as “self-interest, incivility, greed, coercive power, zealotry, and violent extremism” (p. 59) and he sees leadership as a way to help students make a difference in this world.

Young people are important parts of our communities and are crucial to the nation’s future (Rosch & Caza, 2012; Van Velsor & Wright, 2012). Youth see the world in different ways, and if educators allow them to, youth can lead their communities and stimulate growth (Welsh, 2007). In 2012, a survey was conducted with identified business leaders who were asked to list competencies that future leaders would need ten years from now. These leaders felt the most important competencies would be: adaptability, effective communication, learning agility, multicultural awareness, self-motivation or discipline, and collaboration (Van Velsor & Wright, 2012). This demonstrates the importance of including competencies like these into student leadership
education before the students ever reach the college level. This is for the benefit of the community and the individual student.

Leadership education offers educators the opportunity to combine leadership skills development with community needs. On the importance of SLD, Whitehead (2009) found that unconventional student leaders, those not identified or celebrated by our education system, actually had a stronger influence on their peers than those students sanctioned by their teachers. In addition, researchers saw that including student involvement in real life problems in a struggling inner-city community increased student engagement and had valuable outcomes for the schools and communities, possibly even deterring dropout rates from rising (Whitehead, 2009). SLD is important for transformational changes in both students and communities. In this way, SLD offers a concrete way for students and teachers to engage in education, the community, and relationships.

Youth are important to the community. SLD provides students with the 21st century skills—being change agents, courageous, demonstrating concerns for followers, demonstrating integrity— which we as society truly need (Ingleton, 2013). Leadership education can play an important role in combining positive community impact and individual student development. This is why SLD is important to education.

**Research in Student Leadership Development Applications and Programs**

One important way to understand successful SLD is to look at who the leaders are in SLD. This sections starts with a business perspective, moves into outdoor education and specific organizations, and then finishes with examples of leadership that has trickled down to the formal education level.
Jim Collins, author of the well-known book *Good to Great* (2001), is a leader in the field of leadership studies (Reid III et al., 2014). In his research, Collins sets out to understand the components of what took companies from being good, to making them great in their given fields (Collins, 2007). While he wanted to steer away from focusing on leadership and management because he believed it was too easy to blame the leader, he could not ignore the overwhelming results that showed what he defined as “Level 5 Leadership” was an essential component of any company that was classified as great (Collins, 2007). “Level 5 Leadership,” as Collins describes it, is made up of two key characteristics: humility and a strong resolve (or dedication) for the organization (Collins, 2007). It is this idea, Collins argues, that drives great organizations and great companies.

One study took this idea a step further and asked employees to rank their bosses on attributes that made up humility and strong resolve (Reid III et al., 2014). The researchers found that the instrument they created could in fact identify “Level 5 Leaders” that met Collins’ standards in his research (Reid III et al., 2014). Reid and his colleagues provide one example of measuring leadership attributes. This makes it even more important to create opportunities for students to develop the skills before they are assessed at the professional level. As Collins stated, “Under the right circumstances—with self reflection, a mentor, loving parents, a significant life experience, or other factors—the seed can begin to develop” (Collins, 2007, p. 405).

In their study, Kass and Grandzol (2011) recognized the need for students in the professional world to have a stronger skill set in leadership. Masters of Business Administration (MBA) programs have to figure out how to implement leadership programs into their curriculum and student experiences (Kass & Grandzol, 2011). One
MBA program decided to study the effects of an intense leadership program as part of a class, by sending one section of a course on a mountain expedition while not sending a second section and then assessing leadership practices demonstrated using a skill inventory survey (Kass & Grandzol, 2011). The students that participated in the expedition demonstrated improvement in all five categories (modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart), while those in the classroom-only setting improved in only three of the five categories (modeling the way, encouraging the heart, and enabling others to act) (Kass & Grandzol, 2011). It is interesting to note that whether in the classroom or in the field, most of these students saw improvements in leadership practices. In contrast those in the intensive field program experienced more gains in leadership skills. This article argues and demonstrates the role field education and hardship plays in effective leadership development.

Organizations like Outward Bound and The National Outdoor Leadership School (NOLS) have been working in the field of leadership for a long time now, running expedition style programs (Goldenberg et al., 2011; Welsh, 2007). They focus on those intensive field experiences and are intentional about leadership development. Outward Bound was founded in 1941 and NOLS was founded in 1965. Despite the belief that that Outward Bound and NOLS are strikingly different, the outcomes and values that emerge from participants are quite similar (Goldenberg et al., 2011). Outward Bound’s model of leadership has even been extended to the corporate world; former CEO and cofounder of Home Depot, Arthur Blank stated that Outward Bound leadership has “helped to guide my own business and personal life, and the professional development of numerous Home
Depot managers” (Outward Bound USA, 2007, backcover). The resources these organizations provide to leadership development are advantageous. It opens the door for conversation on how field education can play a large role in SLD. On their website, NOLS offers information about leadership and profiles of people that have gone through a NOLS leadership course (NOLS, 2015). They range from business leaders to conservationists, and they all have worked to become better leaders in their given fields. Outward Bound also offers their educational framework on their website and outlines their commitment to high achievement through active learning, character development, and teamwork (Outward Bound, 2015). One study aimed to articulate the mechanisms of learning in a NOLS course. The researchers found that the instructors themselves played a large role in student’s growth and learning (Sibthorp et al., 2011). This strengthens the idea that NOLS is transferring leadership skills and education through their instructors effectively and that there is something to learn from the organization.

As we consider what role SLD might play in classroom education, it is important to first consider short-term education programs and their effect on leadership development. Developed at the University of Southern California, Quikscience is a project created to get middle and high students engaged in science as well as developing a capacity for collaboration and service learning (Lemus et al., 2010). In Quikscience, students worked in teams of six with a coach or mentor to carry out marine science projects in their community. In a teacher survey, teachers expressed that the program’s biggest success was the use of creative leadership skills and grounding in the community (Lemus et al., 2010). This is only one example of many small-scale, short-term programs that are attempting to combine leadership skills with science curriculum. In a residential
environmental education program it was found that students’ learning and knowledge of the environment increased, but their social patterns and decision-making did not change (Stern et al., 2008). Another study, on the effects of short-term leadership development programs, showed that short programs were effective for understanding values, team development, discussion facilitation and conflict management skills (Rosch & Caza, 2012). This study showed that effects for some leadership competencies (team-work and communication) were just as strong three months post program, but some leadership competencies never changed from the first day demonstrating that more complex leadership competencies, e.g. moral reasoning and systems thinking, need to be fostered in a long-term model (Rosch & Caza, 2012).

Long-term classroom education models for leadership are much different. In the United Kingdom, English students from level three through twelve are participating in leadership positions at schools and working with teachers and educators to discuss what they are learning through the process (Thomson, 2012). While this might be an example of fostering only those students already in leadership positions, it provides a look into what students are learning through this long-term development process. Students stated they were motivated and engaged, they had more creative learning practices, they showed citizenship values locally and globally, and they demonstrated citizenship practices (Thomson, 2012).

In Tasmania, Australia there is a large focus on field education. In educational programs there has been a push for changes in curriculum; one course has actually added a new leadership-learning objective (Dyment et al., 2014). This change offered some challenges to teachers like not having the professional development or resources to carry
out the ambiguous goals (Dyment et al., 2014). However the addition of a leadership objective allowed for teachers to teach at a higher level and the students displayed a greater amount of engagement (Dyment et al., 2014). While the challenges these teachers faced can be addressed, and will be in the next section of this paper, the benefits of teaching at a higher level and engaging students make a strong argument for the importance of SLD in adolescent education.

Since 1994 when the Knowledge is Power Program (KIPP) started in Houston, charter schools have developed all over the U.S. (Boyd et al., 2014). KIPP charter schools work to increase student discipline and achievement in standardized testing (Boyd et al., 2014). When compared to similar public school demographics, KIPP charter schools perform better on student achievement tests (Boyd et al., 2014). How these schools achieve that is important to the conversation of leadership education and development. The culture of these schools is focused on achievement, discipline, college attendance, and test scores. Even the students know it. However they do it in a way that motivates and encourages students by holding pep rallies, water balloon fights, and dance parties (Boyd et al., 2014). The authors stated “while none of these activities seem to be related to the specific items that students would soon face on the benchmark exam, it was obvious that teamwork and leadership were being developed” (Boyd et al., 2014, p. 53). Students in these KIPP schools, 144 across the country, are encouraged not only to succeed themselves, but also to help and support those around them to succeed (Boyd et al., 2014). This example demonstrates the definition of leadership in this paper: putting yourself and those around you in a position to succeed. While SLD is not a goal for these
charter schools, they have taken the challenge of standardized testing as a team initiative for students, teachers, administration and parents.

Leadership Education Implementation

Engaging in SLD as an educator is not an easy task. In the Tasmanian example of leadership education in a classroom setting, teachers struggled with the broadness of the content and they felt they were not supported with the professional development they needed to successfully carry out the program (Dyment et al., 2014). SLD is important but there are roadblocks, such as the pressures of academic progress (Whitehead, 2009). In order to consider how educators can carry out successful leadership programs, this section will consider best practices or proven methods in a given field. This will start first at the institutional level and then the individual educator’s role.

Institutions

At the institutional level it is important to emphasize what attributes of the system are leading to high quality leadership development programs. In a grounded theory research project by Eich (2008), sixteen programmatic attributes were organized into three clusters that identified programmatic practices that were leading to high quality outcomes.

Cluster I: Participants Engaged in Building and Sustaining a Learning Community

1. Diverse students
2. Experienced Practitioners
3. Modeling Educators
4. Small Groups
5. Supportive Culture
6. One-on-One Relationships

Cluster II: Student-Centered Experiential Learning Experiences

7. Leadership Practice
8. Reflection Activities
9. Application in Meetings
10. Meaningful Discussions
11. Episodes of Difference
12. Civic Service
13. Discovery Retreats

Cluster III: Research-Grounded Continuous Program Development

14. Flexible Design
15. Values Content

These three clusters explained that participants were engaged in building a learning community, it was a student centered experiential learning experience, and programs were flexible and accommodating, always using research for program development (Eich, 2008). More broadly Eich (2008) found that leadership programs that were highly resourceful, productive, and intentional about goals and outcomes scored higher on a survey measuring leadership programs for effects on students. This research emphasized how crucial intentional goals were for designing leadership development
programs (Owen, 2008). With the knowledge of how important goals and outcomes were, the International Leadership Association worked to create guiding questions for leadership education programs (International Leadership Association, 2009). These guiding questions include:

- Context: “How does the context of the leadership education program affect the program” (p. 12)?
- Conceptual framework: “What is the conceptual framework of the leadership education program” (p. 15)?
- Content: “What is the content of the leadership education program and how was it derived” (p. 18)?
- Teaching and learning: “What are the students’ developmental levels and what teaching and learning methods are most appropriate to ensure maximum student learning” (p. 21)?
- Outcomes and assessment: “What are the intended outcomes of the leadership education program and how are they assessed and used to ensure continuous quality improvement” (p. 27)?

Komives and Smedick contend that the use of these guiding questions, CAS leadership standards, and assessment of outcomes give credibility to SLD and education programs (Komives & Smedick, 2012; Seemiller & Murray, 2013).

Komives is a key contributor and creator of *The Handbook for Student Leadership Development* (2011), which is based on seven philosophies of leadership development that begin to narrow how we consider teaching leadership:

- Leadership can be learned
• Leadership capacity is a developmental process
• All students can develop leadership
• Institutions must seek to develop leadership capacity in all students
• Relational and ethical approaches to leadership should be central to college programs
• Diverse strategies and diverse approaches for diverse students are essential
• Intentional design and assessment of student leadership programs is critical (Komives, et al., 2011, p. xvi)

In this handbook, two other authors discuss the powerful pedagogies that are used as strategies to foster leadership education where excellence can be achieved (Rosch & Meixner, 2011). These powerful pedagogies include experiential learning, team-based learning, peer education, sociocultural awareness, service learning, mentoring, and advising contemplative practices (Rosch & Meixner, 2011). These researchers state that it is not just these strategies, but achieving a flow state between teachers and students that allows both parties to enjoy the work they are doing in an effortless and seamless way (Rosch & Meixner, 2011). Eight conditions of the flow state are identified that work together to create that effortless and seamless relationship between the students and the teacher. The conditions they identified as leading to the flow state include clear goals, immediate feedback, balance between opportunity and capacity, concentration deepens, the present is what matters, control is no problem, and the sense of time is altered (Rosch & Meixner, 2011, p. 311). In sum, they argue the key to good SLD is to use powerful pedagogies combined with the components of the flow state.
Education Coordinator

Zooming in from the institutional level, what strategies are teachers using? Adriansen & Madsen (2013) in Denmark studied the effects of facilitation within environmental study groups and found that, by creating student facilitators to lead discussion, there was an increase in participation, increased student happiness, and it made the material more relatable to students. Facilitation is based on the experience of learning through relationships that provide feedback, and in this way is very much related to leadership skills, whether the educator is facilitating a group or if students are practicing the art of facilitation (Adriansen & Madsen, 2013).

Facilitation is one strategy of teaching leadership skills. If we want to teach leadership specifically, Cogner’s Four Approaches to Leadership Development are key to consider what goals we are working towards and what activities align with those goals (Allen & Hartman, 2009). The four approaches or goals are personal growth, conceptual understanding of what leadership is, feedback or assessment, and skill building. Sources of learning, activities, or specific examples of leadership intervention are identified within each approach (Allen & Hartman, 2009). Once educators have a leadership goal, competency, or outcome they are aiming for they can choose an intervention that would best align with that aim. In this study students also identified approaches that they preferred. Students preferred approaches that addressed personal growth and skill building (Allen & Hartman, 2009). In contrast, students in this study were not interested in role-playing and journaling (Allen & Hartman, 2009). It is important not to become too reliant on one intervention over another.
Educator

An important way to contribute to SLD as an educator is to understand your students. For younger students, SLD looks like practicing skills for the future. Childhood and adolescent experiences that emphasized strong work ethic, high standard of success, and responsibility have been known to foster personal traits such as understanding others, striving for success, and assertiveness later in careers (Brungardt, 1997). In a service learning model with kindergarten, third grade, and sixth grade students based on team work and student decision making, teachers found that there were greater opportunities than they originally thought for collaboration between students, critical thinking, and problem solving (Ponder et al., 2011).

In adolescent and teenage students, leadership becomes more transformative and it begins to dive into personal values, emotions, and goals of students (Ingleton, 2013). For high school students, leadership starts out very personal and then moves outward towards making differences in the community (Bowman, 2014). Welsh talks specifically about the characteristics and behavior of youth in her piece on “Leading Youth in Your Community.” Youth understand conflict and truly want to make a difference, they have short attention spans, are very emotionally charged, and are self-conscious (Welsh, 2007). Based on these, the strategies to work with youth are to build trust, develop credibility by maintaining appropriate lines, create a culture of inclusion, and develop their independence (Welsh, 2007). These strategies are echoed by the KIPP charter school example (Boyd et al., 2014). One of the most important things we can do for youth is to show our respect for them and to ensure our faith in them (Welsh, 2007). As educators and mentors, we are the models for strong leadership and students begin to
form their ideas of effective and ineffective adult leaders (Brungardt, 1997). As youth grow up they enter the professional world or higher education where leadership skills become more high risk; opportunities for leadership come in the form of normal work day activities (Brungardt, 1997). This highlights the importance of being able to foster leadership skills and competencies while in the education system before students are asked to demonstrate them in the real world.

**Literature Review Conclusion**

This literature review aimed to inform the reader about what is current in the field of SLD. It was used to argue its relevance and significance to students and educators. Leadership is putting yourself and those around you in a position to succeed with integrity. SLD is comprised of experiences that cause people to change their behaviors and actions towards effective leadership. In the past leadership has been thought of as a hierarchy model. Since the 1950s that ideal has changed to the idea of leadership being focused on relationships and interactions with other people. The competencies that student leadership education builds are important to the students’ development as citizens and future leaders within communities. The leaders of leadership education, from NOLS and Outward Bound to KIPP Charter School educators are paving the way for a different approach to leadership education. From these organizations we can begin to understand how to actually connect and implement SLD and education. It is most important to recognize intentional goals and competencies that pertain to leadership development and to use the resources available to enhance leadership education.
Table 1.

**Literature Review Conclusions**

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<tr>
<th>Literature Review Section</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History of SLD</strong></td>
<td>While leadership started as a hierarchy model of top-down leadership, it has shifted to an understanding of relationships and ethics (Eich, 2008; Ingleton, 2013; Rosch &amp; Caza, 2012). In the past student leadership has been focused on extracurricular activities, but recently there has been a push to involve all students in the education system in leadership education (Ingelton, 2013; Rosch &amp; Caza, 2012; Van Velsor &amp; Wright, 2012; Whitehead, 2009).</td>
</tr>
<tr>
<td><strong>Why: The Importance of SLD</strong></td>
<td>SLD is important because 80% of the U.S. public sees a need for more effective leadership (Rosch &amp; Caza, 2012). Leadership education also offers students an opportunity to be integral parts of communities by making a difference and taking ownership (Bowman, 2014; Welsh, 2007). Leadership education also focuses on competencies that all students need to learn such as adaptability, communication, learning agility, multicultural awareness, self-motivation, and collaboration (Van Velsor &amp; Wright, 2012).</td>
</tr>
<tr>
<td><strong>Research in SLD Applications &amp; Programs</strong></td>
<td>Research in SLD has revealed attributes that can predict “Level 5 Leadership” made up of humility and strong resolve (Collins, 2007; Reid III et al., 2014). It has been used to reach an array of students from specific MBA students (Kass &amp; Grandzl, 2011) to a variety of professional in field expedition style learning (NOLS, 2015; Outward Bound, 2015). SLD had been implemented into short and long term educational programs in which we have learned more about the challenges of implementing leadership education (Boyd et al., 2014; Dyment et al., 2014; Lemus et al., 2010; Thomson, 2012).</td>
</tr>
</tbody>
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<tr>
<th>Literature Review Section</th>
<th>Conclusions</th>
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<tbody>
<tr>
<td>Leadership Education Implementation (see Figures 6 (Institutions), 10 (Coordinators) and 11 (Educators) in Appendix C)</td>
<td>At the institutional level it is important to establish a strong learning culture to support leadership education that is experiential and flexible to research (Eich, 2008). Programs need to be highly resourceful, productive, and intentional about goals and outcomes (Owen, 2008). At the coordinator level is important to begin matching appropriate instruction and pedagogies with the larger institutional goals (Allen &amp; Hartman, 2009; Rosch &amp; Meixner, 2011). At the specific educator level it is important for educators to consider age appropriateness and to engage students using those age characteristics (Brungardt, 1997; Welsh, 2007). It is also important for educators to build appropriate relationships with their students to work together in a seamless way, and to provide a strong role model of leadership (Brungardt, 1997; Rosch &amp; Meixner, 2011).</td>
</tr>
</tbody>
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Chapter 3

Methods

From Literature Review to Executive Summary

In this chapter I detail how I conducted this research. The first step used in this project was the creation of the literature review. Part two of this project was the creation of the draft website resource. After completing the website, I conducted a focus group interview with faculty from TSS. I made more revisions to the draft website resource based on comments and remarks during the focus group interview. Chapter Four will specifically explore the creation and alterations of the website.

A formal literature review should inform the audience about what is happening in the field, argue relevance and significance of the issue, and provide a context (O’Leary, 2010). The most common keyword search was “student leadership development.” This was used in Summon, a research engine through the University of Wyoming’s library. In order to focus on the education component of this literature, I searched the Education Resources Information Center (ERIC) database using a similar key word. The Journal of Leadership Studies proved useful to locate leadership resources. Unless it was used for historical background, articles and resources from 2008 to present were prioritized. All sources were annotated and organized based on the purpose of the article.

From the literature review, an executive summary or website resource was created. This website can be viewed at www.tinyurl.com/sldevelopment. Details on the development of the website and the edits made following the focus group interview can be found in Chapter 4. Screen shots of the website prior to the focus group interview and after edits can be found in Appendix C. The website captures the information reviewed in
the literature review. In the website platform users can easily access the website, navigate to pages that interest them personally, and it allows tables, charts, graphs, and images to be viewed easily.

Field Education at Teton Science Schools

In November 2014 I submitted an Institutional Review Board research proposal to conduct a focus group interview with six faculty members from TSS in order to put the website resource created into context. That proposal was ruled exempt in early December 2014. Focus group interviews are defined as “‘a group of interacting individuals having some common interest or characteristics, brought together by a moderator, who uses the group and its interaction as a way to gain information about a specific issue’” (Subramony et al., 2002, p. 40).

TSS is a large organization located in Jackson Hole, Wyoming. Ted Major, who as a classroom teacher moved his classes outside and started offering high school science courses in the Greater Yellowstone Ecosystem, founded the non-profit organization in 1967 (Teton Science Schools, 2014b). Since then, the organization has grown into six program areas, three campuses in the Jackson Hole and Teton Valley, and teaches over twelve thousand people every year from a variety of backgrounds and locations (Teton Science Schools, 2014b). As they state,

Teton Science Schools has consistently set the standard for environmental education, innovative pedagogy, curriculum development and scientific research. TSS is now a nationally and internationally recognized leader in place-based education. It reaches a diverse and growing audience to
achieve its mission of connecting people, nature and place through education, science and stewardship. (Teton Science Schools, 2014b)

Due to TSS’ prominence in the field, it was important to capture the faculty’s insight into SLD.

The first two program areas of TSS are Field Education and the Graduate Program. Ted Major believed strongly in the first—getting students learning outside of the classroom in field education programs. In order to do that it was clear professionals would need the training to effectively educate students in that setting, and the Graduate Program was born (Teton Science Schools, 2014b). As the organization has grown, today it is hard to separate the two program areas. The Field Education program area is very reliant on the Graduate Program and vice versa. However with two different campuses involved, collaboration and cohesion in programming becomes a challenge. In terms of leadership curriculum the interface between these program areas is a high leverage point to more precisely define leadership education at TSS. The Graduate Program at TSS’ Kelly Campus is built on fostering development within four competencies: Effective Educator, Knowledgeable Field Scientist, Conscientious Community Member and Innovative Leader (Teton Science Schools, 2014a). At the Jackson Campus the Field Education faculty work with field instructors and AmeriCorps members to create high quality learning experiences for participants.

In selecting participants for the focus group interview it was important to select people that would have a strong understanding of leadership education ideas as well as including those working closest to Field Education. Six participants were selected with the help of a research committee member and faculty member of TSS. Three faculty
members were selected from the Kelly Campus that work in both Field Education and the Graduate Program. The other three participants were Field Education faculty selected based on their work and experience on the Jackson Campus. All six of those invited agreed to participate, however only five were able to attend due to scheduling conflicts. The one participant unavailable to attend provided feedback through written comments on the website forum.

**Responsibility of the Focus Group Participants**

Participants were asked to read through the draft website resource two weeks prior to the focus group interview. Participants were asked to give initial thoughts through written comments on the website to help guide my facilitation of the focus group interview.

The focused group interview lasted two hours and was held on the Jackson (WY) Campus of TSS. It was digitally recorded for the ease of transcribing and capturing the whole interview fully. These data were used to inform and make necessary edits to the website. This focus group allowed TSS participants to collaborate with other members of their organization.

**Questioning of Participants**

The first questions asked of participants were via an email and website forum to gain knowledge before the focus group interview. These were to help inform me of what participants might want to discuss in the short time period together. Because one participant was unable to attend, the only feedback he was able to give came from these open-ended forum questions.

**Forum questions before the focus group interview:**
What information on the website stuck out to you?

Was the format of the draft website resource easy to navigate?

What would you like to spend time talking about in a focus group?

What issues do you see the literature addressing that should be addressed at TSS?

The focus group interview questions were much more specific and generated to foster conversation and interaction between participants. They were organized based on the design principles of a focus group interview. They started with opening questions that were designed to get people talking, moved toward key and specific questions that get at the objectives of the study, and then ended with final questions that allow all voices to be heard (Subramony et al., 2002). See Appendix B for the focus group interview agenda and the specific questions asked.

Following the focus group interview, I used personal notes and transcription to capture the edits suggested by participants. I used these data to reinvent the website. The following chapter will capture the creation of the website, the feedback that was received during the focus group interview, and what edits were made to validate the feedback received and address the goal of this research project.
Chapter 4

Website Results

Website Creation

The literature review of this project was extensive and included a synthesis of current research and reports on SLD. In order to make that more accessible to educators and practitioners, an executive summary in the form of a website resource was created. This website resource was designed to serve as a tool for people and institutions in leadership education. In order to make this tool accessible while maintaining the extent of the research that went into the literature review, it was decided among the research committee to present the executive summary in a website resource (http://tinyurl.com/SLDevelopment). It would allow people to access the information from a distance, it would be easier to organize, and it would serve as a living document that could be edited and added to over the course of the project and possibly into the future. In a brief search, as well as trial and error, the website platform Wix (2006) was chosen as the host site. It proved to be easy to use, edit, and share with participants and the research committee. It also allowed for people to comment on the website in a private setting that only I, the primary researcher, could access.

The original layout of the SLD website was based on recommended layouts from Wix and the literature review. It was organized with a home page that included pictures of students engaged in leadership education at TSS, as well as pictures with links directing readers to the resources on how to implement leadership education at the Institution, Education Coordinator, and Educator level (Figure 2). These were created in
hopes of making the most practical part of the website, the “HOW” section, more easily accessible. Across the top bar of the home page were links to the other pages of the website.

Figure 2. Home page of the original website

The second page of the website was the “ABOUT” section which contained a “Letter from the Project Developer,” and information regarding key players in the project (University of Wyoming, Laramie, TSS, and the research committee) (Figure 3). The
letter contained a brief description on what the website was, where it came from, and its purpose. It also contained contact information for myself in the event viewers and readers had anything to add or comment on.
The next tab across the top was the major page of the website. This page, titled “EXECUTIVE SUMMARY,” was an introduction to the executive summary of the literature review (Figure 4). It outlined the three pages that were subpages within this one
(“WHY”, “WHO”, and “HOW”). These pages correspond to the outline of the literature review and includes that content.

Figure 4. Executive summary website overview

The last page, “RESOURCES,” was essentially an annotated bibliography that would serve as a list of resources for the project with brief descriptions of the resources reviewed.

Most of the information in the literature review was used in the website resource. This led to a lot of information in one place. The information was distilled only slightly and formatted to be visually pleasing. Tables and charts from resources were also included on the website that were not included in the formal literature review of this paper. Throughout the website, references and citations were linked to publicationpermalink links and webpages where the resources could be accessed legally. For more images and examples of the original website see Appendix C.
Feedback From Professionals

In order to assess the usability and purpose of the website the focus group interview was conducted in February 2015. Prior to the interview, participants used the comment feature through Wix to access the original website and provide initial feedback. Many of the comments made through this feature focused on the logistics and usability of the website. Some participants commented on the purpose of the website, but mostly the comments focused on typos in the text, light writing on a light colored screen, links that were broken, and other navigational corrections that needed to be made. From this initial feedback it was clear that much of the time spent specifically in the interview needed to be spent exploring the concept of leadership education and the purpose of the website.

The interview process was important in gathering insight from practitioners as to whether this website would live up to the purpose of serving as a resource for educators at TSS. Initial questions in the focus group interview focused on the participants experience and vision of leadership education. One participant, from the Kelly Campus mostly engaged in the Graduate Program at TSS, immediately expressed that TSS was doing a “very good job of teaching leadership authentically” because of the work that went into “formalizing the competencies and principles around leadership” (Participant 1). Several of his counterparts’ expressed specific things they were doing in the Graduate Program to address those leadership principles and competencies: SMART Goals and Individual Leadership Plans (Participants 2 and 3). When the conversation moved around to Jackson Campus Field Education faculty, the conversation began to shift. It became evident to the participants that while leadership goals and competencies were clear within the context of the Graduate Program the goals for students visiting TSS in Field
Education were not as clear. From this discussion the group went on to talk about leadership at TSS. At least one participant commented that “leadership is what we do,” and that defining a leadership culture across the organization was important.

As participants talked it was evident that they were getting into the content that was presented on website and in the literature. They were discussing goals, activities, and outcomes of TSS and how those could be achieved across such a large organization. As such, participants were next asked to start to tie the content of the website into the conversation they were having. After some awkward clarification, it was clear that the participants were unable to tie what they were just talking about with the research presented. The conversation turned very quickly into a feedback session specifically on the website, and less of a conversation on the theory and practice of leadership education.

The participants felt like the information on the website did not capture the practices of leadership education, but rather provided the support for doing leadership education. One said, “I don’t [know] many educators that would go here because they are looking for the concrete” (Participant 5). Another said that “If you want an educator to think differently, you have to give them something concrete that they can do to try and experience” (Participant 4). When switching from a conversation on what TSS was doing in leadership, it was clear that the website did not capture the participants’ practices explicitly or efficiently enough. They felt there needed to be a connection to practice.

Another piece of feedback provided by the participants is that the website lacked an approachability. One participant said, “What are the avenues through [sic] people enter and see something that is directly connected to practice and then see the supporting information that gives it validity?” (Participant 1). The participants called into question
the audience and purpose of the website. “If you want this to be something to educate people on the theory of educational leadership well then we are just sanding the edges for you cause you did a great job” (Participant 5). In light of realizing the website did not incorporate enough practice or address the target audience, interview participants suggested ways to modify the website. The biggest modification that participants wanted to see was additions of concrete examples of leadership education: lesson plans, debriefing topics, team-building exercises, and videos. In addition they liked the idea of the website being a collaborative document that could be modified over time as needed.

To finish the focus group interview, participants articulated changes and intentional next steps they would like to take in light of the focus group conversation. They wanted to see the website become something more concrete for TSS specifically. Participant 1 stated,

So I wonder if there is a point in this website that could be tweaked to make it something that could be directly implementable and to think about it from the TSS context as supposed to broad context. I think once you broaden it out it is valuable to other institutions, but I think you need something to tie it to.

Another participant stated, “For the short time I’ve been here I’ve seen us being more specific and intentional about talking about leadership across the board. I think this is a great tool that is going to help with that” (Participant 2). In addition to considering the use of the website, TSS is creating a working group around developing the leadership education curriculum across the organization. The interview was a great way to collect
feedback from the participant for this research project, and it was a strong opportunity for collaboration across TSS.

**Corrections to be Made**

While the focus group appreciated part of the website, from the interview with Field Education and Graduate Program faculty at TSS it was clear several big picture changes needed to happen to make this website a more polished product. The website lacked a connection to practice. The theory and research from the literature review backed what TSS was already doing, but there was no connection to explicit practices. The website needed to have a clearer purpose or outlook to the audience that logged on. It was very unclear what this website was from the home page. Participants had to search for the purpose. The original website did not have clear access points for people to get to the information they needed. The information was overwhelming and the website was unapproachable. This was not only an issue with the organization of the website but also the lack of clarity around the context, purpose, and audience of the website. The website also lacked a framework on which to stand. It was expressed that the website should be more strongly tied to the organization’s framework in order to give the website a better context.

In addition to these bigger picture changes, the website also had some logistical errors to consider and correct. These included the logistical problems of navigating the pages. The focus group felt the pages were out of order or hard to navigate. They also expressed the small light colored font on the white background was hard to view. There was so much information they hard to scroll a lot making it hard to capture the information quickly and efficiently. The focus group also expressed that the images
provided on the home page, also were not clearly tied to the content of the webpage. While these were smaller pieces of feedback they were important to note in polishing the website.

**Additions and Alterations**

To honor the feedback that I had received from the focus group, as well as balance the goal of this project, I made major edits to the website. These included combining the original home and about pages and creating an explicit description of the project on the front page with a clear framework, purpose, and audience (Figure 5). The bottom bar of pictures with links to the Institution, Education Coordinator, and Educator sections of the “HOW” page was removed to avoid confusion. The navigation access points of Institution, Education Coordinator, and Educator were added on the top navigation bar to capture the more important part of the website, the “HOW” page (Figure 6).
A Resource for Student Leadership Education

Student leadership development (SLD) is comprised of the experiences, created by educators or particular life experiences, that cause students to change their behaviors and actions towards authentic leadership. Leadership education are those experiences created, specific interventions by educators, which serve to change behavior towards leadership. Leadership education works to define and enhance those skills needed for students to lead.

This website is a resource for institutions, education coordinators, and educators to refer to when developing leadership education experiences for students. This webpage was created with Teton Science Schools in mind, because a focus group of Field Education faculty from the organization helped to provide feedback and resources for the website. That said, this website offers a lot of information on leadership education that pertains to other parties as well.

This website is organized by three different levels: INSTITUTION, COORDINATOR, and EDUCATOR. These levels are not to be thought of as separate entities with different roles, but rather more holistically. Each level has a role to play and each must be aligned with the next in order to create strong leadership education programs. Each level has its own page as seen across the top of the navigation bar. On each page is three-column table that highlights the underlying theory, ideas for best practices, and concrete examples. This is the easiest and fastest way to explore this website. You will find links among these tables to resources (citations) and to another part of this website with more information (EXECUTIVE SUMMARY).

The final part of this website is the EXECUTIVE SUMMARY that captures a lot of the theory and research on student leadership education including the importance and history of SLD as well as people using it and how to implement it. In addition is the RESOURCES page with the literature reviewed for this project.

If you have any thing to add to this website, questions, or concerns I can be reached at matmc11@gmail.com until August of 2015. You may also comment at the bottom of the RESOURCES page.

Thank you,
Megan Matthews

Figure 5. Explicit description of website on new “HOME” page
Within each section (Institution, Coordinator, and Educator) a three-column table was created to easily and explicitly capture the theory, practice, and resources around leadership education for each of the levels (Figure 7). The focus group expressed that there needed to be a more explicit link to practice. Theory is defined as a way to describe or explain a phenomenon or experience (Jaeger et al., 2013). In education we use these theories to shape practices in how we teach, but it is important to accompany those theories with examples of best practices (Jaeger et al., 2013). One researcher working in gifted student education explains that there needs to be a “Continuum of Practice,” that introduces a concept, integrates it, applies it, transfers it, and then individualizes it.
(Kaplan, 2012). In this way the three-column table was designed to introduce the theory in the first column and to integrate it and apply it to education practices in the second column. The third column was a way to transfer the theory and practices into concrete lesson plans and resources. It also would have the opportunity to individualize the information for TSS’ educators and faculty.
**Figure 7. Institution table of Theory, Practice, and Examples**

The entire website was edited to more specifically tailor it to TSS. While it still remains broad, it offers the opportunity for TSS’ educators to have a living document that they can work with and add to. It serves TSS as a resource for SLD, it is a living document to share with all educators, and it supports not only the theory of leadership education but also practices. To see more screen shots of the revised website see Appendix C.
Chapter 5

Conclusion

SLD is integral to positive community impacts as well as individual student growth (Ingleton, 2013). Through leadership development and leadership education, educators can help students to understand the world around them and encourage them to institute change. Leadership cannot be continually treated as its past paradigm of hierarchical dictatorship that only certain students can enter into (Van Velsor & Wright, 2012; Whitehead, 2009). Leadership today is much more focused on the relationships, ethics, and skills that require a system based approach. Leadership is for every student to develop and there is a need and desire to find a way to do that successfully in education systems.

In this project, the literature on SLD was reviewed. It is clear that leadership education maintains a vital and emerging role in the education world across the spectrum of field education, short-term programs, long-term programs, and classroom education programs. It was from this detailed literature review that the draft website resource was originally created (www.tinyurl.com/sldevelopment). It was designed to express the information that was present in the literature and to serve as a resource for leadership education instructors at TSS. It was from the focus group interview that this website became a polished product that field instructors and faculty at TSS can use.

It was from the focus group interview that the tables of practice, theory, and examples at each level (see Figure 7) were created. This is where the research discovered in the literature review intersected with the practices of faculty interviewed at TSS. It is in these tables (Figures 7, 11, and 12 in Appendix C) that the results and implications of
this research are highlighted. These tables take what leadership development literature and research are telling us and combines that theory with real life practices for educators to try. It also provides a space to link to specific examples of how this is being implemented, particularly at TSS.

**Project Implications**

There are a few implications of this project that went beyond the original goals. In summer 2015 the research will be presented to field instructors and graduate students at TSS that will be teaching Field Education programs for the summer. As a result of the focus group interview discussion a committee is being formed at TSS to examine the goals and outcomes of leadership education in the Field Education program area. It is their objective to establish a progression of leadership goals that stem from the Graduate Program’s Leadership Principles (Teton Science Schools, 2014a). They hope to establish these in a way that makes sense for each grade level they teach. They are interested in determining their goals in order to truly define what their leadership education model is for Field Education. Lastly, TSS is interested in possibly continuing to work with this website. They are interested in using the website as a living document in which they could provide lesson plans, video models, and exemplary leadership education. They have interest in combining this website idea with an interactive curriculum library they are already building. This would be a strong way to continue to develop the website as well as provide a more collaborative initiative around it.

**Recommendations**

The recommendations that I would make moving forward based on the research I have done would be (a) TSS needs to define their philosophy of leadership at the senior or
management level and let that percolate throughout the organization into clear goals and outcomes for all students in each program area; (b) TSS needs to explore assessing its leadership education outcomes; (c) There needs to be more concrete examples and lesson plans added to the website; (d) I would like to see research focus on the link between place-based education and leadership education.

The Graduate Program at TSS has done an exemplary job of identifying and creating goals for their students. They have identified a clear leadership competency and have identified the leadership principles that make that up (Teton Science Schools, 2014a). Now TSS would benefit from backtracking to the institutional level and identifying a philosophy of leadership. The organization would benefit from stating at the senior level of the institution and defining what they believe is the importance of leadership. This philosophy and the language it uses might be informed by the work in the Graduate Program, but this needs to come from the very top. From there, TSS can identify goals within each of their six program areas for leadership education. This would look different for each program area but it would all be informed and crafted by the same mission and the same leadership philosophy.

As TSS continues to define their leadership philosophy and leadership education goals, I would recommend finding a way to assess learning outcomes for leadership within the Field Education program area. TSS is adamant that their Graduate Program instills strong leadership principles, and as a former participant I would agree. They give students the language and opportunity to talk about and reflect on leadership. They also give students in the program authentic opportunities to lead in the midst of real challenges. However, there needs to be more research into the observed outcomes of
participants versus intended outcomes and program goals. As is the case in most leadership programs, there needs to be data, assessment, and evaluation to support leadership education. We need to understand what exactly the results are of leadership education compared to what we hope to have happen.

In the future I also hope to add, or to see TSS add, more concrete examples of lesson plans to the website. These need to be evaluated and proven lesson plan resources. I also want to see videos of exemplary leadership activities added. This addition would give the website more credibility. It would become more useful with more concrete lesson examples for teachers, instructors, and faculty to use.

Future research on leadership education could focus on the role of place-based education. A lot of the function of leadership education is to develop student leaders and well-rounded citizens in their communities. This is a key function for place-based education as well. I think it would be a great addition to each field to explore the role of leadership education in place-based education. In terms of TSS it is also an important conversation to have as they look to integrate their pillars: Leadership and Community, Connection to Place, and Field Science Practices.

**Final Thoughts**

This project aimed to create a resource for educators at TSS to consult in implementing student leadership education. By evaluating the literature on SLD and crafting a polished website that captures not just the theory, but the practices of leadership education, this project has served that purpose. While the role of education may not be solely leadership, I think leadership development plays a vital role in some capacity. It is all about leadership.
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doi:10.1177/1076217512455484


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doi:10.1002/jls


Appendix A

Personal Narrative on Leadership

I played competitive softball for eighteen years. I am a product of the past-paradigm of SLD. The first time I ever thought of myself as a “leader” was when I was voted as a captain my junior year in high school. I thought it was a huge deal, but I never truly understood what it meant. In college the same thing happened. I always worked hard and did the things no one else wanted to do, and it got me voted as a captain as a junior again. During that time leadership was a weird thing for me. I did not always respect those that were in “leadership” positions and as I found myself forced into leadership positions I kind of resented it, or always felt like I had to prove to people I was not like the examples we had seen. It might have been this mentality that separated me from the others. I was the first to show up for everything and the last to leave every day. I still approach leadership with the mentality of putting others before myself.

It was not until I was a graduate student at TSS that I realized what it meant to be a leader in the everyday world. It was the Graduate Program that showed me leadership is about relationships, communication, and integrity. Having this new view on leadership and the language and space to work through that changed my entire view on the role of leadership. As I began teaching I realized the role of leadership education is not to teach people how to be in charge, it is teaching people how reach a goal. Leadership is going places and deciding how and who you are taking with you. It is powerful and it is something I truly believe is for everyone.

It was out of this personal struggle and the interest TSS had in exploring their leadership curriculum that this project emerged. I had original plans to explore TSS’ high
school summer programs and how courses such as those could be tweaked to work in inner-city and urban environments. What I found though, was that the importance of those courses was earnestly built upon leadership education and SLD. The curriculum I truly wanted to share with all students was based on leadership skills and competencies. This is when I realized it is truly all about leadership, both in education and for me personally.
Appendix B

IRB Letter of Exempt Approval

December 3, 2014

Megan Matthews
Graduate Student
Science, Math, & Teaching Center
University of Wyoming
Faculty Advisor: Dr. Katherine Welsh

Protocol #: 20141203MM00597

Re: IRB Proposal “Student Leadership Development”

Dear Ms. Matthews:

The proposal referenced above (proposal received November 19, 2014) qualifies for exempt review and is approved as one that would not involve more than minimal risk to participants. Our exempt review and approval will be reported to the IRB at their next convened meeting December 18, 2014.

Any significant change(s) in the research/project protocol(s) from what was approved should be submitted to the IRB (Protocol Update Form) for review and approval prior to initiating any change. Per recent policy and compliance requirements, any investigator with an active research protocol may be contacted by the recently convened Data Safety Monitoring Board (DSMB) for periodic review. The DSMB’s charge (sections 7.3 and 7.4 of the IRB Policy and Procedures Manual) is to review active human subject(s) projects to assure that the procedures, data management, and protection of human participants follow approved protocols. Further information and the forms referenced above may be accessed at the “Human Subjects” link on the Office of Research and Economic Development website: http://www.uwyo.edu/research/human-subjects/index.html.

You may proceed with the project/research and we wish you luck in the endeavor. Please feel free to call me if you have any questions.

Sincerely,

Colette Kuslucks
IRB Coordinator
On behalf of the Chairman,
Institutional Review Board
Appendix C

Website Layout and Design

Figure 2. *Home page of the original website*
Letter from the Project Developer

Dear Reader,

This website is an executive summary of resources received by the Student Leadership Development (SLD) program. The purpose of the executive summary is to provide educators with resources on the history of SLD, the importance of SLD (HOS), and how to implement successful leadership development programs in a range of settings (RDS).

The program would not have been possible without the help of my research committee, the University of Wyoming, and Teton Science Schools.

I can be reached at nathan.15jenny@yahoo.com during 2015. If you have comments, concerns, or resources to add feel free to contact me or see my resources page with a comment section.

Thank you,

Nathan Mathews

Research Committee and Partnerships

University of Wyoming, Laramie

The University of Wyoming provides quality undergraduate and graduate programs to 13,000 students from all 50 states and 149 countries. Established in 1886, UW is a nationally recognized research institution with accomplished faculty and world-class facilities. Offering 200 areas of study, UW provides an environment for success.

Teton Science Schools

TSS is an organization in northwest Wyoming and Idaho comprised of eleven programs, serving a common vision of Education. They have been teaching about the natural world and the greater Yellowstone Ecosystem since 1917. TSS is an organization dedicated to teaching and inspiring thousands of children, youth, and adults, bringing them together through the study of nature and place-based education. They serve students from across Wyoming, the Intermountain West, the nation and around the world.

Research Committees

Dr. Kate Weller
Dr. Jay B. Johnson
Dr. Doug Webber
Ms. Leslie Cook, M.A.

These committee members have worked with me to craft this executive summary and research project. As established educators and researchers they have influenced my work and collaborated with me to complete this research project.

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Figure 3. “ABOUT” page of the original website
Figure 4. *Executive summary website overview*
A Resource for Student Leadership Education

Student leadership development (SLD) is comprised of the experiences, created by educators or particular life experiences, that cause students to change their behaviors and actions towards authentic leadership. Leadership education are those experiences created, specific interventions by educators, which serve to change behavior towards leadership. Leadership education works to define and enhance those skills needed for students to lead.

This website is a resource for institutions, education coordinators, and educators to refer to when developing leadership education experiences for students. This webpage was created with Teton Science Schools in mind, because a focus group of Field Education faculty from the organization helped to provide feedback and resources for the website. That said, this website offers a lot of information on leadership education that pertains to other parties as well.

This website is organized by three different levels: INSTITUTION, COORDINATOR, and EDUCATOR. These levels are not to be thought of as separate entities with different roles, but rather more holistically. Each level has a role to play and each must be aligned with the next in order to create strong leadership education programs. Each level has its own page as seen across the top of the navigation bar. On each page is three-column table that highlights the underlying theory, ideas for best practices, and concrete examples. This is the easiest and fastest way to explore this website. You will find links among these tables to resources (citations) and to another part of this website with more information (EXECUTIVE SUMMARY).

The final part of this website is the EXECUTIVE SUMMARY that captures a lot of the theory and research on student leadership education including the importance and history of SLD as well as people using it and how to implement it. In addition is the RESOURCES page with the literature reviewed for this project.

If you have any thing to add to this website, questions, or concerns I can be reached at matmc11@gmail.com until August of 2015. You may also comment at the bottom of the RESOURCES page.

Thank you,
Megan Matthews

Figure 5. Explicit description of website on new “HOME” page
Figure 6. *New homepage navigation bar*
**Institutional Level Student Leadership Development**

Institutions lay the ground work and play a crucial role in setting the culture and precedent for Leadership Education.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Practice</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes that lead to high quality programs (Eich, 2008):</td>
<td>• Maintain and seek diversity</td>
<td>Teton Science Schools works to create a strong culture of leadership and community through Hands to Work, community meals, and Service Learning opportunities.</td>
</tr>
<tr>
<td>• Building and sustaining strong learning community</td>
<td>• Hire knowledgeable instructors that serve as good role models of leadership</td>
<td>Consider answering ILA’s guiding questions for leadership development programs.</td>
</tr>
<tr>
<td>• Experiential learning</td>
<td>• Foster a culture of leadership practices and relationship building</td>
<td>The Handbook for Student Leadership Development also offers seven points on their philosophy of leadership.</td>
</tr>
<tr>
<td>• Flexible and accommodating to research</td>
<td>• Leadership education should be experiential</td>
<td>Teton Science Schools has identified key leadership principles for their graduate program that can percolate throughout the organization.</td>
</tr>
<tr>
<td>Effective leadership programs are (Owen, 2008):</td>
<td>• Tap into resources within the organization and the community</td>
<td></td>
</tr>
<tr>
<td>• Highly resourceful</td>
<td>• Research impacts and evaluate programs</td>
<td></td>
</tr>
<tr>
<td>• Highly productive</td>
<td>• Form a leadership philosophy that can spread through the organization or institution</td>
<td></td>
</tr>
<tr>
<td>• Highly intentional about goals and outcomes</td>
<td>• Create competencies and outcome goals for leadership education at the institutional level</td>
<td></td>
</tr>
</tbody>
</table>

The use of standards and competencies give programs credibility and legitimacy (Komives & Smedick, 2012).

**Figure 7. Institution table of Theory, Practice, and Examples**
WHY: The Importance of Student Leadership

In 2007, a study showed 80% of U.S. citizens feel our society needs more leadership in order to avoid a "national decline" demonstrating a public need and desire for leadership programs (Brash & Casa, 2012). Leadership is a huge responsibility for our education system. As the world moves towards choices and researchers see leadership as a way to help students make a difference in the world (Bowman, 2014). Youth are important parts of our communities around the country and are crucial to the nation's future (Brash & Casa, 2014; Van Velsen & Wright, 2012). Youth see the world in different ways, and if educators allow them to, youth can lead their communities and stimulate growth (Walsh, 2001).

What teachers do cannot be separated from why they think they are doing it. And the why and what are intimately connected with what students actually learn" (Thomson, 2012, p. 97).

Most Important Competencies: 10 Years from Now

<table>
<thead>
<tr>
<th>Competency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability/Versatility</td>
<td>29%</td>
</tr>
<tr>
<td>Communicate Effectively</td>
<td>26%</td>
</tr>
<tr>
<td>Learning Agility</td>
<td>24%</td>
</tr>
<tr>
<td>Multi-cultural Awareness</td>
<td>22%</td>
</tr>
<tr>
<td>Self-motivation/Discipline</td>
<td>20%</td>
</tr>
<tr>
<td>Collaboration</td>
<td>20%</td>
</tr>
</tbody>
</table>

(Van Velsen & Wright, 2012)

In 2012, a survey was conducted with identified business leaders and they were asked to list competencies that future leaders would need. These competencies are listed to the left (Van Velsen & Wright, 2012). These results demonstrate the importance of including competencies like those found in this study into student leadership education before the students ever reach the college level. This is for the benefit of the community, the nation's future, and the individual student.

IMPACTS OF STUDENT LEADERSHIP DEVELOPMENT

- Unconventional leaders, those not identified or celebrated by our education system, actually had a stronger pull on their peers than those students sanctioned by their teachers (Whitehead, 2005).
- Including student involvement in solving community issues increases student engagement, has valuable outcomes for schools and communities, and possibly even delays dropout rates from rising (Whitehead, 2003).
- SLG is important for transformation change both in students and in our communities (Wein, 2002).
- SLG provides students with the 21st century skills—being change agents, courageous, demonstrating concern for followers, demonstrating integrity—that we as society are looking for and in need of (Majlison, 2013).

Figure 8. “WHY” page of the original website
WHO: The Leaders of Student Leadership Development

Taking the time to consider some of the leaders in leadership education is important to understand how this subject can be carried out with students. This section ranges from business professionals, to outdoor adventure schools, to formal education programs. People and programs highlighted so far include:

- Jim Collins, author of *Good to Great*
- Masters of Business Administration Program (Pennsylvania State University)
- Outward Bound and the National Outdoor Leadership School
- Short-Term Educational Programs
- Long-Term Formal Educational Programs

Figure 9. “WHO” page of the original website

HOW: Implementing Leadership Education

Engaging in student leadership development as an educator is not an easy task. Educators need to be supported with specific goals and competencies, professional development opportunities, and not feel hindered by the pressures of academic achievement (Gummett et al., 2014; Whitlead, 2007). Leadership should be a part of the high standard of success. In order to consider how educators can carry out successful leadership programs, this section will consider best practices. This will start first at the institutional level, then the coordinator level, and finally zoom into the individual educator’s position.

Figure 10. “HOW” introduction page of the original website


<table>
<thead>
<tr>
<th>Theory</th>
<th>Practice</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must understand how instruction is meeting specific leadership goals, match activities with that, and not rely heavily on one strategy over another (Allen &amp; Hartman, 2009).</td>
<td>• Align goals with specific leadership activities or interventions</td>
<td>Conger’s Four Approaches to Leadership Development with Sources of Learning (Allen &amp; Hartman, 2009)</td>
</tr>
<tr>
<td>Facilitation is based on learning through relationships that provide feedback. It increases student participation, happiness, and makes material relatable (Adriansen &amp; Madsen, 2013).</td>
<td>• Consider how leadership can be intertwined with other curriculum through covert outcome goals.</td>
<td>Sources of Learning (Allen &amp; Hartman, 2009)</td>
</tr>
</tbody>
</table>
| There are powerful pedagogies that can specifically enhance student leadership education (Rosch & Meixner, 2011). | • Powerful Pedagogies  
  • Experiential Learning  
  • Team-Based Learning  
  • Peer Education  
  • Socio-Cultural Discussions  
  • Service Learning  
  • Mentoring and Advising  
  • Contemplative Practice | Facilitation of rope course elements creating stronger facilitation skills in instructors, making them stronger educators. | Exemplary Lesson Plans |

Figure 11. Coordinator table of Theory, Practice, and Examples
Figure 12. Educator table of Theory, Practice, and Examples
Appendix D

Focus Group Interview

- Time 0-15 minutes: Reiterations of the goals of the study and consent information from email text. Need to obtain and ensure consent of participants.

- Time 15-45 minutes: Introductory/ Transitional Questions: Get people talking and reflecting on experiences (introductions if necessary)
  
  o What has been your experience with leadership curriculum at TSS?
    
    ▪ Probes: What has been the most successful leadership lesson you’ve done? What has been the least successful? What has been the reason(s) for that?

  o What are the most/least successful types of leadership lessons you have seen at TSS? What is the reason?
    
    ▪ Probe: What do you see as being successful?

- Time 45-90 minutes Key Questions/ Specific Questions: cover the objectives and get to analysis

  o What was your impression of the executive summary?
    
    ▪ Probes: Was the format easy to follow? Did anything shock you? Did you feel anything was left out?

  o How does the executive summary address TSS Leadership practices in Field Education?
    
Is there anything from the summary that you feel TSS is not doing, or not doing well?

- Probes: What can TSS improve on based on the executive summary of the literature?

- Time 90-100 minutes Break/ Gather your thoughts for conclusions

- Time 100-120 minutes (or more if needed) Closing/ Final Questions: ensure analysis is captured, fill the gaps, collect final comments, and ensure all opinions have been stated and heard

- What would you like to see TSS do with leadership curriculum in the future?

  - Probes: In ten years, what does leadership in Field Education at TSS look like?

- Everyone gets one last chance to summarize their thoughts and opinions on student leadership development in Field Education at TSS and the executive summary.
Appendix E

Future Plan B Topics

As TSS and UW students continue to explore SLD and TSS leadership education curriculum I wanted to provide some future ideas for Plan B topics. Some of these would be a bit of a challenge based on timing, but could be problem solved if the graduate student knew soon enough in advance.

- Evaluative Study of leadership education with in the Graduate Program.
  - There is currently a study that assessed different leadership skills. Students self assessed themselves on different leadership attributes, were assessed by bosses or professors, and then were assess by peers or those working closest with them. The results were then displayed on one graph demonstrating the differences between each. This could be done over time within the graduate program, especially since TSS already has a culture and appreciation for feedback.
  
  - Citation

- Evaluative study on lesson planning for Graduate Program
I think the idea of covert versus overt leadership goals is an interesting idea. I think it would be interesting to look at complete lesson plans for entire programs and actually see the all the ways we teach leadership in very covert ways. This might even be interesting to compare a Field Education lesson plan with a Journey’s lesson plan.

Check out the citation below, which describes “sources of learning,” that kind of point out those covert ways of teaching leadership.


- Evaluative Study of L.A. Carson

The Carson High School program has been coming to TSS for a long time and has done a lot of work in leadership education. There is a ton of data, through interviews and conversations with the lead teacher to be collected. Based on the program’s timing, you could also do a true evaluative study of looking at the intended goals of leadership and then the observed outcomes. You will need to be very motivated to get this set up in time, but I think it could be a very strong project.