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Nicholas D. Console for the degree of Master of Science in Agricultural Education presented on May 03, 2022.

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______________________________________________________

Haley Q. Traini

Outdoor adventure education (OAE) has long held on to the assumption that learning is transferred to participants' lives (e.g., Gass, 1985). Recent scholars have contested this assumption, noting that learning transfer may not be a complete lens through which learning is viewed. Transformative learning theory (e.g., Mezirow, 1991) has been posed as a complimentary lens to understand learning in OAE. Using a qualitative, phenomenological approach, this study sought to explore how learning from the Oregon State University Adventure Leadership Institute presents itself in the lives of ALI alumni. Findings indicate that participants experienced both learning transfer and transformative learning. Transformative learning theory offered insight into a rich learning experience otherwise uncaptured by learning transfer. Findings affirm what has long been an anecdotal belief that OAE programming is transformational for students.

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It's Self-Discovery, That's Why it's Hard: An Exploration of Transfer and Transformation from the ALI Experience.

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Nicholas D. Console

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APPROVED:

Major Professor, representing Agricultural Education

Head of the Department of Agricultural Education and Agricultural Sciences

Dean of the Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Nicholas D. Console, Author

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## Chapter 1: Introduction

In the Summer of 2017, I was fortunate enough to partake in a 30-day NOLS (formerly National Outdoor Leadership School) course. The impetus for my enrollment was two-fold– I was in a state of transition but I was also testing the waters for a future career path. The experience was powerful for me. It was empowering in that it gave me confidence to tackle my own personal adventures, but it also gave me an experience to draw on as I navigated my life beyond the course. However, I had a hard time identifying what it was *exactly* that I had learned. After this course, I pursued a degree in agricultural education and was quickly drawn to the leadership education aspect of the field. I remember asking a guest leadership education researcher the question "How do we know it's working?" when referring to educational experiences that are considered "leadership education." He responded, saying that one of the most influential parts of engaging in leadership education for the learner is enrolling in a program. Meaning, the moment when a learner decides they are a leader and subsequently signs up is when the greatest learning happens. I was pretty disappointed by this response. Reflecting on my experience with NOLS I thought, "you're saying, whatever I got from this experience, most of it was from signing up?" The belief that something changed for me during the trip, over its entirety, and because of the experiences I had *on the trip* served to motivate my inquiry for this thesis.

The Adventure Leadership Institute at Oregon State University seeks to provide "awe-inspiring, transformative experiences" that aim to help students become "active leaders with lifelong leadership-oriented and environmental ethics and

outdoor skills" (Adventure Leadership Institute, n.d.). Similar to my experience with NOLS, the ALI uses an outdoors context to teach leadership and other inter and intrapersonal skills to students. Both the ALI and NOLS can be placed in the broader education field of outdoor adventure education (OAE). As such, the ALI, inspired by experiences with NOLS, served as an excellent context for the research presented in this thesis.

Outdoor adventure education seeks to teach inter and intrapersonal skills to students using an outdoor context (Ewert & Sibthorp, 2014, p. 126). There has been a long-held assumption that what is learned in an OAE program will be transferred to personal contexts beyond the experience (Gass, 1985). However, this notion is at odds with the bulk of the literature on learning transfer which understands transfer under an assumption where the context of transfer is similar to that of the learning context (Baldwin & Ford, 1988; Merriam & Leahy, 2005). In fact, Baldwin & Ford (1988) refer to the concept as the "transfer of training," inherently understanding it as learning being applied to very specific, targeted situations. OAE distinguishes itself from a typical "training" program in that participants are returning to contextually dissimilar environments. Furthermore, the actual learning outcomes of OAE have been concluded to be unique to each individual learner (Furman & Sibthorp, 2012), and are further difficult to plan for and assess (Brown, 2010). The discongruence between learning transfer as applied to a training context, compared with an OAE context, has led to it being questioned as the primary lens for understanding learning in OAE (Furman & Sibthorp, 2012). Some scholars have applied transformative learning theory (Mezirow, 1991; 2000) to OAE experiences (D'Amato & Krasny,

2011; Meerts-Brandsma et al., 2020), and have found it to be both a promising and complementary approach to learning transfer.

The conversation around learning transfer in OAE is very much alive. As such, it invites the opportunity to re-examine and explore learning that occurs in OAE programs. As such, the purpose of this thesis was to explore how learning from an OAE experience presents itself in the lives of the program's participants. Specifically for the work of this thesis, I sought to explore how learning from the OSU ALI presents itself in the lives of program alumni. This purpose led to the broad research question: *How does learning from the ALI experience present itself in the lives of ALI alumni?* Additionally, in an effort to tap into the ongoing conversation in the literature, I further proposed four sub-questions inclusive of learning transfer and transformational learning. Those questions are:

1. *Do alumni of the ALI transfer learning from the ALI to their current lives?*
2. *How are ALI alumni using transferred learning?*
3. *Does the ALI experience facilitate transformation?*
4. *How does the ALI experience facilitate transformation?*

Furman and Sibthorp (2012) characterize learning transfer as the "central purpose of adventure programming." As such, this research attends to the questions raised around the viability of learning transfer. While some authors consider learning transfer a lost cause (Brown, 2010), others note that multiple lenses for understanding learning in OAE may be appropriate (Meerts-Brandsma et al., 2020). This study's significance rests in its approach to look at learning transfer and transformational learning concurrently, further contributing to the conversation in the literature.

# Chapter 2: Literature Review

## Introduction

Founded in 1962, Outward Bound (OB) is likely the most recognized OAE organization in the world. They maintain 10 schools in the United States, and dozens more across the globe. On their website they state:

> The sea, mountains and desert provide training that no institute or university can offer. These landscapes, in tandem with Outward Bound principles, teach the hard, technical skills necessary for survival, but also teach the relevant skills necessary for life (Outward Bound, n.d.).

Within this quote lies a mission that is not unique to OB, but is shared by many OAE organizations globally. In this review of the literature, I hope to bring the reader up to speed on the intentions of OAE, the state of the research regarding these intentions and where the research is currently heading. I begin defining OAE and situate the OSU ALI within this definition. From here, I discuss the research regarding the outcomes of OAE. Outcomes of these programs have long been understood through a learning transfer lens, however, literature dictates that this assumption is being questioned. From here arises the notion of Transformational learning as a complimentary idea through which learning in OAE is viewed. By the end of this review, the reader will be able to recognize a gap in the literature regarding learning in OAE.

## What is OAE?

Outdoor Adventure Education (OAE) is an ever-evolving field. Though there are differing definitions of it, for the purposes of this thesis, we will hold it under the

umbrella of outdoor education. Outdoor Education occurs at the intersection of three components: ecological relationships, interpersonal growth and physical skills (Gilbertson et al., 2006 cited in Ewert & Sibthorp, 2014, pp. 6-7). Within this framework is Outdoor Adventure Education, which largely incorporates the two components of physical skills and interpersonal growth. Physical skills include the development skills that are technical in nature and specific to the context of the experience (e.g., rock climbing, rappelling or paddling). Interpersonal growth includes aspects of communication, cooperation, and conflict resolution (Priest & Gass, 1997, p.17). Often paired with this is intrapersonal growth, or one's concept of self (Priest & Gass, p.17). A program that places a singular emphasis on physical skills would be categorized as mostly a recreational outfit, whereas OAE uses physical skills and an outdoor environment as “a platform for a broader spectrum of interpersonal and intrapersonal outcomes” (Ewert & Sibthorp, 2014, p. 126). It is in the space of OAE where physical skills, an outdoor environment and interpersonal growth coincide that this thesis will host its inquiry.

OAE is broadly nested amongst the field of experiential education– Educational terrain influenced by the work of John Dewey (1859-1952). Dewey (1938) states that “the central problem of an education based upon experience is to select the kind of present experiences that live fruitfully and creatively in subsequent experiences” (pp. 27-28). The so-called “fruits” of one’s experience being utilized in a future experience characterize Dewey's notion of “continuity” of experience, for which he describes in the following statement; “every experience both takes up something from those which have gone before and modifies in some way the quality

of those which come after" (p. 35). These ideas connect with education for Dewey as a means of leverage. To him, the role of the educator is to both curate and facilitate the experiences of students in such a way that provides them valuable skills or understandings (i.e., "fruits") that will subsequently aid them in navigating or understanding future experiences. In OAE, experiential learning is often summed up with the phrase "learning by doing with reflection" (Priest & Gass, 1997, p.17). Amongst numerous other qualities of experiential education pertinent to OAE, Ewert and Sibthorp (2014) include curated and direct experiences, learner autonomy and accountability, affective engagement and the solving of "real" problems with real consequences (pp.7-8).

Additional distinctions can be made within an OAE context that are worth noting here. A traditional OAE experience can be described as expeditionary. These programs are characterized by multi-week excursions, often into backcountry wilderness areas. Prominent organizations in this realm include Outward Bound (OB) and NOLS (formerly known as the National Outdoor Leadership School). When one looks up defining characteristics of OAE programs, the idea of "expeditionary" education is excluded, while the aforementioned experiential aspects of the OAE experience are highlighted. However, when looking into the literature, it is clear that research on OAE for young adults has largely been in the context of expeditionary programs (e.g., Hattie et al., 1997). This said it is important to note that non-expeditionary programs exist such as challenge course-based programs, (e.g., Project Adventure) and co-curricular programs, such as the Adventure Leadership Institute along with various other adaptations of the OAE concept. In this review of the

literature, much of what is presented has been derived from research on traditional, expeditionary programming. However, the context of inquiry can primarily be categorized as co-curricular, meaning that students partake in the program alongside other academic requirements.

**Outcomes of OAE**

As was discussed earlier, OAE programs seek to teach both inter- and intrapersonal skills through experiential learning, under a physical skill and outdoor-based setting. As such, it is the inter- and intrapersonal skills that researchers measure. Hattie et al's (1997) meta-analyses, looked across 96 unique studies, and determined 6 categories of outcomes; "academic, leadership, self-concept, personality, interpersonal, and adventuresome." *Academic* outcomes included effects on specific academic pursuits such as math or reading. These outcomes were limited to programs with specific objectives pertaining to academic gains, though general problem-solving abilities have also been found to improve (Marsh & Richards,1998). *Leadership* is discussed as actions that individuals take which ultimately support the group and includes subcategories of conscientiousness, decision making, values and time management, among others. Under the category of *self-concept* programs were effective developing independence, confidence, self-efficacy and self-understandings (e.g., Ewert, 1983; Gillet et al., 1991; Godfrey, 1974). Effect sizes on *personality* were high in the dimensions of assertiveness, aggression reduction, emotional stability and internalized locus of control (Bertolami, 1981; Richards & van Gelder, 1994), among others (e.g., Hendy, 1975). *Interpersonal* outcomes of note included items such as "social competence, cooperation and interpersonal communication"

(Hattie et. al). Finally, *adventuresome* referred to the extent to which program participants were challenged and required a level of flexibility (Hattie et al., 1997).

Since Hattie et al.'s meta-analysis, several more recent studies have found similar inter- and intrapersonal outcomes from expedition-based OAE programs for young adults (i.e., college aged participants). Neil and Dias (2008) found increased psychological resilience in participants after a 22-day OAE program. Ewert and Overholt (2010) found participants self-reported higher leadership skill development compared with a control group. In a mixed-method study, Shellman and Ewert (2010) found participants had a "strengthened sense of empowerment" upon completion of an expeditionary OAE program. Finally, in a meta-analysis of the effects of wilderness settings on organized groups, Ewert and McAvoy (2000) found that research put outcomes into two categories; "self-systems" and "group dynamics and development." Self-systems include self-concept, self-esteem and self-efficacy, among others. Group dynamics include teamwork, trust and communication, among others.

There is also evidence that alternative formats of OAE (i.e., those that are not expeditionary) can result in comparable inter- and intra-personal outcomes. For instance, in a short-term study-abroad program that integrated OAE components, Passarelli et al. (2010) found adventure activities to complement a strengths-based curricular approach (e.g., Gallup, 1998). In this study, students reported improved awareness of their strengths and personal growth. Additionally, Cooley et al. (2015) conducted a meta-analysis focusing on studies that considered OAE and group work skills. These programs were mostly less than a week in length, differing from the

traditional three-week expeditionary programs. The authors found studies supporting outcomes that fostered transferable group work skills (e.g., leadership, self-awareness, conflict resolution), effective group experiences (e.g., trust and decision making), a positive attitude regarding group work and group cohesion or "integration" (Cooley et al, 2015). In a review of the research in OAE-based college orientation programs, Bell et al. (2014) found that participants "develop a sense of belonging" amongst their peers. This claim is supported by studies that found improved friendships (Devlin,1996; Austin et al., 2010), and higher levels of social support (Bell, 2006) in connection with OAE orientation programs. In a co-curricular setting Sandberg et al. (2017) found that continual involvement with a university recreation program emphasizing leadership development was conducive to leadership identity development.

A large proportion of studies measuring the outcomes of OAE programs collect data from participants in temporal proximity to the programs in question. This is likely the result of convenience– it is simple to survey students while they are still on site. Research of long-term outcomes is scant, begging the question, what *are* the long-term impacts of OAE programs on their participants? In a large, multi-method study, Sibthorp et al. (2008) asked this question about NOLS courses, a traditional expedition-based OAE program. Respondents averaged five years of time since completing their NOLS course. 17 areas of learning were found endure the test of time, as perceived by the participants. The highest rated of these 17 learning areas include outdoor skills, the ability to function in difficult conditions, living simply, serving in a leadership role, self-confidence, interest in being outdoors, being an

effective teammate and an appreciation of nature (Sibthorp et al., 2008). Goldenberg and Soule (2015) also sought to address the gap in the long-term outcomes of OAE literature. Also looking at expeditionary-based programming, these authors were looking at the outcomes four years after the completion of a program. Findings corroborated with short-term outcomes highlighted by Hattie et al. (1997) such as interpersonal, leadership and decision-making skills. Findings from Goldenberg and Soule's work also agreed with outcomes identified by other researchers such as working effectively within groups and the development of self-respect, self-esteem and self-confidence (2015).

**Transfer and OAE**

Throughout the Outdoor Adventure Education literature (e.g., Sibthorp,2003; Cooley et al., 2014), there is a long-held assumption that participants will *transfer* what they have learned to their lives beyond a program (Gass, 1985). In his theoretical piece, Michael Gass defines the transfer of learning as the "effect that a particular experience has on future learning experiences" (1985)—reminiscent of Dewey's notion of continuity (1938, p. 35). Gass emphasizes the importance of transfer, stating "transfer is valuable to many [OAE] programs in the sense that their success, continuation and/or livelihood" depends on it. In the colloquial words of Brown (2010), "if outdoor educators did not foster transfer, then they would be out of a job". Despite this claim however, little is actually known about how transfer occurs within outdoor adventure education.

Much of the research in learning transfer comes out of human resources, management and adult education fields (Baldwin & Ford, 1988; Merriam & Leahy,

2005). Influenced by Baldwin and Ford's (1988) model of training transfer, Merriam and Leahy (2005) discuss three categories of variables that influence transfer: (1) participant characteristics, (2) training program content and design, and (3) the context to which the learning is transferred.

Participant characteristics found to influence transfer include; prior motivation, learner self-efficacy and confidence, expectations regarding utility (or lack thereof) of content and personality traits (Merriam & Leahy, 2005). Educational content and program design elements that have been found to influence transfer include; the incorporation of multiple instructional strategies, supportive pre-course materials, facilitating student considerations of barriers to transfer, "post-training maintenance component(s)," feedback during the program, post-program coaching, simulation games, co-constructed learning objectives and intentional planned transfer (e.g., action planning). The third category of influential variables discusses the context to which learned information is intended to be transferred to. Three notable variables are the learner's opportunities to use the skills learned, incentives for utilizing those skills, "social support" for using new skills and the climate of the context (e.g., work-place climate) (Merriam & Leahy, 2005). Many of the variables included here are relevant to transfer from a work-based training back to the place of work. For example, a teacher attending a professional development workshop (i.e., learning experience) and returning to their school afterwards (i.e., transfer context). In OAE, participants are learning in a novel environment (i.e., learning experience) unlike the environment they will return to (i.e., the transfer context). Yet, OAE

programs seek to equip participants with transferable skills, qualities and insights that will enable them to navigate future experiences more effectively.

Given that the gap between a learning experience and transfer context is highly variable, scholars have put forth a taxonomy of learning transfer. Transfer can largely be thought of in two sets of coupled concepts. The first of these paired concepts are *near transfer* and *specific transfer* (Bruner,1961; Detterman, 1993; Gass, 1985). Both near and specific transfer deal with a learner applying similar information to a similar context or situation. Specifically, in a near transfer scenario, a learner's application of learning may be only different by the time at which it occurs, whereas specific transfer may include the learning of information that is a necessary component of a future task (Brown, 2010). In an OAE context, near and specific transfer might include learning how to do a "j-stroke" in a canoe on a lake, then applying the j-stroke in a river. The second pairing of transfer concepts are *far transfer* and *non-specific transfer* (Bruner, 1961; Detterman, 1993; Gass, 1985). These two concepts of transfer involve applying content specific to one context to a new, or novel, context. Far transfer involves transferring learning between two, explicitly different tasks, while non-specific transfer involves the transference of generalizable knowledge and skill. For example, during a challenge course experience, participants may learn strategies for communicating with one another. If participants transfer these communication strategies to a new group, in a new context, far and non-specific transfer will have occurred. These two couplings of transfer are not dichotomously rigid, rather they can be thought of as a continuum,

with specific and near transfer on one side, and non-specific and far transfer on the other (Figure 1).

*Figure 1: The Transfer of Learning Continuum*

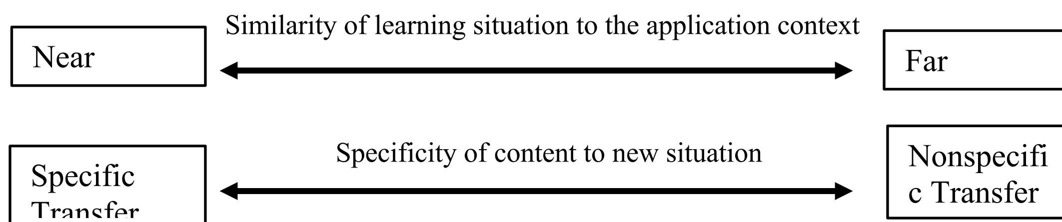



*Figure 1: The continuum of learning transfer. Near and specific transfer are similar. Far and Nonspecific transfer are similar (Bruner,1961; Detterman,1993; Gass, 1985).*

Gass (1985) adds a third conceptualization of transfer, known as *metaphorical transfer.* Similar to far and non-specific transfer, metaphorical transfer involves generalizing learning across situations, however, the generalizability is on the basis of metaphor and/or analogy (e.g., *Life is like a river*). While OAE participants may readily experience near and specific transfer, far, nonspecific and metaphorical transfer are where the interests and purposes of OAE programs reside (Sibthorp et al., 2008).

When transfer is discussed, it is done so as an assumption about the learning process in OAE. Cooley et al. (2015) refer to groupwork skills as "transferable skills" (e.g., communication, leadership, conflict resolution, self-awareness). Looking into the long-term outcomes of OAE programs, Goldenberg and Soule (2014) state that even four years after a program, participants continue "to transfer numerous course elements" to their lives. Also looking at long-term outcomes, Sibthorp et al. (2008) made an explicit connection between outcomes and transfer of learning. In phase one

of two, the researchers identified 17 outcome areas that the participants identified as useful to their lives years after the program. In the second phase of their study, the research teams used those 17 outcomes to build a survey intended to measure the perceived importance of each outcome, the extent to which they credit the organization for learning it, and to identify the setting in which they learned it (e.g., OAE organization, home, work etc.). Though Sibthorp et al. (2008) gained valuable insight into the durability of perceived program outcomes, they also discuss the limitations of their findings, stating "it is difficult to attribute outcome retention and use to individual characteristics, training characteristics or characteristics of the application context."

Where transfer isn't a clear assumption, we are left with questions. For example, Hattie et al. (1997) found the self-control category of outcomes to have the greatest effect size, specifically; confidence, self-efficacy, self-understanding, assertiveness, internalized locus of control and decision-making abilities. How does the concept of transfer help us understand these outcomes? Do these outcomes parallel learned skills? Are those skills being transferred from the OAE experience to the current lives of participants? This is a large jump to make. Hence, I join other OAE researchers in suggesting that the emphasis on transfer should not be the sole focus of OAE efficacy studies (Brown, 2010; Furman & Sibthorp, 2012).

**Challenges with Transfer**

In their argumentative piece, Furman and Sibthorp (2012) argue that transfer does not offer a complete lens for which learning should be viewed in OAE. Transfer has its utility in measuring specific, planned outcomes. However, the concept of

transfer has several dimensions of which Furman and Sibthorp contend have not been well explained by OAE researchers. These dimensions include the *number* of participants who transfer their learning, the *frequency* of transferred learning by individuals, the *durability* of transferred learning and the *efficacy* of transferred learning. These shortcomings in the literature build the authors' argument that transfer in OAE is "empirically elusive." Furthermore, the authors highlight the theoretical discordance regarding transfer in educational psychology. This persistent disagreement raises concern for a concept serving as "the central purpose of adventure education." Finally, Furman and Sibthorp (2012) highlight the "far" transfer nature of transfer in OAE. The bulk of transfer studies attempt to measure the application of skill or knowledge at a later time or setting, however OAE participants are required to "stretch" this learning across a greater gap in time and between vastly different contexts, making measurement difficult. The authors conclude their piece with the notion that transfer doesn't offer a complete lens for which to view learning in OAE. They suggest transformative learning (e.g., Mezirow, 1991) as an alternative.

**Transformative Learning**

Many scholars have made great contributions to transformative learning theory (e.g., Dirkx, Freire, Mezirow). Despite a small body of literature, the work of Mezirow is what has been mostly applied in OAE and has been connected with experiential education (Glisczinski, 2011). Thus, Mezirow (1991; 2000) will be the emphasis in this thesis. Before diving into transformative learning, it is worthwhile to define some characteristics and components of transformation theory. Transformation theory seeks to explain "how we learn to negotiate and act on our own purposes,

value, feeling and meanings, rather than those we have uncritically assimilated from others" (Mezirow, 2000, p. 8). Transformation occurs for individuals when individuals re-construct "reified structures of meaning" through critical reflection (Mezirow, 2000, p.20). These meaning structures include *frames of reference* which are subsequently composed of two dimensions; *habits of mind* and *points of view.* A frame of reference is a "structure of assumptions and expectations through which we filter" our perception of a sensory experience (Mezirow, 2000, p.16). These might include paradigmatic worldviews that we may or may not be cognizant of. Habits of mind are a "set of assumptions… that acts as a filter for interpreting the meaning of experience" (Mezirow, 2000, p. 17). Examples of a habit of mind include one's political lean or how one behaves in congruence with their professional identity (e.g., thinking like an educator). A point of view is the expression of a habit of mind. Points of view are a constellation of "meaning schemes" or "sets of immediate specific expectations, beliefs, feelings, attitudes and judgments– that tacitly direct and shape a specific interpretation and determine how we judge, typify objects and attribute causality" (Mezirow, 2000, p. 18). In other words, points of view are the triangulated and actionable product of specific, deep-held, and often subconscious assumptions.

Transformative learning can happen four ways. These include; (1) elaborating existing frames of reference, (2) learning new frames of reference, (3) transforming points of view or (4) by transforming habits of mind (Mezirow, 2000, p.19). Mezirow summarizes transformative learning by stating:

> Transformative learning refers to the process by which we transform our taken-for-granted frames of reference…to make them more inclusive,

> discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action. (pp.7-8).

This process can happen as a sudden change to one's frame of reference (*epochal)* or it may be a slower, *incremental* process involving a series of smaller transformations to individual points of view, leading to transforming habits of mind (Mezirow, 2000, p.21). Mezirow further posits that transformation follows ten phases. These include:

1. A disorienting dilemma
2. Self-examination with feelings of fear, anger, guilt or shame
3. A critical assessment of assumptions
4. Recognition that one's discontent and the process of transformation are shared
5. Exploration of options for new roles, relationships and actions
6. Planning a course of action
7. Acquiring knowledge and skills for implementing one's plans
8. Provisional trying of new roles
9. Building competence and self-confidence in new roles and relationships
10. Reintegration into one's life on the basis of conditions dictated by one's new perspective

(Mezirow, 2000, p. 22)

Other scholars have added to (Clark, 1993; Kovan & Dirkx, 2003) or disputed (Kovan & Dirkx, 2003) these ten phases, however it has also been noted that not all ten need to be met for transformation to occur (Brock, 2010). The ten stages have been simplified to four broader stages where a disorienting dilemma is followed by

critical reflection, experimentation and building confidence (Meerts-Brandsma et al, 2020). Critical reflection is an important component of the transformative process and requires one to reflect on deeply held assumptions (Mezirow, 2000, p.23). Transformative learning theory was developed as a theory for adult learning (Merriam et al., 2007; Mezirow, 1991). However, as some scholars begin to question the emphasis on transfer of learning (Brown, 2010; Furman & Sibthorp 2012), others are beginning to apply transformative learning in OAE research (D'Amato & Krasny, 2011; Meerts-Brandsma et al., 2020).

Herbers and Mullins Nelson (2009) argue for the merits and utility of transformational learning in higher education. In their paper, they highlight several different educational contexts in which they captured transformational learning for students. One of these experiences was a service-learning experience, where students helped in the construction of a home. In this single experience, the authors described a variety of perspective transformations for students. For example, after the experience, one student reflected on their understanding of literacy, realizing that the concept included more than "the ability to read and write" (Herbers & Mullins Nelson, 2009). For other students in this experience, transformation occurred regarding their conceptualization of learning. The authors note that after the learning experience, "the students realized their assumptions about learning had changed" (Herbers & Mullins Nelson, 2009). The work presented in this example showcases two aspects of transformative learning that will be helpful moving forward. First, transformational learning requires students to critically reflect on their assumptions.

Second, transformational learning from a singular experience may be variable for different learners.

**Transformative Learning and OAE**

Through an iterative and qualitative process, D'Amato and Krasny (2011) found transformative learning (Mezirow, 2000; O'Sullivan, 2002) to be an appropriate lens for understanding learning and personal growth in an expeditionary OAE program. The authors identified four contributing themes for student transformation; "living in pristine nature, experiencing a different lifestyle, being a part of the course community, and dealing with the intensity and challenges of the course" (D'Amato & Krasny, 2011). One of Mezirow's (2000) components of transformative learning is experiencing a "disorienting dilemma." The authors contend that OAE participants experienced such a dilemma both while on a course and when returning to their lives after the course. Further connections to transformative learning were found occurring as students navigated challenging and intense situations on their course, falling under Mezirow's (2000) "building competence and self-confidence in new roles and relationships as a result of taking action" (as cited by D'Amato & Krasny, 2011).

D'Amato and Krasny's paper does not suggest transformative learning as a replacement to transfer, rather they focus on it as a complementary goal to it, where transformation of self is metaphorically similar to environmental and community transformation– a notion that is then *transferred* into the lives of participants. The authors further situate OAE programs within transformational learning theory, considering that it "may be one of a number of environment-related experiences that

eventually lead to positive environmental as well as personal behaviors" (D'Amato & Krasny, 2011).

Meerts-Brandsma et al. (2020) looked at OAE programming explicitly through a transformative learning theory lens. Using a mixed-methods approach, the authors determined transformative learning was facilitated by reflection, challenge and support systems. Acknowledging the distinction between transformational learning (process) and perspective transformation (outcome), the authors suggest the former is a likely occurrence during an OAE experience. A distinction is also made between participants who initiate transformative learning whilst in the program and those who may have begun a transformative process prior to the course. While few participants experienced changes, many unveiled and reinforced personal beliefs and assumptions, a process still very much within the purview of transformative learning (Mezirow, 2000, p.19*)*. These authors also suggest further research is needed to understand how transformative learning in OAE programs is subsequently influential in their lives post-course (Meerts-Brandsma, 2020).

**Summary**

OAE seeks to teach inter- and intra-personal skills to students using physical skills and an outdoor environment as a context for experiential learning. OAE practitioners and researchers alike have long posited that learning in these programs is transferred to contexts beyond the experience itself. The literature dictates that this notion is now being questioned as an adequate view of learning in OAE. Researchers have thus highlighted the utility of transformative learning theory (Mezirow, 1991; 2000) as an additional means of understanding learning in OAE. The work of this

research seeks to shed light on both learning transfer and transformative learning and how the two may be complementary angles to understand learning in OAE. As such the following research question sought to guide this inquiry; *How does learning from the ALI experience present itself in the lives of ALI alumni?* This question was further divided into four smaller questions in an effort to focus the analysis given the literature: (1) *Do alumni of the ALI transfer learning from the ALI to their current lives?* (2) *How are ALI alumni using transferred learning?* (3) *Does the ALI experience facilitate transformation?* And finally (4) *How does the ALI experience facilitate transformation?*

# Chapter 3: Methods

The way in which learning presents itself from an Outdoor Adventure Education (OAE) experience is an ongoing debate (Furman & Sibthorp, 2012; Gass & Seaman, 2012). Some scholars (e.g., Gass, 1985; Gass & Seaman, 2012) see transfer as an adequate lens in which to view learning from OAE programs, while others contend that it is incomplete at best (Brown, 2010; Furman & Sibthorp, 2012). Transformative learning (e.g., Mezirow, 2000) has been suggested as a complimentary lens to view learning. The purpose of this study was to explore how learning from a co-curricular OAE experience presents itself in the lives of program alumni beyond the program. At a broader, overarching level, my research question was, *how does learning from the ALI experience present itself in the lives of ALI alumni?* Splitting the focus of this question between transfer and transformation, this study also sought to address the following sub-questions:

1. *Do alumni of the ALI transfer learning from the ALI to their current lives?*
2. *How are ALI alumni using transferred learning?*
3. *Does the ALI experience facilitate transformation?*
4. *How does the ALI experience facilitate transformation?*

Using a qualitative, phenomenological methodology, this study aimed to explore the learning and experience in the ALI from the perspectives of program alumni. Graebner et al. (2012) suggest qualitative methods are well suited to "capture individuals' lived experiences," "unpack multifaceted, temporally unfolding" phenomena and to provide illustrative qualities to prior models and ideas. Additionally, Creswell and Poth (2018) state that phenomenology culminates in the

"essence of the experience for individuals incorporating 'what' they have experienced and 'how' they experienced it" (p.77). The explorative nature of this study, in concert with the "what" and "how" of a lived ALI experience, pairs neatly with a qualitative, phenomenological approach. A qualitative approach was further chosen over a quantitative approach given the contention around measuring learning transfer (Brown, 2010; Detterman, 1993) and the explicit interest of quantitative work in measurable variables (Creswell & Poth, 2018).

**Phenomenology**

Broadly speaking, phenomenological research aims to understand the "common meaning for several individuals of their lived experience of a concept or of a phenomenon" (Creswell & Poth, 2018, p.75). Two schools of thought dominate the methodological landscape of phenomenology; descriptive and interpretive (Lopez & Willis, 2004; Reiners, 2012). Descriptive phenomenology was largely influenced by the work of Edmund Husserl (1859-1938) whereas interpretive phenomenology was largely born in the work of Husserl's student, Martin Heidegger (1889-1976) (Reiners, 2012). It is the latter school that serves as the guiding premise for this thesis.

Interpretive phenomenology holds on to the assumption "that presuppositions or expert knowledge on the part of the researcher are valuable guides to inquiry" and further give the inquiry purpose (Lopez & Willis, 2004). An interpretive approach seeks to understand subjective experience through the "lifeworld" of those who have experience with the phenomenon in question. In this study, I sought to explore the phenomenon of learning from participating in the ALI through the experiences of ALI

alumni. In the spirit of an interpretive approach, I used the concept of learning transfer (e.g., Haskell, 2001; Gass, 1985) and transformational learning theory (e.g., Mezirow, 1991) to guide my inquiry. This stands in contrast to a descriptive phenomenological process whereby researchers describe the subjective experience solely through the words of participants. Researchers in this school of thought attempt to “bracket” out their preconceptions of the phenomena of question (Lopez & Willis, 2004).

As previously stated, the phenomenon of question is *learning* from an ALI experience. It is fair to say that learning is a multifaceted and complex phenomenon. An interpretive approach to phenomenology embraces this notion (Lopez & Willis, 2004). With this assumption in place, I will emphasize the concept of “constitutionality” (Koch, 1995) which characterizes research findings as interpretations as a “blend of the meanings articulated by both participant and researcher” (Lopez & Willis, 2004).

**Setting**

This study was conducted at Oregon State University, located in Corvallis, Oregon. Given my interest in outdoor adventure education (OAE) programs, the Adventure Leadership Institute was an appropriate context for exploring transfer and transformational aspects of an OAE experience.

*The OSU Adventure Leadership Institute (ALI)*

The Adventure Leadership Institute (ALI) is a co-curricular, outdoor adventure education program housed with Recreational Sports at Oregon State University. The ALI is a blend of a traditional university-based “outdoor program”

and structured OAE. While a formalized outdoors program has existed at OSU for several decades, the ALI was formally established in 2008-2009 (J. Norris, personal communication, March 18th, 2022).

Students can engage with the ALI in a variety of different capacities that can be largely captured in two different levels of engagement. The most basic and entry-level way for students to engage with the ALI is to be a student in a class or to be a participant in an ALI sanctioned event, trip or program. For example, students can take for-credit courses in rock climbing, rafting, hiking, wilderness living, or foundations of adventure leadership, among many others. Students might also find themselves connected with an ALI event as part of a freshman orientation rafting program or joining a student organization on the challenge course. Finally, students can join the OSU Adventure Club and participate in trips that range from day hikes to week-long excursions led by other OSU students.

The second level of engagement with the ALI requires a student to take on some formal role. These roles can include working at the climbing gym, bike shop or gear rental desk. However, the flagship roles of the ALI include being a trip guide, working as a challenge course program facilitator and being a teaching assistant for an ALI course. In these roles students take on additional responsibilities such as planning and leading an Adventure Club trip, challenge course program or preparing lessons for an ALI class. These students also have the opportunity to work alongside professional staff in the ALI. Students who engage this way are encouraged to participate in a formalized certificate progression. This progression is a co-curricular process that requires students to take specific classes, obtain certifications and lead

specific experiences in order to move across the progression. There are three certificate levels for students to progress through; (1) The Apprentice Certificate, (2) the Guide Certificate and (3) the Adventure Leadership Minor. While these titles have changed over the past several years, the process remains similar. When students complete the requirements for each level, they then submit a reflective application which requires them to draw connections between their experiences and curricular content. For example, students are asked questions about how they applied Situational Leadership (Blanchard, 1985) to their experiences. These applications are submitted to the team of professional staff who either accept or deny the application with feedback and a request to resubmit.

Aside from the two mentioned levels of engagement, other students interact with the ALI in a more peripheral fashion. These students may utilize the bike shop, rent outdoor gear or climb at one of two indoor climbing facilities. These resources are open to all OSU and the broader Corvallis, Oregon community members.

The ALI does not have an explicit goal of producing outdoors professionals, rather they describe graduates as “active leaders with lifelong leadership-oriented and environmental ethics and outdoor skills” (Adventure Leadership Institute, n.d.). There are no restrictions on which academic majors students are in, or what their class status is. The ALI is open to all OSU students as a place to provide experiential learning opportunities to promote the following goals (Adventure Leadership Institute: Foundations, n.d.):

1. Create a compelling experiential learning environment.
2. Increase the adaptive capacity of students to solve problems.

3. Contribute to developing intellectual, physical and interpersonal competence.
4. Employ robust reflective processes as core to the learning experience.
5. Use the outdoor learning environment as a way to foster the development of self-identity.
6. Contribute to the development of student leaders through opportunities to practice guiding and facilitation skills.

**Participants**

As discussed previously, students can involve themselves with the ALI in numerous capacities and with varying degrees of intensity. This can range from simply participating in an ALI sanctioned experience to leading one. This study sought to explore how learning presents itself for alumni of the *full* ALI experience. Students who engaged as *full* members can be defined as members who, at a minimum, partook in two of three flagship roles. These three roles include working as a teaching assistant (TA) for an ALI course, guiding Adventure Club trips and facilitating challenge course programs. Other roles for students at the ALI exist (e.g., climbing wall or desk staff), however, given my experience with the ALI, these three seem to be most directly related to the curricular structure of the program. This said, the participants sampled in this study all held onto auxiliary roles in addition to those considered "flagship."

Purposive, criterion sampling was found to be a suitable approach to understand the phenomenon of learning from the ALI experience (Creswell & Poth, 2018, p.157). The complete selection criteria for participants included; (1) alumni will

have graduated at least five years from the date of the study, (2) alumni will have been *either* an active Adventure Club guide or OSU Challenge Course facilitator *and* the alumni will have been a TA for at least one ALI class (e.g., *Hiking Local Trails, Bushcraft, Rock Climbing 1*). A list of 20 potential participants was generated by a professional ALI staff member, who in addition to these objective criteria, was also asked to include alumni who they remembered to be "exemplary" participants of the ALI. Creswell and Poth (2018) state, "criterion sampling works well when all individuals studied represent people who have experienced the phenomenon" (p.157). I found it a fair assumption that full participants (i.e., exemplary) in the ALI will have been most likely to have experienced the phenomenon of interest. All 20 of these participants were invited to participate in this study via email. Eight candidates responded to the initial invitation and seven were ultimately interviewed. All participants signed an explanation of research and consent form.

*Table 1: Participants at a Glance*

| Participant [A] | Gender [B] | Race | Year Graduated | Years in ALI | ALI Roles [C] |
|---|---|---|---|---|---|
| Casey | M | White | 2010 | 5 | TA<br>Guide |
| Charlie | M | White | 2011 | 5 | TA<br>Guide |
| Chris | M | White | 2018 | 3.5 | TA<br>Guide |
| Cory | M | White | 2013 | 4.5 | TA<br>Guide<br>CC Facilitator |
| Frankie | F | White | 2016 | 3.5 | TA<br>Guide |
| Jessie | F | White | 2015 | 3.5 | TA<br>Guide |
| Tommie | M | White | 2010 | 4 | TA<br>Guide |

*Table 1: [A.] Participant names given as pseudonyms, [B.] M meaning masculine presenting and F meaning feminine presenting, [C.] The only roles included here include the three "flagship" roles; TA, Guide or Challenge Course (CC) Facilitator.*

**Data Collection**

Data was collected primarily using semi-structured interviews. Kvale & Brinkman (2009) state that "a semi-structured life world interview attempts to understand themes of the lived everyday world from the subjects' own perspectives" (p.27). I developed an interview protocol (see Appendix) using open ended questions inspired by transfer of learning and transformative learning. I piloted this protocol with six current ALI students as well as reviewed the questions with other graduate students and faculty members (Creswell & Poth, 2018, p.165). Questions regarding transfer followed a pattern asking about what they learned and how they are using that learning now (e.g., "What non-technical skills did you develop?," "Do you use any of these skills now? How so?"). Questions regarding transformation were reflective of Mezirow's (2000) transformational learning theory. For example, the question "can you tell me about a time when you faced some sort of dilemma as a [TA, Guide, Facilitator]?" is connected to the first phase of transformative learning, experiencing a disorienting dilemma. While each participant was asked all questions in the protocol, impromptu follow-up and probing questions were utilized to extract greater depth from the interviewee (Kvale & Brinkman, p.135). For example, Interviewee Chris described learning how to be a direct communicator, to which I replied, "Where in the ALI do you think that came from?"

Interviews were all conducted by myself, using Zoom video conferencing software. Interviews were one to two hours in length. Audio was recorded via Zoom

and was subsequently transcribed using the Otter.ai transcription service. While artificial intelligence (AI) transcription can greatly speed up the transcription process, errors are frequent. I spent many hours ensuring transcription accuracy. This was done through a slow revision of each transcript closely listening to the words of each participant. Transcripts were kept as close to the original audio as possible, however filler terms (e.g., "like" and "um") and repeated words were removed when they did not change the meaning of the quote.

I took field notes immediately after four interviews and after listening to each when correcting the transcripts. These field notes consisted of observational notes (Bailey, 1996 as cited in Groenewald, 2004) and theoretical notes. The following excerpt evidences both the "what happened" qualities of observational notes and "attempts to derive meaning" aspects of theoretical notes (Groenewald, 2004).

> *Jessie shared much about her growing apart from the ALI in terms of "vision." This vision was somewhat related to that of the ALI but also related to her vision for herself, and the work she wanted to do. She did not always feel supported emotionally. The ALI did also play significant role for Jessie in changing/altering her life-path. This was largely influenced by the words/encouragement of ALI professional staff. Similar to interviews with some others, Jessie also discussed ALI as a piece of her college experience. There are many other things in her life that have influenced her development, but ALI was a piece of that process. Another point of note was the change of the wording in my question about change. She chose to switch the word from*

*"change" to "uncovered"; I think this happened in at least one other interview.*

Field notes such as these served as a preliminary sense-making process

*Data Management*

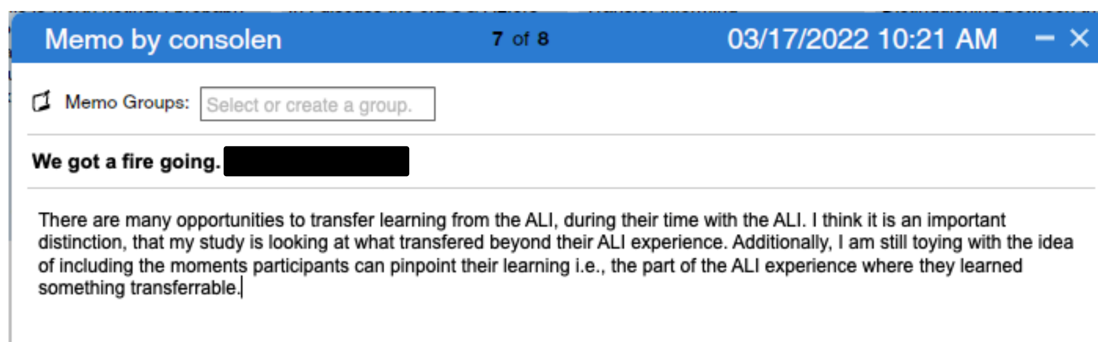
Recorded interviews were stored on a password protected cloud server and were named using a numbered system to retain anonymity. Transcribed interviews were also only accessible via password protected entry. Names and other identifying information were removed from transcript excerpts. Participants' names were further replaced with random pseudonyms that bore no resemblance to participants' actual names. This study was approved by the Oregon State University Institutional Review Board.

**Analysis**

Data analysis was conducted using the software Dedoose. The process largely followed a thematic analysis approach as outlined by Nowell et al. (2017). The first phase of analysis began with multiple read-throughs of each transcribed interview (Kvale & Brinkman, 2009, p.205; Maxwell, 2013, p.105), enabling me to get a sense of the "whole" and to familiarize myself with the data before further, more pointed meaning-making happens (Agar, 1980, p. 103 as cited in Creswell & Poth, 2018, p. 187; Nowell et al., 2017). I wrote memos to summarize initial impressions, reflect and capture early meaning-making of the interview. Memos served to capture early thinking as it related to theory, reflective thinking or to note potential emergent codes (Nowell et al., 2017). Figure 2 is an example of a memo collected in Dedoose.

Transcripts were then read through a second time. During this read through, emergent codes were the focus and were appropriately noted.

*Figure 2: Example Memo from Dedoose*




The second phase of analyses included reflective processing and peer debriefing. My reflective process largely consisted of reading and re-reading memos and parts of transcripts in search of codes and themes, in an effort to further immerse myself in the data and identify "meanings and patterns" (Nowell et al., 2017). A whiteboard was an important tool for capturing and connecting ideas. This process was further supported through debrief sessions with my advisor. Citing Appleton (1995), Cutcliffe & McKenna (1999) state that peer debriefing with an expert, in my case my advisor, can enhance study credibility. Phase two of analysis resulted in a hierarchical coding scheme (King, 2004). This coding scheme (Table 2) followed a blended coding process (Graebner et al., 2012), meaning it included emergent, inductive codes (e.g., "I am responsible for others) and it included deductive codes, inspired by theory (e.g., "Perspective Change" (Mezirow, 2000)). While reviewing transcripts through theoretical lenses will bias interpretations, it can also "bring forth new dimensions of familiar phenomena" (Kvale & Brinkman, 2009, p. 238).

Transcripts were then read through a third time, applying codes to excerpts of text that captured the "richness of the phenomenon" (Nowell et al., 2017). For example, an excerpt of text that captured near/specific transfer, in a professional context would be the following quote from Cory: "A lot of challenge course technical skills… are very relevant to what I do now they're the foundation for my job now." An example of an excerpt of text that is relevant to transformational learning and captured in the code "trying it out" would be the following quote from Casey: "getting the opportunity to really test and push myself and then also have the community [provide me with feedback]."

*Table 2: Coding Scheme*

| Parent Codes | Child Codes | Sub-Child Codes |
|---|---|---|
| Transfer | Near/Specific Transfer | Professional |
| | | Personal |
| | Far/Nonspecific Transfer | Metaphorical |
| Transformation | I am responsible for others | |
| | Passion for adventure | |
| | Perspective change | |
| | Role Models | |
| | This is what I want | |
| | Trying it out | |

After this coding process was completed, I engaged in an additional round of reflection, using codes and associated excerpts to generate themes. The themes that emerged regarding transfer of learning were consistent with the initial codes. However, two themes emerged regarding transformation and included (1) the role of feedback as a mechanism for transformative learning and (2) the development of a new frame of reference known as the "The ALI Mindset." Reflective journaling and white board sessions along the way captured changes from codes to themes, and remain an auditable component of the analysis process (Cutcliffe & McKenna, 1999).

**Validity and Reliability**

Maxwell (2013) defines validity as "the correctness or credibility of a description, conclusion, explanation, interpretation or other sort of account" as it relates to a phenomenon of inquiry (p.122). Validity was supported in three ways in this study. First, clarifying questions and paraphrasing of meaning was posed to the interviewee, to provide space for "in situ" validation (Kvale & Brinkman, 2009). For example, in my interview with Chris, he discussed the amount of practice he had had at the ALI for learning technical skills, to which I asked if the ALI made him more "fluid" with his skills in his work, in an effort to confirm my understanding of his response. Second, participants were invited to review direct quotes, synopses and interpretations from their interviews, serving as a means of member validation. This occurred via email, to which pertinent sections of this thesis were attached. Member validation serves to include the interviewee as a partner in the interpretive process (Kvale & Brinkman, 2009) and further hold true to the phenomenon in question by those who experienced it. Third, validity was supported via two means of triangulation (Tindal, 1994 as cited in Daly, 2007). *Data Triangulation* is a process that "involves collecting accounts from participants who may be at different stages in their experience of a phenomenon" (p.257). In this study, participants ranged from having graduated three years ago, to ten. *Theoretical triangulation* involves reviewing transcripts through different theoretical perspectives, opening "a variety of interpretive pathways" (p.257). In this study, we utilized transfer of learning and transformational learning theory as two interpretive lenses.

Reliability in an interview setting refers to a presumed consistency of the interviewee in responding to each question (Kvale & Brinkman, 2009, p.245). The interview protocol used in this study asked open ended, non-leading questions. Care was taken to avoiding leading questions when asking follow-up questions. Additionally, expectations were established with the interviewee prior to each interview. These expectations made it clear that I, as the interviewer, was not looking for a "right" answer but was looking for open, candid responses to the questions.

**Reflexivity and Transparency**

Creswell and Poth (2018) emphasize the importance of reflexivity in the qualitative research process, stating that the researcher must "not only detail his or her experiences with the phenomenon but also be self-conscious about how these experiences may potentially have shaped the findings, the conclusions and the interpretations drawn" (p.229). With this in mind, I wish to present my own personal experience with outdoor adventure education and the ALI, and how these experiences may emerge or influence in my work.

First, prior to attending graduate school, I participated in a 30-day expeditionary OAE program. This program had a long-lasting impact on me; however, it was difficult for me to articulate exactly what that impact was. This served as the primary motivation for exploring the learning that occurs in an OAE program. Given that this experience was so positive for me, it is important to acknowledge that this can present itself as researcher bias (Maxwell, 2013). In other words, might I be more inclined to "hear" or pursue positive aspects of my

interviewees' experiences, as opposed to the negative? This was an important question to grapple with, particularly when interviewing Jessie, whose experience with the ALI was not entirely positive.

Throughout my graduate program at Oregon State University, I was involved in the ALI as both a participant and teaching assistant for ALI classes. Additionally, I developed personal relationships with both professional and student staff in the program. The Director of the ALI, was invited and accepted a position on the committee of this thesis. Additionally, ALI professional staff were involved in the participant recruitment process. The ALI served as a context for exploring the topics in question through the experience of alumni who were exemplary participants. All this said, it was not my intention for this research to be evaluative. I was not asked to research the ALI, rather I asked to use it as a context for understanding the learning that occurs in OAE. I think this is an important distinction to make, as it was not my hope to provide programmatic suggestions for the ALI, though I welcome them to use what was learned in this study for their own programmatic decision making.

*Power and the Interview*

Kvale (2006) argues that the interview is inherently a hierarchical process, in which the researcher (i.e., the interviewer) maintains the bulk of the power. Though I might refer to my interviews as "discussions," I agree with Kvale who further states that "referring to the interview as dialogue is misleading" (2006). Power was asymmetrical in the interviews for this study in three ways. First, I held power in setting the context for the exchange and setting the agenda for what was discussed. Kvale (2006) refers to this dynamic as the researcher ruling the interview. Second, the

interviews I hosted were a "one-way dialogue," in which I asked the questions and the participant responded. This stands in contrast to the "reciprocal change of questioning and answering in a spontaneous conversation or a philosophical dialogue" (Kvale, 2006). Finally, these interviews were "instrumental" and served as a means to an end for my own research interests and goals to obtain a master's degree (Kvale, 2006).

One aspect of Kvale's (2006) dynamics of power asymmetry in interviews is the notion of "membership research." This is synonymous with the idea of membership validation (Kvale & Brinkman, 2009, p.255), where interviewees are given an opportunity to correct or offer feedback to the researcher. This serves as an attempt to minimize power asymmetry regarding interpretive aspects of the research process. However, Kvale (2006) highlights that it has limits, stating: "In practice, few researchers let their subjects have the final say on what to report and what interpretations to present in their dissertations." When reaching out to the participants of this study, I made every effort to encourage them to give feedback, no matter how critical that feedback may be. I understand, however, that it is impossible to entirely remove any power differentials that exist.

# Chapter 4: Findings

## Introduction

The ALI alumni in this study generously offered several hours of their time to coordinate and be interviewed. The findings presented here were generated from these interviews, but are not comprehensive of everything that was said. Alumni had a lot to say about their experience, however what is presented here are excerpts from interviews that were the most explicitly connected to the research questions of this study. Overall, participants described aspects of both learning transfer and transformational learning. This section will present the data that supports the claims of learning transfer through three themes; (1) Near and specific transfer, (2) far and nonspecific transfer, (3) metaphorical transfer. Furthermore, it will present the data that supports two claims for transformational learning: (1) feedback as a catalyst for transformational learning, and (2) building a new frame of reference. In the latter transformational theme, a model will be introduced. Finally, this section will conclude with a brief presentation of findings that support the idea of an interaction between these two sets of findings.

## Transfer of Learning

Participants perceive to have transferred learning from the ALI to their current lives. Learning transfer occurs when learners apply lessons, skills and knowledge learned in one context to another (Gass, 1985). ALI alumni evidenced learning transfer at both near/specific levels and far/nonspecific levels. The former was most salient for alumni who continued into a profession that is contextually similar to

OAE. Far and non-specific transfer emerged as individualized outcomes, unique to the learner.

*Theme 1: Near and Specific Transfer*

Near and specific transfer are characterized by learners applying skills or knowledge across contextually similar situations. From this perspective, findings largely placed themselves into professional and personal categories. Near transfer was coded for when participants discussed the application of skills that were mostly technical in nature, and applied to contexts similar to that of outdoor adventure education. For those who entered a profession that was contextually similar to that of OAE (e.g., professional rescue or professional challenge course work), such as Chris, there was a general sense of preparedness and technical proficiency:

> I have worked a ton in the professional rescue worlds where I'm around other people who are really weak with their skills, they hold the same certification and the same job title, but, gosh, like, the fact that I've tried all of these knots, for the ALI 400 times before even entering that field has been such a gift, because I don't have to worry about how I'm going to tie that knot or how I'm going to set up that rope or how I'm going to clip that carabiner … I just don't worry about it… When we get a call or when we have to train or when someone needs help, I don't really worry about the fear of doing something wrong.

Cory began his career in experiential challenge course work at the ALI. He shared a similar sense of technical proficiency with Chris, in that both felt more prepared than their professional colleagues:

> I went up and took a challenge course certification up at [experiential learning organization] in [Pacific Northwest City] ...I was testing [for] this level one [certificate]. And I was looking over at what the people who were testing for level two were doing, and I was like, oh, man, I'm actually ready to do that, like I under assessed where I was…but like having that moment of validation of like, OSU really prepared me to step into this place, in a higher spot than where I thought I was. [The ALI challenge course] prepared me [in] a lot of really good ways.

Charlie spends most of his time as a corporate educator and trainer, however he still engages in OAE on a part-time basis. In this realm, he described a general sense of technical proficiency attributable to his ALI experience, "I think there's not much in the outdoor ed world that I wouldn't feel comfortable doing. …. So, from a technical skill perspective, like man, being [at the ALI] for five years, I learned a ton."

Beyond transferring technical knowledge into the professional realm, some participants also described feeling equipped to chase personal outdoor pursuits. Jessie discussed the transfer of paddling skills to her personal life;

> Paddling, rafting, [I] think general river, water knowledge. It's an interesting thing being on a river now or anywhere water I just, I can read it. Yeah, like there's like a little map right. And that's an interesting skill to have, that I wouldn't have thought of before but that's like being able to read and understand water and water hydraulics is definitely a skill I developed…When it comes to water, I definitely still will go rafting and engage in water sports.

Chris engages in a variety of outdoor activities, and can attribute his competence to time at the ALI.

> I've used Stand Up Paddle Boards and paddle down rivers, that most people raft and that's fun too, because of the confidence that, you know, those skills have given me so just going out and exploring on my own.

While participants all seem to engage in a variety of outdoor activities currently, only a few explicitly chose to discuss their current engagement in those activities as a direct result of ALI participation. However, what many chose to discuss was the perceived utility of wilderness medicine and first aid skills they acquired while at the ALI. Tommie described using wilderness first responder (WFR) skills to respond to an incident he came across on a personal outing:

> A couple of… years ago [we] came across a medical emergency where someone had fallen and gotten smashed with a rock and we both just like, jumped into WFR mode. We both just like snapped into like, oh yeah, we've had the training, we know how to respond to this, it was just like, we're back in college and we're like, boom, here's the checklist, let's work together like a team.

Charlie also found himself in an emergency situation supporting someone having a brain aneurysm at a remote hot spring. While a nurse was present, he perceived himself to be more equipped to support the patient in a remote, resource-limited environment.

> Just being able to have the confidence and calmness to be able to know, like, we're a ways out here, like, let's just stick to the basics. Like we're gonna put

> her in the recovery position, and we're gonna, you know, if she chokes on her tongue, we're just gonna get in there and sweep it. And like, if she vomits, we're gonna sweep it, and then we're just gonna go back to CPR. And they're like, ‘oh, yeah, okay, right, you're right.’ And so, like, having this fundamental set of skills to go back to, like, not only is good for me and performing the skills, but like, gives me the confidence to help others.

After surviving an accident that left her in a survival situation, Frankie felt she had the knowledge needed to survive cold weather conditions as she awaited rescue.

> They found me 16 hours later, hypothermic. So actually, a lot of that knowledge was very useful like I was able you know, because I knew about heat loss, I was like okay cool, like I need to crawl around and get away from the wind. I'm gonna stuff the map in my shirt for more insulation. So that was really useful.

Some participants experienced limits of learning transfer– where they could recall learning something once before, but acknowledge the loss of that particular skill. Without intentional maintenance of technical rope rescue skills, Frankie described the perceived loss of learned skills: “[In an ALI course, we learned] pretty intense rope haul stuff for climbing that was pretty technical. Do I remember any of it now? No.” Jessie also described perceived skill loss. She discussed remembering learning technical ropes skills, but stated. “[I] probably haven't retained a lot of that honestly, but I did learn some of those things.”

Near and specific transfer deal with a learner applying similar information to a similar context or situation. For ALI alumni, near and specific transfer occurred

primarily with the application of technical outdoors-based skills in either a professional or a personal setting. For those participants who entered contextually similar professions, there was a sense of preparedness that was discussed as a result of engaging with aspects of the ALI. For those who do not work in similar fields, near and specific transfer was discussed largely with regard to wilderness medicine training that occurred at the ALI. Participants felt they had a toolbox of skills that could be applied to emergency situations in the backcountry.

*Theme 2: Far and Nonspecific Transfer*

Far and nonspecific learning transfer involves the generalization of new skills or knowledge across contextually different experiences. This concept was also evidenced in interviews. Participants described competencies such as direct communication, using their voice and gauging a group as skills learned at the ALI, and which they continue to use. While similarities can be found across participants, the unique perception of what has been useful to the individual lives of alumni will be the focus of these findings.

Chris described three distinctive, transferable learnings from his ALI experience. These included learning how he best learns, establishing a professional demeanor and using direct communication. Chris credits his ALI experience with providing useful insight into how he best learns.

> The ALI gives that to students, certainly, you know, the ALI gave that to me, where I'm pretty confident in the way that I learn best, which then helps me sort of formulate, or plan out ways that … I will take in information or experience [education].

This has proven useful for Chris as he continues his education in paramedic school learning technical skills such as starting an I.V. He describes a mock scenario, in which students are learning in stations.

> I need to be going first because there's a window of like, adequate opportunity for me after I see a demo done. Like, I have a small window of time where it's like, okay, I need to go do that right now. Like this, this is my window of best learning, I don't need to see a demo happen, and then do it. 45 minutes later, I need to see a demo happen. And then do it four minutes later.

Chris attributes this self-understanding to learning about Kolb's learning styles in an ALI course. This case constitutes far and non-specific transfer in that the learning is applied across contextually different scenarios. Chris learned about his learning style in an OAE classroom setting at the ALI, however the concept in the case of the mock scenario above indicates a new context, in which he is applying this awareness to learning medical skills. The second piece of transferred learning for Chris is the "importance and practice of direct communication." When asked where this came from in the ALI experience, Chris stated "I think it was guiding, frankly… there's a lot of sort of fast-paced, one-on-one communication that needs to occur." The value and practice of direct communication was described to have transferred into some of Chris's professional context as a first responder:

> In the back of an ambulance... if you're not well practiced with direct communication, that could be a problem, because then it's like, what are you trying to say to me? You know, this person needs this and we're not communicating very well. And so, you know, and I think ultimately, like, it's

> a good piece of team dynamic. If you have direct communicators on a team, gosh, like, a 20-minute conversation can now be a four-minute conversation and that opens up doors.

Cory described two distinctive, transferable learnings from his experience at the ALI. Those include adequate preparation and reading a group. The former of which Cory described as being in strong alignment with their current employer.

> At [challenge course organization and current employer] we do our homework, we do a lot of prep. We do a lot of intentionality and planning for our programs. And getting some solid foundation in that from ALI on both sides, right? As a trip leader, [there is] obviously a ton of planning, contingencies and, you know, the ALI framework at the time [requiring] the documents and stuff, [in preparation] to submit a trip... and on the challenge course side as well of the time it took to prep the structure of a program, but also the specifics of your [job] as a facilitator, right? I should come into the day with a plan of some things I want to do, I can't show up and expect to dive into it.

Second, Cory described how his ALI challenge course experience taught him to read a group of students. This is very much something he continues to do in his professional life.

> That sense of assessing your group has been very formative, that I feel like was something that was very much stressed in [the] ALI program…read your group and read them well and recognize how you can mitigate risk in various situations. I think about risk mitigation a lot now. And risk management. [I]

> have moved up into a more of a manager level and starting to train at a higher technical level where I'm training advanced skills and rescue skills, where you need to teach the actual physical, technical skill of how to do something, but also the awareness of how do you do everything you can to avoid the situation where you have to use these skills. I think that's another big ALI trait of like, okay, I think I had planned ahead, be ready for anything and do all you can to mitigate the risk before it becomes a big problem that day… I'm seeing it now as a manager of other trainers and facilitators. [My] team is now like 10 people... And so, applying some of those [skills], like reading your group, in this case, it is a very long term because it's people's profession and career and like are jobs that I'm now managing some group dynamics in our team.

While Jessie doesn't regularly work with groups, she described feeling equipped to do so, if need be, in her work as a therapist:

> I learned so much more about group management and group facilitation through ALI than I ever did in my grad program… Now as a professional, if I ever need to lead groups, I do feel relatively confident in doing that. And I think that's because of ALI. That's not because of any of my other training.

When asked to explain further, Jessie expounded on this idea of using her "voice:"

> Prior to ALI, I would not have described myself as someone who was comfortable or effective, necessarily like speaking in front of other people…And ALI really forced me into that. I mean, even being a raft guide, you have to give safety talks every time. You know, you're standing up on a boat, or also just like running your boat, right? You also are semi entertaining

> people like all day. And so, it helped … build my confidence and find my voice.

Tommie discussed one of his more applicable and transferred skills as navigating conflict and conducting challenging conversations. This came up several times in our interview. While he describes having some "innate" qualities that allow him to navigate difficult conversations, he also attributes some of this ability to his time spent with the ALI.

> When you're leading trips, and you're putting yourself in uncomfortable situations, or you're helping to facilitate others going into uncomfortable situations, [it] forces some of that stuff to happen. And that's, that's really prepared me well for what I do now…One thing that was helpful for me is because I got into it, as a freshman, I was a lot younger than some of the people that I was taking on trips and when I was working at the climbing gym, I became a supervisor pretty quickly. And then I was supervising people that were older than me… And sometimes I have to tell them, they're doing a bad job. And those were hard conversations to have. Stuff like that was hugely helpful. And now I feel like oh, yeah, we have to deliver some bad news. Like, I can do that. And I can do it in a way that's not going to be mean, but it's honest, you know. I think that's a skill that I picked up there [at the ALI].

*Theme 3: Metaphorical Transfer*

Beyond the cases of far and nonspecific transfer presented above, two participants evidenced metaphorical transfer. Similar to far and non-specific transfer, metaphorical transfer involves generalizing learning across situations, however, the

generalizability is on the basis of metaphor and/or analogy (Gass, 1995). For Jessie, this metaphor was the resemblance of the life course to a river. Learning river morphology and terminology has informed and influenced her professional practice as a therapist.

> [Experience participating in water activities had] translated to my work as a therapist, and doing nature-based therapy. I use a lot of nature metaphor, specifically around water and rivers… I think that imagery helps, translate or facilitate the actual mental processes going on. [I] also use river metaphors just for myself, personally, and how I conceptualize therapy in my work, that we're kind of like both in this boat going down this river. Sometimes we'll bump into rocks, sometimes we'll be going through some really rough waters, sometimes we'll have some eddies that may [give us a place to] pull off and take a break and slow down… It's helpful for me to conceptualize what I do…But these types of metaphors and language helps me pull it away from the abstract and it makes more sense to me and I find that it does for a lot of my clients too.

When asked if the language used in this metaphor came directly from the ALI experience, Jessie stated that it came from both prior knowledge and the ALI experience.

> Probably a little bit of both. I think the way that we talk about water and rivers, I think a lot of that I did learn from ALI. You know, even the idea of like, what's an eddy? I don't think I probably really knew what that was or what that meant. I can absolutely describe it now.

During the interview process, Charlie had a metaphorical insight regarding his work now and his time in the ALI. He shared what his feelings were regarding an experience being lost with a student on an ALI outing:

> But now that's a permanently ingrained lesson for me in a lot of ways. Like, I'm real careful about looking at maps... And like always trying to look for trail blazes and signs and weird offshoots that could be trails and that kind of stuff and like to remember how shitty it felt to be lost.

When asked if this lesson influenced his current work, he described how he perceives himself to be a bit of an organizational "wayfinder."

> I think one of my skill sets has become, I don't know if it's because of that or not, but one of my skill sets is [being] a bit of a Wayfinder. [I'm good] at connecting vision to tactics in organizations… I don't know if it's because of that experience. But like, my outdoor education experience overall, like I think there's something I learned at the ALI about, like pursuit of purpose. I think I do. I am overly prepared about things.

While it may be a stretch to say he learned to be an organizational wayfinder during his time with the ALI, his ALI experience does provide a reflective, metaphorical context for which he was able to make meaning out of his current skill set.

**Transformational Learning**

Transformational learning emerged in two ways for ALI alumni. First, feedback often precipitated into a disorienting dilemma and subsequent phases of Mezirow's (2000) transformation (e.g., *self-examination with feelings of fear, anger, guilt or shame* or *exploration of options, new roles, relationships and actions*).

Second, transformational learning emerged through the creation of a new frame of reference for alumni, one that will be referred to as the “ALI mindset.” This mindset emerged as a disposition in which the ALI alumni expressed awareness of themselves as active, responsible facilitators of safe and positive experiences for the participants of ALI programs

*Theme 4: Feedback as a Catalyst for Transformational Learning*

Feedback is a regular component of the ALI experience. It is given through formal channels but is also given informally from peers and mentors. The alumni in this study received feedback from their supervisors, peers, and instructors which was largely given organically, as opposed being given through a formalized process. For ALI alumni, feedback prompted “critical self-reflection” (Mezirow, 1991), where “learners examine their worldview in light of their own particular belief or value system” (Kitchenham, 2008). Through a transformational learning lens, this feedback and subsequent self-reflection served as what Mezirow (2000; 2009) calls a disorienting dilemma, and is what Mezirow posits to be the catalyst for transformational learning.  A disorienting dilemma is characterized as a moment when one realizes their previous assumptions are invalid (Taylor & Cranton, 2012, p.142).  Disorienting dilemmas are often perceived as negative or uncomfortable in the moment, however, in retrospect they are perceived positively (Greenfield, 2009).

Chris described feedback he received from his supervisor during his time working in the OSU climbing center, a component of the ALI. He recalls being sat down and told that he wasn’t “panning out” the way that he was needed to. He was

subsequently put on probationary status with the expectation that he would improve. This moment precipitated as a dilemma for Chris:

> My initial response to it was not good. I was like, okay, this is stressful, I want to quit… Someone is giving me very direct, legitimate feedback for one of the first times in my life, who was not my parents, and I don't like it, and it's uncomfortable.

This dilemma was followed by Chris questioning his options to either quit or to take the feedback and grow from it. He reflected on the questions that ran through his mind; "What do I do here? Like, do I just call it quits?... Or do I, like, actually try and recalibrate and grow?" In this case, several of Mezirow's (2000) transformation phases were laid bare. Feedback from his supervisor, whom he clarified was also a student, prompted questioning of his assumptions about his work, reflective of the *disorienting dilemma* phase. This was followed by feelings of discomfort and reflection on getting this type of feedback which reflect the transformational learning phases *self examination with feelings* and *a critical assessment of assumptions* respectively.

Chris further described the progression of this dilemma; "I had to figure out like, what do I really want from this situation? Do I want to grow? [Do I] want to be better at my job? Like, how do I even do that? I'm probably going to need to seek help in that." In this quote, the transformational phases of *exploration of options for new roles, relationships and actions* and *planning a course of action* are beginning to emerge. This process ultimately led to a new perspective on what Chris's definition of professionalism looked like for himself, aligning with the final stage of

transformation, *a reintegration into one's life on the basis of conditions dictated by one's new perspective* (Mezirow, 2000, p.22). This new idea of professionalism was reintegrated first into Chris's work as a guide with the ALI, but ultimately beyond and into his work as a first responder:

> That's culminated into my job where if I have to talk to a patient's family, or a patient, or talk to a patient in front of their family, ... I find that I am 100% carrying myself the exact same way that I would be if I were talking to a group of 20 people about the rappels [at the ALI] for the first time. But it's really the exact same level of focus and professionalism.

Cory faced a similar dilemma, prompted by critical feedback he received from his supervisor at the challenge course. At the time, Cory was one of the more senior challenge course facilitators and felt he was ready for more responsibility. He proposed that he fill a more supervisory role on the course, a proposal that was denied by his supervisor at the time.

> [My supervisor] had a very difficult conversation with me…basically being like, 'I see that, and I don't think you're ready for it, I'm not going to give it to you, you're not getting promoted. You're welcome to stay here as a staff person, I definitely need you on the course, but not in that role. Or with that title.' And that was a pretty emotional moment [for me].

This was followed by a moment of questioning and self-reflection, as he had to conceive a new reality for what the remaining time at the challenge course would look like. Questioning whether he should stay or leave. Cory ultimately stuck around to work that summer on the challenge course:

> It was a plan that I was going to do and I felt I was very ready for it... [Instead of quitting, I] spent that summer doing some really good facilitation work and getting to mentor staff in a less official capacity, which I think was probably good, to not have some of that ego around being the supervisor.

In this situation Cory confronted a *disorienting dilemma,* prompted by the critical feedback from his supervisor. This was followed by a period of *self-examination with feelings* (the tension felt emotionally, when receiving the feedback) and *critical assessment of assumptions* ("I'm not gonna scream and rant here in your office, I'm going to, you know, say I need time to think about this and, like, walk out and, and [I] had do some of my own processing"). Ultimately, Cory merged into the phase of *exploration of options for new roles* (Mezirow, 2000, p.22), as he explored aspects of the supervisory role, without the "ego" of having a supervisory title.

In hindsight, both Chris and Cory saw the critical feedback they received as well-meaning, growth oriented and accurate. However, the pattern was different for Jessie. Progressing through her guide levels, Jessie received feedback that she thought was "inaccurate and unfair" and more like personal criticism, rather than feedback. This feedback resulted in a state of dissonance (Greenfield, 2009) that served as an entry point to a disorienting dilemma.

> Going through that feedback process, I had felt like there was a little bit of a breach of emotional safety and security that I was actually like, I don't actually know if I can be as safe here as I felt like I could before. As long as I meet these various criteria; if I'm this kind of rah rah, adventure person, then everything's fine and good, but that's not entirely who I am… At that point in

> time, I think I'd outgrown what [the ALI] could do for me and what I could do for it. Like my vision was diverging from what the program was and was offering.

Following this *disorienting dilemma,* Jessie described *a critical assessment of her assumptions* when she began to question her sense of emotional safety in the ALI. The phase *exploration of options for new roles, relationships or actions* was met by Jessie as she migrated away from the ALI and into coursework and other extracurricular pursuits more in line with her vision for herself (Mezirow, 2000, p.22). While this experience with feedback was negative, it still ultimately aligns with aspects of transformational learning. This said, it does raise questions about the methods and strategies used for giving feedback in educational contexts, questions that will be discussed further in the Discussion chapter of this thesis.

The previous story of Jessie’s experience occurred during the later portion of her tenure with the ALI. It is insightful to consider her early experience, as it provides additional context for transformation that ultimately led to her feelings of misalignment with the program. This misalignment was her interest in pursuing a therapeutic approach to outdoor education as opposed to a more adventure-based format. She had stated earlier in our interview that she works in “eco psychology,” a form of therapy that she describes as using nature and ecological processes as a context for treatment. I asked if she thought interest in this field was sparked during her time in the interview, to which she replied, “Very much, yes.” From here, unfolded a specific instance during her time at the ALI in which an epochal

(Mezirow, 2000, p. 21) perspective change occurred, captured in the following excerpt of the transcript;

> [Originally at] OSU, I was studying physical therapy. I was a PT degree and ALI was kind of like, for fun. And one of the classes that we did, we had to develop a program and I developed a wilderness program [that] was basically a transitional program for people coming out of intensive rehab programs…I just, like, fell in love with this program. I thought it was so cool. I was like, I'm gonna do this program. And [my instructor] pulled me aside after that presentation, and said, "you should do this" … It took me about two weeks, and I entirely upended my whole, entire future plan. I decided I was going to do this program. And so, I changed my degree to psychology, decided I was going to go into nature-based therapy.

After graduating from OSU, Jessie went into a graduate program, with one of her specialties being nature-based therapy. In this case, a different pattern of transformation occurred. *Epochal* transformation is one that is "sudden" and "reorienting" (Mezirow, 2000, p.21). For Jessie, developing a therapeutic outdoor program during an academic exercise, coupled with the feedback from her instructor ("you should do this") led her to alter her professional path towards a new vision for herself. From this case, the transformational learning phase *acquiring knowledge and skills for implementing one's plans* can be seen being initiated at this point as Jessie subsequently planned to pursue academic training required in order to fulfill this new plan. This transformation also provides insight into Jessie's diverging vision from that of the ALI. The ALI does not do therapeutic work.

Feedback is built into the culture of the ALI. At the ALI, feedback is given to participants from their peers and from their supervisors (who, in some cases, are also their peers). The feedback discussed by the ALI alumni who participated in this study was often given in response to a role they held within the ALI, though it should be noted that the most salient feedback was not in one of the previously described "flagship" ALI roles. Both critical (e.g., "I don't think you're ready") and encouraging feedback (e.g., "you should do this") sparked moments of self-reflection and subsequently catalyzed the transformative learning process.

*Theme 5: Building a new Frame of Reference*

Transformative learning can happen in four ways, one of which is learning a new frame of reference which Mezirow (2000) describes as a "dispositional orientation" that can be "highly individualistic or shared as paradigms" (pp.19-20). In contrast to the unique, individualistic cases of far-transfer understood through a transfer of learning lens, transformational learning theory highlighted a shared element of learning done by full members of the ALI. This was the creation of a shared *frame of reference* that involved participants describing a sense of responsibility for the experience of others. This concept, one that from here forward will be referred to as the "ALI mindset," emerged in all seven interviews. The ALI mindset can be described as a disposition in which the ALI alumni expressed a sense of awareness of themselves as active, responsible facilitators of safe and positive experiences for the participants of ALI programs. Reflecting on leadership positions he held within the ALI, Chris exemplified the ALI mindset:

> I felt an immense amount of responsibility to do it right. Because these are experiences that can shape people. And in fact, that's kind of the whole goal, right? … Trying to positively impact people's lives, having them experience something that potentially will, allow them to grow or build confidence. And so, for me, like, just truly believing in the process and the system and in the goals [of the ALI], it just meant, like a lot of responsibility that I needed to take to make sure it was done well.

Tommie showcases the nuance in applying the ALI mindset to working with a group on a snowshoeing trip:

> You've got people that have snowshoed a dozen times and people that have never stepped in the snow in their life. And so, there's a wide variety of comfort levels, and trying to understand the group and gauge everyone's comfort level, trying to make sure everyone feels welcomed and engaged and, you know, adjusting pace, so the people that want to have an athletic experience feel like they've been able to move enough and the people that are there for more leisurely time, don't feel like they're getting rushed. So, like trying to assess a group and balance expectations and get feedback, you know, being able to talk to people and read body language and get a sense of where the group at was super helpful [to learn].

Cory also exemplifies the ALI mindset and how it has carried into his life now:

> There was an element of responsibility that came out of being a trip leader, and being a supervisor and being a trainer and… recognizing there was responsibility for other people, right? Both their lives [but also] making sure

> their experience was really positive and powerful, impactful… That responsibility for other people's experience, I think stuck with me in a lot of ways.

Charlie described how his ALI experience helped him identify his purpose in life; a purpose that echoes the ALI mindset. During our interview he described a moment from his current OAE work where he supported a student in finding their own metaphorical "summit," whilst attempting to actually summit a mountain. While this embodiment of the ALI mindset did not occur on an ALI trip and was after he had graduated, Charlie drew a clear connection back to the ALI and how his time there had fostered his perspective:

> I didn't realize till we were sitting around the campfire that night how much of [what] I learned at ALI was like actually pursuing my purpose, without realizing it. [It's like] oh, I didn't get the summit, but I helped that girl see her summit in the sense that, she just needed to know that somebody was gonna stick by her through the hard stuff…Or, like, you know, she had a whole bunch of stuff she was going through, but like that there are other people in this world who would believe in her and help her do these things. That's why she was on that trip, and I was the one that was there to give her that experience. That's where my purpose finding came in. And [the] ALI gave me the skills to do that. Both from like, in that case, technical skills, but also, more importantly, the adaptive skills of being able to see what this girl needs.

A part of the ALI mindset is having confidence in knowing that one can positively affect a situation. In our interview, Casey described a situation in which he

was leading a backpacking trip that was met with challenging weather conditions. He recalled:

> You have the option to either step up and do what [is] needed in the situation or step back and let the situation happen to you... And I'm lucky that I had the training that I had, through the [ALI] to be able to react in a way that kept other people safe and actually improve the situation versus just either elongating a situation or making the situation worse.

For Casey, this confidence came from, in part, experiencing success with these types of challenges: "it just showed that I could do it. [It] showed what I'm capable of. That, you know, at 19, 20, 21, 22, I was capable of leading people, leading teams, leading situations, teaching others you know?" For Jessie, this confidence came from knowing others had believed in her, and describes a sense of empowerment, connected to her gender identity as a young woman at the time:

> [In the outdoor industry] it's been a difficult thing for women to hold positions of power, and so I think that felt pretty important to me, as like a young girl, right? I'm like, 19, 20 I'm like, cool, you're letting me lead this rafting trip, like really? So, for somebody that, believes that you can do it, I think helps make you believe that you can do it.

The ALI mindset emerged as a shared paradigm from my sample of ALI alumni. It represents a sense of responsibility that one has over the experiences of others and that as individuals in leadership roles, they have the ability to positively affect their group's experience. Mezirow (2000) states:

> Transformation Theory's focus is on how we learn to negotiate and act on our own purpose, values, feelings and meanings rather than those we have uncritically assimilated from others– to gain greater control of our lives as socially responsible, clear-thinking decision makers. (p.8)

In this light, the ALI mindset evidences transformational learning in that it showcases a newly formed or transformed *frame of reference.* In other words, the result of how an experience was interpreted (Mezirow, 2000, pp.16). For the ALI alumni sampled in this study, experiences of leadership were interpreted with consideration of the experience for the participants and the active role in which the alumni played in that experience.

**Linking Transfer and Transformation with the ALI Mindset**

Developing the ALI mindset was the result of a process that included acquiring skills and knowledge, applying that knowledge and skill with real experience and getting feedback, as represented in Figure 3. ALI alumni described learning and improving on a variety of skills that ranged from technical outdoor skills (e.g., "belaying and knot tying"- Cory; "whitewater navigation"- Chris) to group facilitation and leadership skills (e.g., "trying to facilitate an experience"- 5). ALI alumni also described being able to practice these skills. Chris described working at the climbing gym as a "mixing pot of mock experiences" and Tommie described the quantity of time facilitating groups of people:

> It was just so much interaction and working with people. You know, beyond just the casual, like catching up at a coffee shop it was like I'm going to try to teach you these skills, or we're going to go on a trip together and spend the

day in the van or something where you're trying to get them to learn something, or trying to facilitate an experience that really required like a broad depth of social skills.

*Figure 3: ALI Mindset Process*

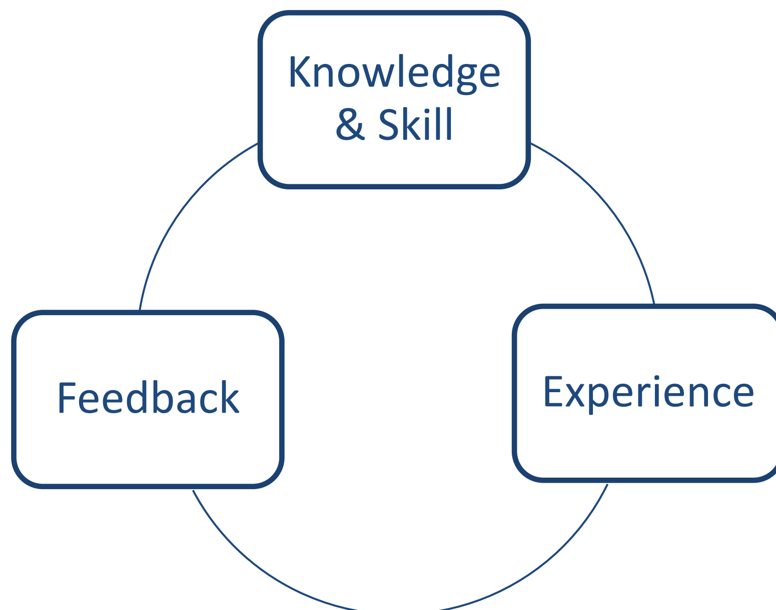



*Figure 3: The ALI Mindset is an iterative process whereby the ALI alumni described experiencing repeated revolutions.*

Developing an ALI mindset was further supported by feedback. Having ample experience and practice, alumni shared stories of both failure and success. Charlie reflected on an experience getting lost with a student and the subsequent debrief he had with his supervisors:

> ALI provides you enough space to make some mistakes and still come out of it okay. [In the] debrief meeting with [my supervisors] after that, like, okay, I got the message that I'd done fucked up, right? And like, that's okay. They also weren't like, you're an idiot, you're fired. Right? ... Like, if I did that [at

> my current job], that wouldn't be good for my career. [Messing up at the] ALI was great for my career, because I was able to understand what I did.

Casey reflected similarly on receiving feedback when he failed to request the necessary number of vehicles to support an ALI trip. He recalled his supervisors saying "This time you messed up, we're not going to say that it's okay, but what we're gonna say is that you need to learn from it and not let it happen again."

Throughout this process of developing an ALI mindset, participants have the opportunity to transfer learning within the ALI context. They learn skills and they apply them to experiences (e.g., leading a trip, facilitating a program etc.). The component of feedback in this created a space for building beyond transference of learned skills. Feedback opened a door for individuals to reflect on their practice and be critical of their actions. Subsequent experiences then allowed them to apply learning that had since been tweaked and refined through reflection. This learning was transformative in that, eventually it amounted to a new frame of reference for the individuals, the ALI mindset. Furthermore, some participants were able to discuss how this new frame of reference (i.e., the ALI mindset) transferred into their lives after graduating from OSU, such as when Charlie described helping someone "see her summit," when running a program as a professional.

## Chapter 5: Discussion

Outdoor adventure education (OAE) distinguishes itself from other organized outdoor-based activities in that it seeks to provide learning opportunities that support inter and intra-personal learning (Priest & Gass, 1997). These outcomes are typically measured soon after an OAE experience (Hattie et al, 1997) and have long been understood primarily through the lens of learning transfer (Cooley et al., 2014; Gass, 1985; Sibthorp, 2003). The notion of transfer has been contested by some OAE scholars, who suggest it is both difficult to assess and to plan for (Brown, 2010; Furman & Sibthorp, 2012). One alternative that has been recommended is Transformative Learning (e.g., Mezirow, 1991), which has been applied to OAE research by few researchers (D'Amato & Krasny, 2011; Meerts-Brandsma et al., 2020). D'Amato and Krasny (2011) do not pose transformative learning as a replacement to transfer of learning, rather they discuss the two as complimentary.

Furman and Sibthorp (2012) contend that "what is learned, taken, and applied from an adventure program depends entirely on the program participant," a curiosity that in turn leaves measuring *intended* transferred learning, and more so far and non-specific transfer, an ordeal that is "dicey at best." So where does this leave us? Transfer has utility; however, its utility is limited to the bounds of outcomes that were intentional and are easily measured post-program. Transformative learning theory in turn offers a lens through which we can understand learning that occurs in-situ, but has effects that endure beyond the experience. In other words, transformative learning allows us to recognize and capture unintended outcomes that still represent a worthwhile learning experience.

The aim of this study was to explore both learning transfer and transformative learning as they relate to alumni of the Oregon State University Adventure Leadership Institute (ALI). Broadly, I wanted to know how learning from the ALI experience presented itself in the lives of ALI alumni. This broad objective was explored through four sub-questions:

1. *Do alumni of the ALI transfer learning from the ALI to their current lives?*
2. *How are ALI alumni using transferred learning?*
3. *Does the ALI experience facilitate transformation?*
4. *How does the ALI experience facilitate transformation?*

**Transfer of Learning from the ALI: *Research Questions 1 and 2***

Merriam and Leahy (2005) discuss three categories of variables that influence transfer; participant characteristics, training program content and design, and the context to which the learning is transferred. While the third of these categories is most directly related to my research questions, the first two will be briefly discussed, as they provide valuable insight to understanding learning transfer from the ALI. Additionally, several of Gass's (1985) suggestions for promoting transfer within an OAE context emerged in conjunction with Merriam and Leahy's three categories.

Participant characteristics that influence transfer include motivation and positive expectations for the content being learned (Broad & Newstrom, 1992; Mathieu et al., 1992). Participants in these studies were often predisposed to learning environments similar to that of the ALI, having previous interests and experience with outdoor activities. For example, given his previous experience with scouts and being a multi-sport athlete, interviewee Chris described himself as a "very easy key to

put in the lock," indicating that the ALI felt like a good fit to him. Other study participants shared previous experience with and enthusiasm for activities such as whitewater rafting and rock climbing that predisposed them to similar activities in the ALI. This study sought to explore learning in the ALI experience through the words of "full," or exemplary participants of the ALI, which may have contributed to consistent predispositions of the interviewees. It is important to mention here that participant characteristics are largely something that OAE programmers cannot control and is notably missing from Gass's (1985) recommendations for enhancing learning transfer.

The second influencing element shared by Merriam and Leahy (2005) is the program design and content learned. Of particular note is time for practice and feedback (Gass, 1985; Lintetern et al., 1990). ALI alumni described opportunities to practice learned skills and subsequently receive feedback. The following quote from Casey captures this well; "What was amazing was getting the opportunity to really test and push myself and then also have the community to kind of be like, yo, step back, that was too much, that's not okay." The process of learning skills and applying them was discussed as an organic aspect of the ALI experience, but is also embedded into the ALI structure. In the ALI, students have the ability to progress through three different guide levels. These levels are obtained by completing a variety of formal course work, in both technical skills (e.g., backpacking) and interpersonal skills (e.g., leadership) but also by completing experiences such as leading a trip. These experiences allow students to transfer learning to new contexts, yet still within the ALI. Furthermore, as one attempts to move between different levels of the

progression, they need to submit extensive reflective essays, which are reviewed and offered feedback by ALI professional staff. This feedback also served as coaching, another programmatic design component claimed to support learning transfer (Olivero et al., 1997 as cited in Merriam & Leahy, 2005). Furthermore, ALI alumni described additional experience in alignment with four of Gass's (1985) techniques for enhancing transfer including; real consequences, "providing the means for students to internalize their own learning," placing responsibility of learning on the learner and providing follow-up experiences for students to apply new learning. Much of these programmatic measures supported transfer within the context of the ALI, however it is the transfer of learning beyond the ALI that is important to this study.

The third element that can influence learning transfer is the context to which learning is transferred. It is in this element where the work of this thesis was keen to explore. Elements of context pertinent to this study that influence transfer of learning includes the opportunity for application of learning (Seylor et al., 1992; Ford et al., 1992; Sorra, 1992; Lim & Johnson; 1992). For participants in this study, transferred learning under the umbrella of near and specific transfer was split between professional and personal applications. For those who proceeded into professional contexts similar to that of their ALI experience, interviewees were readily able to discuss many skills that were transferred from their ALI experience to their profession. Cory's ALI experience was spent largely working as a facilitator on the challenge course. He described feeling well-equipped with both technical and facilitation proficiencies as he moved into a career in experiential, challenge course-based education. Chris continues to work as a professional first responder, frequently

applying technical rescue and medical skills to his work– skills that were initially learned in the ALI. In fact, Chris was turned towards first responder work during his time in the ALI— adding further impetus for transfer via the mechanism of motivation (Merriam & Leahy, 2005).

For individuals whose work requires them to apply technical skills learned in the ALI, transfer is obvious. Asking them about what transferred almost felt silly, as the connection and preparation for their work they described was perceived to be obvious. Even sliding into the space between near and far transfer, participants described transference of more conceptual knowledge. Charlie, who now works as a full-time corporate educator and part-time OAE educator, described transferring technical skills and educational frameworks to his professional life, alluding to conceptual educational knowledge gained with the ALI: “I work with people with master's degrees in education, and I still think I have simpler frameworks to provide around teaching technical skills than they do.” These findings are expected and unsurprising. Research (Baldwin & Ford, 1988; Merriam & Leahy, 2005) and logic make it clear that given the opportunity to continually apply learning, learning transfer will occur.

Regarding near and specific transfer in the personal realm, participants occasionally described using outdoor activity skills for personal recreation. This said, it was hard to attribute the learning to time explicitly spent in the ALI. Participants often climbed, paddled and hiked with friends, on their own time concurrently to their ALI experience. However, what was perceived to have transferred by numerous participants to their personal lives was wilderness medicine training. Study

participants could clearly connect their initial learning of these skills to their time in the ALI and still find them to be pertinent to their personal outdoor pursuits. There was a shared sense of preparedness that participants described from having learned first aid skills. Several study participants were able to share stories where these skills were useful to them in a backcountry setting. This said, it should be noted that the wilderness medicine curricula used in the ALI is through a separate, outside organization. However in-house ALI instructors teach the curriculum and the ALI further require students to take these courses as part of the certificate progression. Finally, not all skills were maintained beyond the ALI experience. Participants like Frankie and Jessie described losing technical skill proficiency of skills that they hadn't continued to use.

These findings fit neatly with Merriam and Leahy's (2005) three variables that influence learning transfer along with some of Gass's (1985) techniques for enhancing learning transfer. In summary, the participants of this study were predisposed to be engaged learners in the ALI, the content and design of the program was such that supported transfer of learning *within* the ALI context and transfer was most readily discussed in contexts representative of a near and specific form of transfer. Additionally, attrition of skills was evidenced by participants like Frankie and Jessie who had no need to practice certain technical rescue skills. This suggests that despite having much practice during the ALI experience, if these skills are not maintained in a transfer context, they will be lost. Findings are less straightforward when we look into far transfer and non-specific transfer of learning from the ALI.

I agree with Brown (2010) who states that "general transfer," a concept similar to far and nonspecific transfer, "is the greatest interest for educators who endeavor to educate beyond the constraints of the immediate environment." This is important in OAE, as it distinguishes itself through teaching inter and intrapersonal skills in an outdoor context that are applicable beyond the program and later into the life of its participants (Furman & Sibthorp, 2012). Participants in this study were asked to think about "non-technical skills" they learned in the ALI, along with how they use those skills in their daily lives. The term non-technical skill is contested (e.g., Nestel et al., 2011), but was chosen as a lay-person and catch-all term for competencies such as leadership, interpersonal and facilitation skills. What emerged in the interviews confirmed what Furman and Sibthorp (2012) contended, stating; "Ultimately, what is learned, taken, and applied from an adventure program depends entirely on the program participant."

Far and nonspecific transfer that was discussed as useful to participants was unique to each individual interviewee. Far and nonspecific transfer emerged as learning how one learned, reading a group, using one's voice and how to conduct difficult conversations, among others. For learning to be transferred, by definition, it needs to be applied in a later context (Gass, 1985). What participants described regarding the transfer of "nontechnical" skills was often reflective of what their current lives required of them. While this statement is not profound, it is important to point out that the answer to this question is only available once a participant has left the ALI and has moved onto something else. In that new context, what is seen as transferable from the ALI, is reflective of that context.

The findings from this study could argue that far and nonspecific transfer occurred for ALI alumni. They were able to describe distinctive lessons, ideas and practices that they learned at the ALI and how those items have been useful to both their work lives and personal lives. However, there are limits to this perspective from a utility point of view. The individualistic nature of learning outcomes is interesting and important. An ALI experience clearly *gives* something to its participants. However, the outcome is unpredictable, making intentional programming through a learning transfer lens very challenging. Though some of this study's participants continued into professionally similar contexts, students do not typically participate in the ALI because they see it as a pathway to professional success as OAE professionals. Given conversations with the interviewees of this study and my own experiences with the ALI, students active in the ALI regularly have no intention of a career in OAE. They join because it's fun, because they are in search of a challenge or they are in search of a community. This rights-off near and specific transfer as a worthy goal for the ALI. I stand with other researchers and practitioners in OAE (Brown, 2010; Furman & Sibthorp,2012) who contend that the transference of "nontechnical" skills is entirely more important than that of technical skills. These findings contribute to the argument that transfer, a notion that is largely understood through the learning of specific outcomes (Baldwin & Ford, 1988), is not suited to be the sole lens for understanding learning from the ALI or other OAE programs. However, if far and nonspecific transfer are difficult to program for, how might learning be further understood in a way that is actionable for educators and programmers within the ALI and beyond into the professional OAE community? The

findings from this study viewed within a transformative learning lens provide insight to this question.

**Transformative Learning: *Research Questions 3 and 4***

Outdoor adventure education (OAE) seeks to provide experiences for students that culminate in outcomes that are interpersonal, leadership or otherwise non-technical in nature. The findings from this study could argue that some learning transfer occurred for the ALI alumni interviewed. However, these outcomes are not only difficult to measure but are ultimately not met in a predictable way as highlighted previously in this thesis and by other scholars (e.g., Brown, 2010; Furman & Sibthorp, 2012). Historically, OAE researchers have sought to understand these outcomes through the lens of learning transfer, yet prominent scholars of learning transfer (e.g., Baldwin and Ford, 1988) claim that transfer can only be measured accurately when teaching specific outcomes. Brown (2010) contends that transfer is limited to a matter of "'what' can be transferred from OAE to everyday life," whereas a shift to a "how" we have prepared students to be "meaningful participants in different situations" may be more appropriate. In other words, Brown is suggesting a shift from "*what* far transfer has occurred" to "*how* have we prepared students for their current situations." Transformative learning provides a lens through which we can view the "how" of learning, and ultimately acquire insight into how students were prepared for their lives beyond their ALI experience.

A transformative learning lens revealed different perspectives on learning in the ALI. Two prominent themes that emerged included (1) the role of feedback in initiating transformational learning and (2) the development of a new meaning

perspective (i.e., frame of reference), the ALI mindset. The ALI mindset describes a process in which skill/knowledge, feedback and experience work in concert to support learning. Over time this iterative learning process reified a new perspective in which the ALI alumni viewed their role at the ALI and beyond. While feedback is included as a component of the ALI mindset process, it also emerged as a prominent mechanism for transformative learning for the interviewees of this study.

*Feedback as a Mechanism for Transformation*

For the alumni in this study, feedback served as a mechanism for initiating transformative learning. Feedback was often followed by critical reflection and subsequently initiated the transformation process. This process was variable for participants. For Chris many phases of transformation, including a disorienting dilemma, occurred on the basis of a singular moment of feedback, suggesting that he may have experienced full perspective transformation regarding his professional identity. For Jessie, feedback also prompted a disorienting dilemma however this dilemma seemed to persist beyond the ALI experience and required therapeutic intervention to overcome. These cases suggest that transformative learning is possible from the ALI experience, though it may not occur to the same degree for all who participate. Some transformations occur suddenly (epochal) while others may occur over lengthy periods of time (Mezirow, 2000, p.21). Additionally, transformation does not always follow a linear process (Gould, 2002 as cited by Herbers & Mullins Nelson, 2009).

Despite different degrees of transformation, there was a shared theme regarding feedback initiating a disorienting dilemma for at least three participants. Herbers and Mullins Nelson (2009) state:

> The essential feature of a disorienting dilemma is that the challenge is painful and perplexing because it conflicts with one's former ways of knowing. Tension is generated, and the individual finds himself or herself at a crossroad: either to cling to old structures and negate the experience, or seek new meanings that can integrate the current experience with prior learning.

For Chris, Cory and Jessie, receiving critical feedback led to a state of dissonance. For Chris, the dissonance existed as he grappled with what actions to take in response to his supervisor's feedback. This was the first time someone other than his parents had given him direct feedback. For Cory, the dissonance presented itself similarly in that he had to make a decision in response to feedback– should he stay on the challenge course, without a promotion or should he leave? Dissonance emerged a bit differently for Jessie. Her experience was the result of receiving inaccurate feedback. However, she still described a tension between what her vision was for herself and how it was diverging from the vision of the ALI, a place that she had grown to cherish. Greenfield (2009) suggested three themes that are influential over the transformative power of disorienting dilemmas; personal discontent, emotions and noting that the experience alone isn't enough. It is clear the three aforementioned individuals experience both personal discontent and strong emotions when receiving critical feedback. However, it is unclear that they had a formalized opportunity to process the experience at the ALI. Chris and Cory were able to process and move forward from their disorienting dilemmas within their time at the ALI. However, Jessie described her process taking several years.

A culture of feedback is embedded into the ALI. Participants described one-on-one feedback (such as in the previous examples with Chris, Cory and Jessie), but also group feedback when debriefing a variety of other ALI experiences. Out of the former type of feedback precipitated a disorienting dilemma and subsequent phases of the transformation process. One might look at the ALI experience at a glance, and presume that transformative learning might be initiated on an ALI sanctioned backcountry trip or other adventure experience. On the contrary, these moments of feedback and subsequent transformation were unexpected and random. However, what wasn't random was the culture of feedback. Yes, feedback and debriefs occur after trips, challenge course and other ALI programming but establishing a culture of such feedback opens an opportunity for these types of authentic transformational processes to occur. Based on my conversations with ALI alumni, the ALI has considerable potential to spark transformation through this culture of feedback, but may not necessarily have formalized structures for participants to reflect on unplanned, critical feedback. On the flip side of this, it could be argued that participants were able to wrestle with critical feedback using some sort of assimilated skill learned in other, structured feedback experiences in the ALI. This was not explored with the participants of this study.

The case of Jessie is worth revisiting here. The feedback she received that initiated a transformative process was described as "inaccurate and unfair." Coupled with this perception, is the requirement of risk in providing transformative learning experiences. Disorienting dilemmas have the potential to raise a variety of emotions, including anger and anxiety and can even have negative impacts on learning (Roberts,

2006). Taylor (2009) describes the importance of authentic relationships with students in transformative learning, stating: “It is through building trusting relationships that learners develop the confidence to deal with learning on an affective level, where transformation at times can be perceived as threatening and an emotionally charged experience” (p.13). This crucial piece in transformative education was missing for Jessie. Describing the individuals who gave her the feedback in question, she stated; “I felt like they didn't actually know me,” a position that is contrary to the requirements of transformational learning as clarified by Taylor (2009).

Feedback emerged as a prominent catalyst for critical reflection and subsequent transformation from the ALI alumni interviewed in this study. Taylor (2009) includes the promotion of critical reflection as a “core element of fostering transformative learning” (p.7). Other scholars have found feedback and reflection to be influential for transformational learning in OAE. Meerts-Brandsma et al. (2020) identified reflection, challenge and support as three primary means for transformative learning, where feedback was discussed as a challenge for students to overcome. The researchers also highlighted the importance of these three elements working together to promote transformative learning. In this study, a similar co-dependent process emerged. This process, referred to as the ALI mindset process, suggests that learning transfer can support a process of transformation by promoting the development of new meaning schemes or a new frame of reference for full participants in the ALI.

*Developing a new Frame of Reference: The ALI Mindset*

Feedback stood out as a prominent process supporting transformative learning in an ALI experience. However, what also emerged to work in conjunction with feedback was the ALI mindset process. Transformative learning is very much a process, whereas perspective transformation is an outcome (Meerts-Brandsma et al., 2020; Mezirow, 2000). This distinction is comparable to the ALI mindset process model (Figure 3) where the model itself represents a process and the development of the ALI mindset is a transformational outcome of engaging in the process.

The ALI mindset process model includes learning skills and obtaining knowledge, applying that skill and knowledge in real experiences and then receiving and processing feedback related to those experiences. The ALI alumni interviewed in this study described repeated engagement in these three components, in turn reinforcing a new frame of reference or meaning perspective (Mezirow, 2000). Skills and knowledge were obtained through formal coursework and training. What was learned was then applied when the alumni would lead trips, TA courses or facilitate challenge course programming. Following these experiences, though not always formalized, alumni received feedback regarding the successes and challenges of that experience. Each of these components happens all of the time at the ALI. This was evident when interviewing the ALI alumni in this study, but is also representative of my own experience working as a teaching assistant in the ALI.

Incremental transformative learning has been described as "concatenation" of smaller transformations (Kitchenham, 2008). Stepping back and looking at the experiences shared by the interviewees in this study, it is clear that the three ALI mindset model components worked together, culminating into something greater than

they would otherwise have been on their own. The process was iterative, each cycle presenting an additional opportunity to reify the ALI mindset, a new frame of reference through which the alumni began to interpret the roles they held at the ALI.

This process is similar to that proposed by Kasl & Elias (2000) who state that transformation is best facilitated through "interdependent processes of discernment and critical reflection", where discernment requires the application of judgment and critical reflection requires the "surfacing and challenging uncritically assimilated assumptions about oneself" (Mezirow, 2000, p.231). Kasl and Elias further contribute to the definition of transformative learning, stating that it includes a process of expanding one's consciousness via creating new frames of reference (2000). Meerts-Brandsma et al (2020) found transformative learning to be supported by the interdependent process of challenge, support and reflection in an OAE context. Taylor (2000) contends that "intense experiential activities offer experiences that can be catalysts for critical reflections and can provide an opportunity to promote transformative learning" (Mezirow, 2000, p. 6). These ideas parallel the ALI mindset process.

**Connections between Transfer and Transformation**

The ALI mindset process is an iterative model that outlines a road map to transformative learning in the ALI. The ALI alumni in this study were chosen as highly active members of the ALI, and were called "full members" of the ALI, meaning they took advantage of at least two of three flagship ALI experiences. These included being a teaching assistant for an ALI course, guiding ALI trips or facilitating programs at the challenge course. Students do not need to qualify as "full members"

to be a part of the ALI. There are levels of engagement, with the most accessible level including participating in an Adventure Club trip or being a student in an ALI-housed class. These differing levels of engagement in the ALI parallel differing levels of engagement with the ALI mindset process. While this study explored the experience of full members of the ALI, the ALI mindset process will be discussed considering all levels of experience in an attempt to explain how learning transfer and transformational learning can emerge in the ALI.

The ALI mindset process could begin with any of the three components. For the sake of simplicity, I will use the learning of skills/knowledge as the starting point. Students in the ALI acquire skills and knowledge initially through taking ALI courses. Students are then given an opportunity to transfer that learning in class or on some sort of ALI trip. During those experiences, students may be given feedback on how they implement a particular set of skills. Near and specific transfer occurs as students learn technical outdoor skills and then practice them in similar contexts. This process can repeat for different classes and different experiences. For example, a student could take the rock climbing class and then go climbing with the Adventure Club. That same student can also take a backpacking class, and then also go on a backpacking trip with the Adventure club. This would all be an example of the first level of engagement with the ALI process model.

The second level of engagement with the ALI process model requires an individual to hold on to a position of leadership within the ALI (e.g., teaching assistant, guide, facilitator). This is where the participants of this study could be placed, though if it were a continuum, they would be on the high, more engaged, end.

At this level, ALI members have reached a new echelon regarding learning transfer. Similar to those at the first level of engagement, these members have continued opportunities for near and specific transfer of outdoor skills. However, they also have opportunities to transfer less tangible skills and knowledge when managing groups of ALI participants (i.e., those at the first level of engagement). The more active these students are with the ALI, the more revolutions through the ALI mindset model occur. The participants in this study were likely going through revolutions sequentially and simultaneously. With further engagement in this process, the more opportunity exists for feedback to spark a disorienting dilemma and subsequent transformational learning. This occurred for several participants in this study. Furthermore, as the participants in this study progressed through this process they began to embody the ALI mindset. This new frame of reference through which they interpreted their experiences was subsequently applied, or *transferred*, to contexts still within the ALI. The ALI alumni interviewed for this study unanimously expressed feeling responsible for the participants of the programs they guided, facilitated and taught.

So, how are transfer and transformation interacting? In alignment with the shared values of OAE (Ewert & Sibthorp, 2014), the ALI uses outdoor technical skills as the context for learning that extends beyond outdoor contexts. What this is also saying is that the extent to which a participant will experience transformative learning within the ALI may be related to the extent to which that participant engages at different levels of engagement. This responds to research questions three (*Does the ALI experience facilitate transformation?*) and four (*How does the ALI experience*

*facilitate transformation*). However, this does not respond to the broad aim of this study to explore how learning presents itself in the current lives of alumni, which could in turn present a new question; *How does transformational learning at the ALI present itself in the current lives of alumni?* This question presents an opportunity for future research, however some evidence from this study provides insight. For instance, Cory states "That responsibility for other people's experience, I think stuck with me in a lot of ways." Charlie also describes the transference of the ALI mindset, which he refers to as his "purpose:"

> Much of [what] I learned at ALI was like actually pursuing my purpose, without realizing it. [It's like] oh, I didn't get the summit, but I helped that girl see her summit in the sense that, like, she just needed to know that somebody was gonna stick by her through the hard stuff.

This quote captures both the ALI Mindset perspective ("I am responsible for the experience of others") and how it has unfolded as Charlie's purpose in life, beyond the ALI.

Within the first level of engagement of the ALI mindset process, participants can certainly learn skills and obtain knowledge that can be applicable to their lives, both as students and beyond. However, when we consider the broader aims of OAE and the ALI to teach interpersonal, leadership and other less tangible skill sets, it becomes clear that a greater level of engagement and responsibility can be supportive of learning beyond just transferable technical, outdoors skills. The learning evolves into the development of the self by creating a new frame of reference through which the world is interpreted.

At face value, the ALI might be seen by prospective students as a place to learn outdoor skills or to connect with other students. However, for those who engage with the ALI throughout their undergraduate experience and take on greater levels of responsibility within the program, it becomes more than that. Reflecting on his ALI experience, Charlie imagined what he might tell prospective ALI students:

> Yeah, it's a lot of work, but man, so is self-discovery and growing as a person, and that's what the work is at ALI. It's not showing up on weekends [and] taking people to look at birds. It's self-discovery. That's why it's hard.

**Limitations**

The first, and perhaps most significant limitation of this study was the study sample. A purposive sample was sought to explicitly include members of the ALI that met outlined criteria; however, these criteria were stretched. The criteria for selection (appendix) sought participants who had graduated at least 5 years ago (i.e., in 2017 or earlier). Participant Chris graduated after 2017. Furthermore, participants Charlie, Tommie and Casey graduated more than 10 years ago. While this was within my selection criteria, I did not consider the ALI's formal creation year of 2008-2009. These three participants observed and even engaged with the development of the ALI. When they first began participating with what is now the ALI, the structure was different. This said, they still engaged in very similar activities such as guiding trips and teaching classes. Given time constraints and the number of responses to my recruitment emails, I chose not to exclude any of these individuals from analysis. One additional limitation to this study's sample was with regard to participant Frankie. Frankie met all of the criteria, however, since leaving the ALI she experienced a

significant, traumatic event that seemed to have overshadowed her ALI experience. Frankie’s interview was analyzed, however, I only used quotes from our discussion that were very clearly and explicitly connected to her ALI experience. It was frequently challenging to discern between what she had learned in the ALI from what she had learned since her traumatic experience. The following quote captures this; “When I think of my life now it's like before-accident and after-accident, so yeah. Most of what I'm going to say is after-accident.” Finally, the last limitation regarding my sample is regarding racial and gender diversity. My sample consisted of all white individuals. Additionally, only two of the seven interviewees were women.

A second limitation of this study was the dissimilarity of OAE programs in the literature compared with the ALI. Literature regarding the outcomes of OAE, whether it is talking about transfer, transformation or something else, is about OAE programs similar to organizations such as NOLS (formerly known as National Outdoor Leadership School) and Outward Bound (OB). These programs are largely expeditionary-based. Expeditionary programs are characterized by extended backcountry trips over two weeks in length. Students on expeditionary programs are entirely immersed in their OAE experience. This differs from the ALI, which is a co-curricular program. This means that students are opting to participate in the ALI alongside their scheduled college coursework. Outcomes such as experiencing a different lifestyle, such as an expeditionary lifestyle, (D’Amato & Krasny, 2011) would be unlikely from the ALI experience. This said, OAE does not necessitate an expeditionary experience. As mentioned previously OAE is characterized by an emphasis on physical skills, an outdoors environment and inter and intra-personal

growth. With this understanding in mind, the ALI is still very much considered an OAE context. The existent literature was found to be an appropriate means to inform the work of this study.

**Recommendations**

This study used a broad, explorative approach, looking at learning in the ALI through the lenses of learning transfer and transformational learning. As such, many avenues for further inquiry were revealed. Given the potential for the ALI experience to promote and support transformative learning, it would be interesting to explore this alone, with a more focused lens. In this study, disorienting dilemmas emerged as the result of feedback. It would be interesting to explore what other aspects of the ALI experience might create the conditions for disorienting dilemmas and subsequent transformation. Thinking more broadly about the field of OAE, it would be illuminating for scholars to explore this same question, looking at specific educational practices or facilitated student experiences. For the ALI alumni in this study, disorienting dilemmas seemed to emerge at random moments. It might prove insightful to explore if any planned experiences also triggered similar dilemmas.

Furthermore, the sample for this research was chosen given the participants status as “full” members of the ALI. As mentioned, students engage at a variety of levels within the ALI. Further research into learning transfer and transformational learning considering less involved members would be a worthwhile endeavor. In other words, researchers should consider “how much” involvement is required in order to experience transformative learning, or extensive learning transfer.

Another avenue for future research would be to explore other university-based co-curricular OAE programs with regard to their ability to foster transformative learning. Other scholars (Sandberg et al., 2017) found participants of campus outdoor recreation programs further developed their leadership identity, however, with the exception of this thesis, there has been limited research (Sandberg et al., 2017) that specifically links co-curricular OAE and transformative learning processes.

Finally, while this study sought to broaden the way we look at learning from OAE experiences, there was much that emerged from the interviews that could not be neatly placed into either transferred learning or transformational learning. For instance, many interviewees discussed, at length, the value of the community they were a part of in the ALI. Based on the discussion I had with participants, it felt forced to attribute or connect this to a transformative process or to learning transfer. This said, the affectively-rich discussion around the ALI community is suggestive of an important element of the learning environment created by the ALI. One might loosely be able to connect this to Mezirow and Taylor (2009) requirement for “authentic relationships” (p.13) in supporting transformative learning. However, further inquiry is needed to explore this connection.

Other emergent themes that would be both interesting and important to explore would be that of gendered experiences at the ALI. Both participants who identified as women mentioned the impact of having other role models who identified as women. Phase five of Mezirow’s (2000) transformation process is the “exploration of options for new roles, relationships and actions.” Much research exists regarding the gendered experiences of OAE practitioners and participants (e.g., Gray & Mitten,

2018) however, further inquiry might be directed at navigating the value of role models in supporting transformational learning specifically for women and non-binary ALI and OAE participants.

## Chapter 6: Conclusions

Learning that occurs in the ALI is multifaceted. ALI alumni discussed experiencing both learning transfer and varying aspects of transformational learning. Beyond the ALI and into their lives, the transfer of learning was largely reflective of their current situations. If their professional or personal lives demanded them to apply skills learned in the ALI, transfer occurred. Therefore, it was not surprising that those individuals whose professional context was similar to that of the ALI had much to say regarding the utility of what they learned as ALI students.

This said, the opportunities for learning transfer within the ALI program supported two aspects of transformational learning. First, the ALI creates many opportunities to practice learned skills in authentic experiences, which in turn provide a rich context for feedback and reflection. Feedback in particular emerged as a prominent force for sparking transformative learning processes for the ALI alumni interviewed. Second, transformational learning occurred for alumni through the ALI mindset process. This process was inclusive of feedback, but also took into account the acquiring of skills and knowledge, and opportunities for experience. Repeated iterations of this process fostered a new frame of reference for ALI alumni. This new frame of reference offered a new set of assumptions through which alumni filtered their perceptions of an experience and subsequently informed the way they chose to respond. Ultimately, ALI alumni saw themselves as active, responsible facilitators of safe and positive experiences for the participants of ALI programs.

It should be noted that the ALI cannot be exclusively responsible for transformative learning. This study certainly found evidence that ALI alumni could

point to aspects of their ALI experience that were meaningful learning experiences. However, many also pointed out that the ALI was just one component in their lives. Learning, no matter how powerful, does not happen in a vacuum. As Casey so nicely captured, “I am a collective of the experiences that I've had up to this point. And ALI played a huge role in that, but it doesn't speak to all of my experiences.” ALI experiences occur for students amidst other experiences in higher education that may just as well contribute to transformative processes (Mezirow & Taylor, 2009). Nonetheless, the ALI emerged as a nucleus for transformative learning for the participants in this study.

Dewey (1938) argues that education serves to promote “continuity” of experience, where “every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after” (p. 35). This echoes Bruner (1961) who states “learning should not only take us somewhere; it should allow us later to go further more easily” (p.17). We can view both the notion of learning transfer and transformative learning with regard to these proposed purposes for education. When one applies learning to new situations, they are applying information or skills that they would not otherwise have had. Therefore, they are meeting the new situation more prepared, affecting its “quality” or the “distance” in which they are able to go. When one experiences transformation, they are meeting the new situation with a new or altered frame of reference. Therefore, their interaction with and response to the new situation is different than it would otherwise be prior to transformation. Both lenses offer insight into how the ALI, and

OAE, can support the broader aims of education– to give students a means to better navigate experiences to come.

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# APPENDIX

# Appendix

Interview Protocol

| | |
|---|---|
| Name: | o Welcome, thank you and introduction |
| #: | o Voluntary and may end at any time. You may also decline to answer any questions asked. |
| | o Interview length:1 to 1.5 hours, but may be up to 2 hours. |
| Date: | o Recorded and transcribed. Pseudonym given. Do you consent to being recorded? |
| Start time: | o General goal of study<br>o You are the expert, no right/wrong answers. Looking for your honest and candid perspective. |
| End time: | o Questions? |

Interview Protocol

1. Can you tell me a bit about what you've done since graduating from OSU?
   - What do you do now? For work? For yourself?
   - When did you graduate?

2. Can you tell me a little bit about your involvement with the ALI?
   - What roles or jobs did you have? (TA, guide, facilitator?)
   - How long were you involved?

3. What motivated you to join/participate? How did you get involved?

4. The next couple of questions will be about the skills you developed during your time with the ALI.

   - What technical skills did you develop? (e.g., first aid, climbing skills, paddling, backpacking, camping etc.)
     - Do you use any of these skills now? How so?
   - What non-technical skills did you develop? (e.g., leadership, group management, facilitation, interpersonal, intrapersonal etc.)
     - Do you use any of these skills now? How so?

5. Can you tell me about a memorable or significant experience you had with the ALI?

6. During your time with the ALI, you held a couple positions of leadership (e.g., TA, Facilitator, Guide). At the time, what did that mean to you?
   - What motivated you to take on this position of leadership?

- Now that some time has passed, how are you making sense of that experience now?

7. Can you tell me about a time when you faced some sort of dilemma* as a [TA, Guide, Facilitator]?
   **Alternatively- Can you tell me about a challenging experience or made the wrong decision?*
   - At the time, what did this experience make you feel? What stood out to you?
   - Now that time has passed, what do you think was significant about this experience?

8. Were there any [additional] "lessons" you learned that have since stuck with you?
   - Why did this stick with you?
   - How does this influence you now?

9. During your time with the ALI, did you have any role models?
   - How did they serve as a role model for you then?

10. Did your experience with the ALI prepare you for your current situation? (e.g., work, life, citizenship etc.)? How so?

11. Did your experience with the ALI change you? How so?

12. Is there anything else you would like to share about your ALI experience that you haven't mentioned yet?

Next steps
- Thank you
- If you have anything to add please email, text call
- Transcription and clarification