HVMAK

THESIS

The Nature of Educational Adventure Programming

Linking Education to Adventure in Xwander Nordic

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ABSTRACT

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This thesis explores the delivery of education in adventure programming, focused in the context of adventure provider Xwander Nordic, based in Ivalo, Finland. The project is commissioned by Xwander Nordic and aims to aid in the development of educational adventure products and to address the desire to market existing adventure products as adventure education. The main goals of this project are to understand the difference between adventure and adventure education, create a theoretical foundation for delivering adventure education, analyze Xwander Nordic's current and potential ability to provide adventure education, and define what is needed to promote their products as educational experiences.

This work reviews a vast collection of education theory across multiple disciplines, exploring behavioral and cognitive psychology, social constructivism, experiential learning, and transfer theory. Five common principles are uncovered: practice, feedback, reflection, goal setting, and planning for transfer. These principles inform the research into Xwander Nordic. The conducted research involves interviews with adventure guides and the head of Xwander Nordic and an analysis of Xwander Nordic's current ativities listed on their website.

Findings reveal that Xwander Nordic already provides educational experiences in their available products. The nature of adventure itself fulfills the principle of practice through active voluntary participation. Guides demonstrate enthusiasm for education and teaching, incorporating educational practice in their activities to facilitate skill development in customer groups. Feedback is frequently provided, particularly for beginner level participants. While guides express understanding of reflection, it was discovered that this principle was mainly used as a personal tool. More knowledge and practice is needed to be able to expand adventure products into adventure education. Goal setting and planning for transfer are particularly important to include in future deveopment, as this ensures that learning can be taken forward and applied to every day scenarios outside of adventure settings. Although this thesis is conducted through the lens of Xwander Nordic, the theory and findings offer valuable insight for all education and adventure providers interested in expanding their services into the realm of adventure education.

Keywords: adventure education, theory, practice, reflection, experiential learning, ZPD, transfer

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1 INTRODUCTION

This thesis focuses on the question of how education can be delivered in adventure programming in the context of Xwander Nordic. An adventure provider based in Ivalo, Finland, Xwander Nordic is the commissioner of this thesis project. The company has the desire to market their adventure products as educational experiences. It is the intended purpose of this project to understand how educational experiences are currently and potentially delivered in the adventure activities that Xwander Nordic provides, as well as how education theory is understood and applied by Xwander Nordic employees working in adventure settings. It is the goal of this project to understand what differentiates adventure from adventure education and use this knowledge to analyze the commissioner's current and potential delivery of adventure education and therefore address their need. The aim of this thesis is to construct a concrete theoretical framework that can provide us and our commissioner with an understanding of how people learn, what constitutes education, and which theories of learning are relevant in adventure education. This includes breaking down various theories of education and analyzing the principles that differentiate adventure from adventure education. Further, we aim to explore the elements of learning theory that makes adventure education a valid and reliable method for delivering education and why adventure programming is an invaluable tool in the field of education.

To understand what separates adventure from adventure education, we examine various theories of learning across disciplines and explore how they relate to an adventure and outdoor setting. Learning theories reviewed range from behavioral and cognitive psychology, social constructivism, experiential learning, to the theory of transfer in learning. These have created the theoretical basis of our understanding of education and have informed our methods of analysis regarding the delivery of adventure education at Xwander Nordic. From these theories five common instructional principles are identified: practice, feedback, reflection, goal setting, and transfer. Based on these main principles extrapolated from our research on education theory, we assessed Xwander Nordic's current activities promoted on their website and conducted interviews with Xwander Nordic employees to gain insight into the current understanding and application of adventure education in regular practice. We interviewed the outdoor and adventure guides that are responsible for hosting adventure activities with customers, as well as the head of Xwander Nordic to assess how the goals of the company align with their desire to provide and promote educational experiences. Results revealed Xwander Nordic already provides educational experiences, through first aid courses, foraging, and wilderness skills workshops. Practice was fulfilled through the basic nature of adventure and its requirement for active voluntary participation. Beyond providing a space for practice, Xwander Nordic guides expressed enthusiasm for education and teaching in their practice. Guides naturally incorporated educational practices in their activities and facilitated skill development and learning in their customer groups. All guides felt satisfaction with teaching and understood the principle of reflection in their own personal learning and development, however, they did not always employ them with customer groups. Feedback was regularly provided, particularly for beginner groups. Planning for transfer and goal setting were not often employed, offering insight into areas in need of further development. On a whole, Xwander Nordic seems to have a good basis for providing educational experiences and displayed a willingness to commit to developing the delivery of their adventure education further.

This thesis has been a collaboration between HUMAK University of Applied Sciences students Patricia Gargour, Elisa Juopperi, and Xwander Nordic.

2 COMMISSIONER AND PURPOSE

2.1 Xwander Nordic

Xwander Nordic is a premium destination management company with accommodations, activities and logistics provided by a highly skilled local team based in Northern Lapland. Xwander Nordic offers high-end tours for small groups into the wilderness of Finnish Lapland. The company is committed to offering sustainable, high-quality travel experiences to a variety of visiting groups. The destination management company (DMC) services that Xwander Nordic provide include adventure activities; accommodations; logistics; meetings, incentives, conferences, and exhibitions (MICE); and film production fixer services. Xwander Nordic offers their products to a large variety of customer groups, with the most common customers being families and adults. Xwander Nordic offers programs which teach customers skills through adventure and the outdoors, as well as first-aid skills. Courses for wilderness skills, foraging, and watersports exist already and information is provided in depth on their company website (Xwander Nordic, 2023). Recently there has been growing interest in providing activities for target customers from younger ages, especially school-aged children and young people. They are interested in expanding on these educational products to develop camp programs for kids and youths, in summer while they are out of school, as well as in winter. We have been asked to focus on the educational perspective of their existing activities and assess how ready the company is to provide further adventure education programs and what they may still need for being able to provide educational activities and promote them as such.

2.2 Purpose

The purpose of this study is to find out Xwander Nordic's current and potential delivery of adventure education. We are interested in discovering whether they are ready to provide adventure education products and if not what they need to do to be able to provide those. The company is planning to start offering different camps for youth and children. These camps require more than just the adventurous activities; given that the target audience for these camps often includes schools or educational institutions, there is a desire to connect educational aspects into the program.

Another purpose is that we want to explain this with theory. What is the difference between adventure and adventure education? In adventure activities, participants often apply practical skills learned through experience and hands-on participation. These skills may not always be rooted in formal educational theories but are developed through practice. Adventure education, on the other hand, incorporates educational theories to guide and enhance the learning experience. Educators and facilitators use established learning theories, such as experiential learning, constructivism, and transfer of learning, to design and structure programs. Educational theories inform the pedagogical approach in adventure education. They guide the process of setting learning objectives, creating structured activities, facilitating reflection, and ensuring that participants gain knowledge, develop skills, and experience personal growth. Therefore, while adventure activities often rely on practical skills without direct link to educational theories, adventure education actively employs education theory to optimize the learning and growth of participants. It is this educational focus that separates adventure education from pure adventure.

To further our analysis of Xwander Nordic, we conducted interviews within the company. Our purpose is to use the theory and the principles that separate adventure from adventure education to guide our research into Xwander Nordic's business practice and discover how much they know and use theory in practice. Through the responses given, we evaluated the employees' readiness and level of knowledge. The purpose of the interviews is to get in-depth qualitative data, which we intend to analyze based on knowledge, understanding, and application of adventure education principles. Additionally, we assessed the manager's interest and willingness to introduce and/or enhance adventure educational programs within the company. We also explored whether the company is prepared to invest in employee training, particularly if they are not currently prepared to deliver education. Furthermore, we analyzed the content promoted on Xwander Nordic's website. The purpose of this is to determine if the company already implements educational activities. This brings us back to the overall purpose of this project: to identify what state of readiness Xwander Nordic is in to promote their products as educational.

3 AIMS AND OBJECTIVES

3.1 The Project

This thesis centers around the application of education within the realm of adventure programming. Our primary objective was to gain insights into how learning is presently integrated into adventure-based activities and how educational theories are put into practice in these settings. Our exploration has been conducted within the framework of Xwander Nordic, an adventure company, where we've assessed their current approach to adventure education and its potential expansion. To comprehend the field of education, we've delved into various learning theories, which encompass the roles of reinforcement, motivation, and instructional methods. We've also extended our examination to consider the significance of adventure and outdoor experiences as forms of education. The primary aim of this thesis is to assist our partner, Xwander Nordic, in marketing their adventure programs as educational opportunities. To evaluate the current implementation of adventure education in Xwander Nordic's activity programs, we conducted interviews with their staff. Our focus was primarily on the outdoor and adventure guides responsible for leading activities with customers. Additionally, we engaged in discussions with the head of Xwander Nordic with the aim to gain a deeper understanding of the company's aspirations as an educational adventure provider.

Our primary objective is to explore educational theory and understand the difference between adventure and adventure education. We use this theoretical framework to conduct an in-depth analysis of adventure education within Xwander Nordic's business operations. For this purpose, we analyze content promoted on Xwander Nordic's website and develop interviews grounded in educational knowledge to examine the company's utilization and understanding of adventure education principles. By collecting quantitative data through these interviews, we aim to assess Xwander Nordic's potential in delivering education. Furthermore, our mission is to evaluate the strategies and tools available to Xwander Nordic to fulfill their mission of providing and promoting adventure education within their products. In the end, this thesis aims to establish a comprehensive framework outlining the tools that adventure providers can employ to integrate educational elements into their activities, fostering the application of adventure education.

3.2 Goals

Individually, each of us seeks to enhance our own comprehension of the education theories applied in adventure programming. We aspire to create a personal repository where we document and organize the diverse ways in which adventure activities function as educational tools. This repository will contain the methods, rationales, and underlying principles that make adventure experiences valuable for fostering learning and personal growth. This research is driven by the overarching goal of understanding learning in adventure programming. The thesis seeks to comprehend how learning takes place in adventure-based activities and how educational theories are applied in these environments. This information will guide the goal of exploring adventure education in Xwander Nordic. The research conducted in this project focuses on the goal of assessing Xwander Nordic and its current and potential use of adventure education in their programs. The over-arching goal is to meet the needs of Xwander Nordic, which is to promote their adventure programs as educational experiences. The research is guided by five key principles of adventure education: feedback, practice, goal setting, reflection, and transfer of learning. The thesis aims to bridge the gap between educational theories and adventure programming by understanding how learning occurs and how educational principles can be effectively applied to enhance the educational value of adventure programs.

4 THE MANY FACES OF LEARNING THEORY

For us to understand how to identify and deliver education, we need to understand the main theories of education and learning. In this section we break down education into core theories that explain how learning occurs, as well as exploring the role of learners and educators in the learning process. The understanding of learning begins from behavioural science as the observable change in behaviour as a response to given stimuli (Skinner, 1953). This principle of stimuli-response was expanded on in cognitive science, giving merit to the mental processes that are involved in the uptake of knowledge and skills (Neisser, 1967). Both schools of thought are important in understanding the foundation of learning in an individual. However, humanist theorists discovered that successful learning is not only the response of behaviours and mental processes but is dependent on the relationship of an individual to themself, their needs, and their teachers. There is an assumption in the west that humans are born as individuals and learn to be social members of society (Jarvis, 2010). Contemporary social sciences argue instead that humans are born as members of humankind and in relation to our families, culture, and contacts, and we learn to become individuals and social contributors over time (Schunk, 2012). Given that foundation, the person as a learner should be observed as a part of a whole; within the context of learning environment, within a social context, and within their relationship to themselves and their needs. This personal, social, and psychological aspect is fundamental to understanding the function of adventure education (Becker, et al., 2018). Addressing an individual's needs is seen in humanistic science as paramount to development and the relationship between educator and learner stands out as an important factor in successful learning. Motivation is a very important aspect of learner interest, participation, and success, and is seen as a by-product of the pursuit of meeting one's needs. The relationships between stimuli-response behaviours and mental processes, learner and educator, and needs and motivation are explored in depth in this chapter.

4.1 Breaking Down Learning

Although there is no centralized definition of learning (Shuell, 1986), learning can be described as something that involves observable change, endures over time, and occurs through experience (Schunk, 2012). Assessment of learning can be conducted using various methods, including direct observations, written or oral responses, ratings from others (i.e., teachers and peers), and self-reporting. The critical questions involved in learning theory include: how learning occurs; what the role of motivation is; how transfer of learning occurs; and what are the implications for instruction? When considering education as a topic, it becomes clear that it is a crossdisciplinary study, as learning is fundamental to growth, skill development, language, communication, and building knowledge. This means that the study and understanding of education comes from many different fields of science (Shuell, 1986).

Contemporary understanding of learning originates from theories in early psychology (Schunk, 2012). After psychoanalysis, behavioural psychology is often considered one of the earliest fields of psychology that examined the science of learning (Kimble, 2014). Learning in behavioural psychology is observable in human behaviour, observed as the change in rate of behaviour or change in frequency of behaviour occurance (Jarvis, 2010). Behavioural learning theory explains learning as response to stimulus and defines motivation as a consequence of external reinforcement, called conditioning. Classical conditioning was coined by Ivan Pavlov (1927), describing learning as creating repeated behaviour by pairing repeated reinforcement, just as Pavlov's dog was trained to salivate upon hearing the ringing of bell after repeatedly pairing the bell with the presentation of food. Operant conditioning, explored by Skinner, considers learning to be about creating repeated behaviour through negative and positive reinforcement. Positive reinforcement describes the introduction of an external stimulus to evoke a desired behaviour, while negative reinforcement refers to the removal of some external stimulus to reinforce desired behaviour (Skinner, 1953). This relationship is known as stimulus-response and can be considered as a form of punishment and reward system designed to encourage repetition of the desired behaviour (Schunk, 2012). These theories have been subject to countless research and have been expanded upon and put into practice in the form of trial-and-error learning (Young, 2009). Trial-and-error learning refers to the relationship between learner action and external response, considering the process of learning by getting it 'right or wrong' in context of external (instructional) feedback. Actions and their corresponding feedback make up a stimulus-response relationship that becomes stronger through repetition. This form of behavioural learning and teaching states that an individual accumulates multiple learned stimulusresponses throughout the progression of living and ageing (Schunk, 2012).

As a criticism of the behaviourist perspectives, Noam Chomsky shared ideas that later came to be recognized as cognitive psychology (Neisser, 1967). Chomsky (1959) stated that behaviour

theories had a narrow perspective on intelligence, arguing that behaviour and reinforcement alone did not dictate learning, but that the many complex processes of the mind played an important role. Cognitive learning theory focuses on the mental processes that are involved in learning, such as attention, memory, perception, language, and metacognition (Groome, 1999). While we will not expand too deeply on these mental processes, they offer insight into other factors that play a role in learner development. Communication, understanding, and mental ability play a critical role in the learner's educational development and success. Cognitive theories have a wide range of implications for instruction. It has been shown that learner's repeated practice combined with corrective feedback promotes learning (Rosenshine & Stevens, 1986), and that instruction alone does not account for learning, signifying that learning is not only a consequence of the external reinforcement that behaviourist approaches emphasized (Pintrich, et al., 1986). The learner's use of information through mental ability in coding, storing, and retrieving information, as well as their participation and understanding, is critical to their success (Schunk, 2012). Learning environments also play an important role regarding motivation and perceived positive outcomes in students (Stipek, 1996). It has been found in various studies that outdoor learning environments positively impact mental performance (Szczytko, et al., 2018), and increases participation and engagement (Mann, et al., 2023). In contrast to behaviourist approaches, cognitive learning theory places more importance on learner differences, rather than attributing the same learning response across individuals (Shuell, 1990). The thoughts, beliefs, attitudes, and values of learners are closely considered. Learning and motivation are considered separately in this field of thinking, as "one can be motivated but not learn; one can learn without being motivated." (Schunk, 2012, p.23)

Across these two theories of education, there are several common instructional principles. In observing learning through behaviour and cognitive processes, we can see that all learners progress through stages, and when observing learners and instruction, learning materials should be organized and presented in small steps (Shuell, 1990). For learners to be successful, they require repetition in the form of practice, feedback, and review (Rosenshine & Stevens, 1986; Shuell, 1986; 1990). Individual and self-practice is especially important in the retention and solidification of learning (Anderson, 1990; Ericsson, et al., 1993). Motivational and contextual factors influence learning, with motivation being particularly important to learner success (Stipek, 1996). Motivation in a learner can influence their performance, practice, perceived positive outcomes, and can be manipulated through learning environment and instructional

feedback (Schunk, 2012). Understanding the role of motivation in learning is crucial in analysing the most effective ways to deliver an educational experience.

4.2 The Role of Motivation in Learning

Learner motivation is described as the perceived value of learning as the result of self-efficacy and positive outcome expectations (Schunk, 2012). Motivation is built upon attributions that emphasize ability, effort, and strategy. (Stipek, 1996). Research has shown that the learning environment plays a factor in motivation and learning (Szczytko, et al., 2018; Mann, et al., 2023; Beames, et al., 2012). Learner motivation has been identified as a critical influence in the successful transfer of learning (Pugh & Bergin, 2006), an educational concept which is discussed further in chapter three. It can also be seen that motivational feedback enhances strategy use, performance, and self-efficacy (Schunk & Rice, 1993). A learner's real and perceived responsibility increases motivation, enthusiasm, and commitment to learning (Gass, 1999). Curiosity is key to motivation in learning and can be harnessed to improve learner success (Beames, et al., 2012).

One important theory of motivation that has played an important role in understanding the needs of learners is Abraham Maslow's hierarchy of needs (see: fig. 1). Maslow argues that basic needs of an individual must be met for higher order needs to be addressed. In this context, an individual learner's motivation follows the fulfilment of their needs. Once the foundational needs are met, the desire to further fulfil higher needs fuels motivation (Navy, 2020). This implies that learning which is related to meeting the needs of a learner leads them to learn more deeply and with more joy, as opposed to learning through external coercion. In fact, research has shown that the use of external coercion in learning may lead to less learning and learning to not enjoy the process of learning (Freitas & Leonard, 2011).



Fig. 1. Maslow's hierarchy of needs. (Nmilligan, CC BY-SA 4.0, via W. Commons)

When assessing the tiered structure of Maslow's hierarchy, it could be argued that the desire to achieve overrules our more basic needs, as some individuals outperform perceived limitations (Argyle, 1974, as cited in Jarvis, 2010). It can also be seen that needs are integral, rather than linear, indicating that there is no set order in which needs must be fulfilled (Wilber, 2000, as cited in Beames, et al., 2012). Furthermore, Maslow's hierarchy has been shown to have little cross-cultural applicability (Hofstede, 1984), and it can be argued that the order by which needs are met is not important (Wahba & Bridwell, 1976). What is important is that humans have needs. Carl Rogers addressed this needs model and motivational value by creating the 'personcentered approach,' a.k.a. 'differentiated learning' (Beames, et al., 2012). This type of learning focuses on the specific needs and goals of the individual learner, placing the learner at the center of their own learning journey. Rogers aimed to celebrate individual creativity and problemsolving abilities, suggesting that an individual's skill level corresponded to their motivation and that education programs should be built around each learner's starting skills and personal goals. This is essential in adventure education, as Matt Berry writes in Adventure Education: An Introduction (2011), "learning is done by people, not to them." This style of teaching encourages learners to be responsible for their own learning and states that it is the educator's job to facilitate this process (Schunk, 2012). In this learner-focused approach learners are encouraged to learn how to learn, particularly in a way that best suits them as individuals and encourages their

future learning success. This practice is relevant to adventure education, as the skills learned and taught in adventure are facilitated by learning how to learn them.

4.3 Importance of Social Constructivism

Constructivism is a school of thought which states that learners construct most of what they learn and understand through internal interpretation and external contexts (Bruning, et al., 2004). Theories that span from constructivism specifically examine the process by which students construct their knowledge (Schunk, 2012). The main assumptions in constructivist thinking are that the interactions between an individual and their situation spur the acquisition and refining of skills (Cobb & Bowers, 1999). This contrasts the conditioning theory from behaviourist psychology that states that learning is a response to external stimulation, as well as the cognitive theory of learning that focuses on the processes of the mind to create and store meaning as knowledge. Constructivism instead suggests that learning happens in context, not as a response to the environment, nor only in the mind (Schunk, 2012). This approach is similar to social cognitive perspectives, which consider concepts such as imitation to be paramount to learning. The similarity lies in the perception that people, their behaviours, and their environment are all reciprocal and work together to facilitate learning (Bandura, 1997, as cited in Schunk, 2012).

Constructivist learning theories regard individuals as active learners that develop and learn specifically for themselves (Geary, 1995, as cited in Schunk, 2012). While constructivist learning theories place the emphasis on the reciprocal relationship between internal factors and external contexts, there remain many more theories that express the importance of social interaction on learning and development (Bredo, 1997, as cited in Schunk, 2012). These interactions can be between peers, teachers, parents, or any other social relationship present in the learner's daily life. According to this theory, teachers should not teach in traditional ways, but should create situations where students become actively involved with the course content. This can be done through the manipulation and use of course materials and interaction between peers; by observing individual and group evidence of interest; by collecting data and feedback from learners improvement and experience; by generating and testing hypotheses with learners; creating collaborative working tasks and environments; taking visits outside of the classroom; and cooperating together with different subject teachers to plan the curriculum to be cohesive and integrated (Schunk, 2012). In this way, students are taught to be self-regulated and active learners. These attributes can be further developed by using regulative processes such as goal setting, progress tracking, encouraging going beyond basic requirements, and exploring specific interests (Bruning, et al., 2004; Gredler, 2009; Geary, 1995, as cited in Schunk, 2012).

Situated cognition is a theory worth mentioning here as well, as it works in conjunction with constructivism, stemming from the same school of thought that knowledge is created in context (Schunk, 2012). This theory posits that thinking and learning is found within physical and social contexts, giving the theory its name (cognition that is situated in physical and social context) (Anderson, et al., 1996; Cobb & Bowers, 1999). The principle of situated cognition considers learning to occur within the relationship between an individual and their situation, not only in the mind. Multidisciplinary research shows that information processing theories, such as those found in cognitive schools of thought, are limiting in their perception of learning as thinking appears to be related to the context in which the thinking is done (Cobb & Bowers, 1999; Derry, 1996). This concept is highly significant to the field of adventure education, as participants in adventure activities are placed in a unique situation which is often quite different from their everyday lives. In this situation new knowledge can be created (Beames, et al., 2012).

It would be impossible to discuss constructivism without also considering the pioneers of the field: Piaget and Vygotsky. Piaget was a psychologist who was deeply interested in the development of children, conducting in-depth research into the cognitive mechanisms that make up the developmental process from infancy to adolescence (Schunk, 2012). Throughout his extensive research, he uncovered several mechanisms of learning that have become foundational to developmental and educational research. Firstly, Piaget discovered the learning only occurs in a state of cognitive conflict or disequilibrium, in which a learner is then spurred into action to seek answers that can remedy the conflict and find balance. He proposed that learning takes place within regular interactions with the social and physical world surrounding the learner and found that children, when learning, impose their own understanding onto the world around them using input from the knowledge they already have (Jarvis, 2010). This process is not inborn, but rather a cycle of learning, questioning, and seeking answers within the context of the learning.

ing environment (Schunk, 2012). These findings of Piaget's have a marked implication for instruction, suggesting that for educators to promote learning, they must create incongruity and insight cognitive conflict. This mirrors the process of harnessing curiosity, which is discussed in the following section, further suggesting that creating incongruity and conflict are essential to successful learning (Beames, et al., 2012). While this may sound counterintuitive to learning, there are countless studies that support this finding (Arnone, 2003; Maw & Maw, 1970; Bergsteiner, et al., 2010; Akella, 2010) and it is a concept that plays a very important role in adventure education, as will be discussed further in the experiential learning section of the next chapter.

Vygotsky is another important name is constructivism, developing his own branch of which he dubbed social constructivism (Schunk, 2012). This theory puts the emphasis on social and cultural environments on learning and development, as opposed to happening only in the mind (Tudge & Scrimsher, 2003). In social constructivism, it is believed that learning does not occur in isolation, social interaction is critical, and knowledge is co-constructed between two or more people. Self-regulation is developed through the internalization of actions and mental processes that come about in social interactions (Gredler, 2009). This suggests that human development takes place through the transmission of cultural tools, such as language and symbols, with language being the most critical tool (Meece & Daniels, 2008). Through his research, Vygotsky developed the Zone of Proximal Development (ZPD), which seeks to explain the difference in a learner's ability to learn (Mahn & John-Steiner, 2012). At the centre of development in the ZPD lies what skills a student is capable of learning on their own, which expands into the next stage what a student is capable of learning with guidance, finally ending with what a student is not yet capable of reaching (see: fig. 3).



Fig. 3: Vygotsky's Zone of Proximal Development (ZPD)

This theory takes account of learner differences and highlights guidance and collective activity as a method of successful learning and teaching. Learning through the ZPD works best when more knowledgeable people work together with less knowledgeable people to accomplish a task. This can be seen in action in apprenticeships, where an apprentice works together with a more experienced master to complete the common task of work (Schunk, 2012). Teaching using the ZPD uses functions of self-regulation to keep track of progress, such as planning, checking in, and evaluating along the way. This method can also transfer self-regulating tools to the student, making the student an active participator in their learning.

Instructional scaffolding is a method of teaching that has developed from Vygotsky's theory of social constructivism and the ZPD, using participative guidance to aid learner's acquisition of skills and knowledge (Bruning, et al., 2004). This involves instructors controlling elements just beyond the student's capabilities to encourage successful development that can surpass their current ability (Pianta & Hamre, 2005, as cited in Schunk, 2012). When a learner becomes more and more competent, their teacher's guidance and close participation slowly decreases and the instructional scaffolding is slowly removed (Campione, et al., 1984, as cited in Schunk, 2012). This concept is closely related to adventure education and other adventure practice, as guides and instructors begin by working very closely with their customers or clients, ensuring safety

and acquisition of good practice. Slowly, as their customers become more skilled at the adventure tasks at hand, less direct guidance is required.

The theory of social constructivism is a leading tool in adventure education, with the processes of regulation and scaffolding being paramount to successful learning in an adventure environment (Beames, et al., 2012). As explored in the previous section, curiosity is a driving force in learner motivation and participation, and can be compounded in an outdoor environment, but outdoor and adventure settings can also increase stress and distractibility in participants (Bentsen, et al., 2009). This can be mediated through the participative guidance suggested in Vygotsky's theories, as well as through proper planning and regular checking in, staying informed about participant performance, attitude, and experience, and giving the participants a sense of security (Jarvis, 2010). Despite the clear utility of Vygotsky's theories, it's important to note the limitations that exist within. Research has shown that children are able to cognitively solve problems before being influenced by their surroundings and culture (Bereiter, 1994), with further research discovering that some individuals seem more biologically predisposed to some abilities (Geary, 1995, as cited in Schunk, 2012). As well as this, Vygotsky is often discussed aside from his own theories with concepts such as scaffolding which did not originate from Vygotsky's original writings (Schunk, 2012). With few translations and most of his work lost, it can be quite hard to know what theory truly originates from Vygotsky, but nonetheless the impact of his work on education and instruction cannot be understated. In this thesis project, we built our analysis of Xwander Nordic's education providing ability on these concepts of scaffolding, participative guidance, and as well as the shared regulative and maintenance processes from behavioural and cognitive theory. These principles boiled down to goal setting, progress tracking, review, feedback, and practice.

5 LEARNING THEORY IN ADVENTURE PRACTICE

The role that the outdoors plays in education has been explored at great depth, with many educators discovering that venturing outside has a positive impact on curiosity and engagement (Schunk, 2012). The outdoors and learning outside of the classroom remain a widely discussed topic in the industry of education, with the importance of environmental variance being of particular interest in the modern digital age (Louv, 2008). In the last section of this thesis, the principles of practice, feedback, review, and motivation were examined as components of delivering education. We saw that motivation, a key factor of success in learning, can be enhanced through goal setting and harnessing curiosity. In this section, we examine the concept of curiosity and how it ties into learner interest and participation and assess the significance of outdoor activity in harnessing curiosity. Time spent outdoors has been seen to have a positive impact on curiosity in student, as well as improving interpersonal skills, ecological understanding, sustainability, and respect, enhancing the human relationship to nature (Beames, et. al., 2012). Furthermore, research has discovered that outdoor learning provides a realistic environment for students to practice and improve decision-making skills and action-oriented participation (Orr, 1992, as cited in Beames, et al., 2012). These principles are paramount to the topic of adventure education, as typically adventure programming is designed to take place out of doors.

The main question this chapter is interested in answering is, how do outdoor environments affect education? The answer to this question is vast and supported by countless empirical studies, all of which will be expanded on further in the chapter. This section goes on to explore the two main educational theories employed in outdoor education: experiential learning and the transfer of learning. These three principles are considered fundamental in delivering outdoor and adventure education, first by describing the purposes, tools, and methods of adventure-based education, and then by exploring how the skills learned in adventure-based activity can be transferred to daily life and other learning environments (Jarvis, 2010; Beames, et. al., 2012). These principles are directly relevant to this thesis's over-arching project, understanding how Xwander Nordic can deliver educational products to their customers. Linking theory to practice regarding relevance, current utility, and prospective potential goes on to form the foundation of our analysis of Xwander Nordic and their desire to provide educational experiences using their adventure programs.

5.1 The Outdoors, Learning, and Curiosity

In today's world it has been seen that the frequency, duration, and quality of young people's outdoor experiences mostly decreased around the world, particularly suffering in societies where residence in cities and dependence on technology is seen in higher rates (Louv, 2008). Not spending time outside has been shown to have significant negative health and wellbeing consequences. This is due to a variety of factors, some of which include fresh air (Sadrizadeh, et. al., 2022), physical activity (Larsson, et al., 2011), mental stimulation (Beames, et al., 2012), and mood (Ibes & Forestell, 2022). It has been seen through research that spending time outdoors increases physical activity, personal and social development, environmental education, and skills in adventure activities (Larsson, et al., 2011). Research also shows that outdoor activity increases motivation and engagement (Mann, et al., 2023), and improves attention, behavior, and learning outcomes for students with various disabilities (Szczytko, et al., 2018). These days, as our relationship and dependence on technology develops and social isolation increases (Mesman, et al., 2012), these attributes become instrumental to ensuring wellbeing across social domains. It has also been found that the relationship between individuals and the planet is improved through time spent outdoors (Sobel, 2008). This suggests that education in outdoor spaces promotes ecological sustainability, environmental understanding, and practice in harmony with nature for students and teachers.

The term "udeskole" ("out of school" in English) was developed in Denmark as the practice of involving a school's natural surroundings and cultural settings as extensions of the classroom (Bentsen, et al., 2009). This can include visiting museums, local businesses, parks, factories, and churches as a part of a regular school curriculum. As matters of public health, wellbeing, and education begin to take precedence in the global consciousness, governments and schoolboards are starting to take a vested interest in increasing outdoor learning opportunities similar to "udeskole" (Beames, et al., 2012). Higgins and Nicol (2002) compiled methods of outdoor learning and developed a rubric of outdoor learning in school environments, discovering a positive correlation between adventure activity in school programs and increased social and personal skills. Beames, Higgins and Nicol (2012) expanded on these findings, highlighting four different zones of outdoor learning (see: fig. 2). Within these four zones are learning spaces found on school grounds, in the school's local area, in areas farther from the school, and areas stayed in overnight. Each of these zones were discovered to have differing benefits for learning,

with potential risks to learning being highlighted as topics for consideration for educators aiming to provide variance in learning spaces, particularly during longer expeditions. Risk assessment is important in adventure education, as there is always an element of real or perceived risk in adventure practice (Becker, et al., 2018; Goldenberg, 2001). This component of outdoor education will be expanded alongside experiential learning theory in the next section of this chapter.



Fig. 2. Four Zones of Outdoor Learning (Beames, Higgins & Nicol, 2012)

As a result of Beames, Higgins and Nicol's research into outdoor learning, it has been shown that well-planned use of outdoor activities can offer multi-disciplinary learning opportunities in realistic environments (Beames, et al., 2012). Outdoor learning may be different, but it works as being complementary to indoor learning. Outdoor learning can build decision-making and action-oriented participation, and cross-curricular integration of outdoor learning can promote retention of knowledge and transfer of skills across subjects (Orr, 1992, as cited in Beames, et al., 2012). Outdoor learning can also insight curiosity in learners. Curiosity is observed when a learner reacts in a positive way to exposure of new things, showing a desire or need to know about these things, and showing sign of scanning their surroundings with a persistence in examination (Maw & Maw, 1970). Arnone (2003) stated that instilling curiosity in students is about encouraging their innate disposition to learn, providing, and developing physical space where curiosity can grow, using curiosity creating elements in teaching to encourage further

exploration. Elements that create curiosity include incongruity, uncertainty, and conflict (Beames, et al., 2012). The key to allowing curiosity to grow is by fostering an environment where enquiring, investigating, and questioning is the norm, which in turn gives learners the power to control a large part of their own learning. This concept can be likened to that of the learner-centred approach by Carl Rogers, once again teaching a learner how to learn, but in this case by harnessing a learner's curiosity. Arnone goes on to state that when the curious mind is active, the learner can do a lot of the teacher's job by focusing on the specific learning content that most captures their interest. Orr (1992; 2004, as cited in Beames, et al., 2012) pointed out as well that an over-emphasis on indoor learning can lead to a learner suppressing the feelings from which respect, curiosity, wonder, and awe for the world beyond the classroom grow, leading to a lack of interest, participation, and possible aversion to learning. Conflict and uncertainty can be constructed by instructors using mediated risks and problem-solving approaches (Becker, et al., 2018).

5.2 Experiential Learning Theory

The concept of learning by doing is a major part of adventure education, as much of the learning that takes place through adventure practice is experiential. John Dewey explained experiential learning based on three assumptions: people learn best when they are personally involved in the experience; knowledge must be discovered by the individual for it to have significance or lead to a change in their behavior; and a person's commitment to learning is highest when allowed to set their own goals and actively pursue them (Ord, 2012). Kolb (1984) further developed the theory of experiential learning by building on Dewey's assumptions, as well as the theories belonging to Piaget, Rogers, and Maslow (Akella, 2010). Kolb's experiential learning theory suggests that learning is a process, much like Piaget's theory of cognitive development, is a shared dialectic process, like Rogers' theory of learning, and shares Maslow's humanist concept that humans have a natural ability and drive to learn. He also believed learning was derived from experience as a holistic and integrative process with results in knowledge creation (Kolb, 1984, as cited in Akella, 2010). Like social constructivism, experiential learning suggests learning occurs through an interplay between an individual and their environment. This happens through a cycle characterized by three experiential stages: concrete experience, where a learner is actively experiencing an activity; reflective observation, where a learner is actively reflecting on their experience; and abstract conceptualization, where a learner is shown or is

trying to understand a theory or model of reflection (Akella, 2010). According to this learning cycle, learning is a process that involves constantly adapting to, and engaging with, the learning environment. This suggests that individuals create knowledge from their experiences rather than purely from instruction (Bergsteiner, et al., 2010). This theory is fundamental to adventure education, as learning in adventure activities occurs through the experience of the activity and is integrated through reflection, often occurring as a group at the closing of the activity. The components of experiential learning created the foundation on which we created our inquiry into Xwander Nordic's adventure practices and their educational aspect.

In Kolb's experiential learning theory, conflicts, disagreements, and differences drive the learning process as learners move between action, reflection, feeling, and thinking. Different learning styles can highlight learning preferences within a group of learners, which can change in various settings (Akella, 2010). Learning, then, is a holistic process that results from co-operative interactions between individuals and their environment, with individuals making their own choices about which parts of the environment they will engage with (Kolb & Kolb, 2009, as cited in Bergsteiner, et al., 2010). This is significant to the way Xwander Nordic conducts their activities, as customer groups can be a mix of different people carrying differing opinions, however instructors often mitigate any conflicts that arise to ensure a safe environment to conduct adventure. Nevertheless, adventure practice is inherently co-operative and group-based, with a strong emphasis on interaction with one's environment, making this theory paramount in the delivery of adventure education. The assumptions put forth by Dewey and Kolb in experiential learning determine a major difference between providing a purely adventure experience and providing adventure education.

5.3 The Transfer of Learning

Transfer in learning refers to the extended application of skills acquired in one environment to another (Schunk, 2012). For example, social skills learned in a camp setting can be transferred to social interactions in everyday life. This component of learning is important in the application of adventure as education as it isn't always immediately clear how the skills learned in an adventure setting can be applied to daily life. This may be one of the leading critiques in the application of adventure education in standard school curricula (Beames, et al., 2012), leading

to scepticism in the integration of adventure practice as education. However, upon further examination, the goals of transfer theory in learning align clearly with those of adventure education and conventional in-class education: promoting life-long learning, increasing long-term information retention, emphasizing the co-relatedness of skills, practicing skills in different contexts, and using homework as a mechanism of transfer (Anderson, et al., 1996). Transfer of learning does not only occur from current practice to future practice, but also calls for the retrieval of prior knowledge for use in new learning situations, making this principle fantastic for encouraging repetition and increasing skill and knowledge retention across disciplines (Schunk, 2012). This can be widely useful with multi-disciplinary cooperation and can aid in blending subjects together (Beames, et al., 2012). For example, natural science theory can be taught inclass and then brought into practice in an outdoor environment as students can interact firsthand with nature. This promotes the transfer of knowledge from theoretical to practical and further teaching of related hard skills (i.e., gardening) can increase transfer into daily life.

The true value of any learning experience is how it benefits the learner in the future. The theory of transfer in education aims to increase long-term benefits, utility, and retention of knowledge and skills in a learner (Jarvis, 2010). The main goal of transfer in learning is to introduce the mechanism of retrieval and application of previously gained knowledge and skills to new, per-haps seemingly unrelated experiences. Gass (1985) describes transfer as being enhanced by follow-up experiences after the main learning event. Studies that have examined the efficacy of transfer in reducing delinquent behaviour in young people found that without follow-ups to promote transfer, no reduction in behaviour was seen. This supports the importance of the promotion transfer for long-term changes in behaviour. Gass (1999) developed a learning process model with an emphasis on transfer of learning aligning the goals of a learning experience with a learner's personal needs, establishing learning objectives, and providing evaluation and follow-up after the experience's conclusion.

5.4 From Theory to Practice

Following all this theory, what can we conclude about adventure education? From early behaviourist science, we learned that learning can be observed as a change in behaviour over time (Schunk, 2012). From cognitive science, we established that most learning activity takes place in the mind of the student, emphasizing the importance of repetition and evaluation. From constructivist approaches, we discovered that learning takes place in context and is enhanced through social interaction and cooperation (Tudge & Skrimsher, 2008). Through experiential learning theory, we saw that learning can occur directly through experience and is enhanced through reflection (Akella, 2010). From transfer theory, we understand that adventure education programs must plan for transfer (Gass, 1985). From these various theories of education, we can conclude that what separates adventure from adventure education is the application of practice and reflection, creating and mediating context and social interaction, and following a process that promotes transfer. This can be done through means of identifying the needs of each participant or student, identifying the goals of the program, matching a student's needs to the program's goals, planning, and carrying out activities that emphasize important skills and strategies, offering a connection between past, present, and future learning, and providing follow-up experiences after the initial experience has concluded (Gass, 1999). Adventure education sets itself apart through reciprocal teaching, involving an interactive dialogue between students and teachers, developing strategies around regular student behaviour, peer collaboration and collective activity (Schunk, 2012). It has been seen that reciprocal teaching is most effective when each student is given responsibility, and all students must show competence before the whole group may progress (Slavin, 1995). Peer groups and cooperative learning have been shown to increase learning and are often used in academic environments to promote learning (Geary, 1995, as cited in Schunk, 2012). Social environments impact learning and positive social interactions are key to positive learning experiences (Meece & Daniels, 2008).

We can conclude from all this that education has a place for adventure and outdoor activity and can be, in fact, ideal settings for learning to take place. The important part of delivery of education in adventure is the application of education principles that set apart pure adventure and adventure education. Extrapolating from each learning theory, we can establish the common implications for instruction and identify these principles as practice, feedback, reflection, goal setting, and transfer. These principles make up the repository for our further understanding and application of adventure education and form the basis of our analysis into Xwander Nordic and their delivery of adventure education. These five principles informed the interview questions designed for our research.

5.5 Sustainability in Education

Although it is not a focus of this thesis, it became clear from our review that another important element of outdoor education is the regard of environmental sustainability. There has been growing concern for environmental and human communities which has created interest in emphasizing the importance of education for sustainable development, topics which were addressed at the UNCED Earth Summit (Sand, 1992). This conference indicated the importance of context (curriculum) and approach (pedagogy) for education for sustainable development (Beames, et al., 2012). Since then, there has been growing advocacy for education outdoors and countless research has been conducted to evidence this. Learning outdoors provides direct sensory/physical, intellectual, and affective interaction with nature (Martens, et al., 2020). Outdoor education offers the opportunity for concept and understanding of sustainable development to be fully integrated (Martin, 2008; Higgins, 2009). Students can learn to practice sustainable development through interaction with the earth and through understanding and respect of the earth's value and utility (McKeown, et al., 2002). However, the earth and the environment need to be valued and respected for more than how useful they are to us.

Humans and the earth belong to a system, harming any part of the system harms us and our earth (Suzuki, 1997, as cited in Beames, et al., 2012). Sterling (2001) coined "sustainable education" which he believes all school curricula should deal with. Society as we know it today is more industrialized and urbanized than ever before, leading to more children and therefore more adults who have limited exposure to nature and the outdoors (Louv, 2008). This has the potential to further increase the burden of poor sustainable development practices. There is evidence to suggest that early life experience in the outdoors has a marked impact on developing ethical treatment of the planet and increased care for the environment (Palmer & Suggate, 1996). Regardless, however, of early experiences, research shows that the more time humans spend outdoors at any point of their life influences their understanding and ethical responsibility regarding sustainable environmental practice (Beames, et al., 2012). These are all evidence to the further place and importance of adventure education and fuel the purpose of aiding Xwander Nordic in providing and delivering adventure education.

6 EVALUATING XWANDER NORDIC

6.1 In Research

After exploring all these theories of learning, we established a foundation by which to understand what separates adventure and adventure education. Narrowing down what we have learned from each school of thought, we determined which instructional principles are important in differentiating adventure from adventure education. These instructional principles are practice, feedback, reflection, goal setting, and transfer (Rosenshine & Stevens, 1986; Akella, 2010; Bruning, et al., 2004; Gredler, 2009; Gass, 1999). We can see these principles echoed through each education theory explored in the prior chapters, with the most prevalent common principles being feedback, reflection, and goal setting. In the context of adventure and outdoor education, the need and necessity for transfer becomes clear, as it is often asked how learning obtained in an adventure setting can be applied in everyday life (Gass, 1985). The concept of transfer is especially important in the case of Xwander Nordic and their desire to promote adventure education activities. Understanding and applying transfer principles is key to Xwander Nordic's ability to successfully provide and promote adventure education programs for all ages.

Using these five principles of adventure education, we set out to assess Xwander Nordic's current application and potential for delivering adventure education. Our initial interest was to carry out quantitative measures, such as a questionnaire using a Likert scale or similar quantifiable scale, to extrapolate from numeric values and identify trends in the data. However, after creating a questionnaire that contained questions alluding to each of the five instructional principles, we began to realize that there was a danger of questions and terms being misinterpreted or misunderstood, which could potentially falsify our data. Instead, we opted to create and conduct interviews with Xwander Nordic's guides so that we could provide the space for ensuring understanding of terms and principles. Interview questions were designed for adventure guides who are responsible for handling and running adventure programs with customer groups (appendix 1). A separate set of questions was created for the head of Xwander Nordic (appendix 2), specifically interested in exploring the goals and ambitions of the company, as well as the willingness to adopt training programs for staff if needed.

6.2 In Implementation

Five of the seven guides at Xwander Nordic actively participated in these interviews. Their background in leading adventure-based activities made them ideal candidates for sharing insights into the company's readiness to venture further into education. Initially, we made a slight misstep by conducting interviews with two guides simultaneously. However, this approach proved to be less effective, as it led to both guides not actively participating in the conversation. One guide often dominated the discussion, leaving little room for the other to contribute. To overcome this issue, we shifted to one-on-one interviews, allowing each guide to express their thoughts and experiences without any distractions. This adjustment allowed for more comprehensive responses and a deeper understanding of their perspectives.

The interviews were conducted in a structured manner, face-to-face, primarily following a set of prepared questions. These questions were strategically designed to explore the guides' experiences with adventure education and assess their awareness of educational principles in practice. We encouraged the guides to share their thoughts and experiences related to adventure education. Throughout the interviews, we also addressed specific questions related to the application of adventure education principles within Xwander Nordic's activities. We inquired about their understanding of goal setting, reflection, and the transfer of learning. Additionally, we explored their opinions regarding the integration of education into the adventure programs provided by Xwander Nordic

The interviews were recorded with the interviewees' permission to ensure no information was missed, and for the purpose of later review. Maintaining a clear structure was occasionally difficult because the format was somewhat flexible, with open-ended questions. Despite this, our approach resulted in more comprehensive responses and a deeper understanding of individual perspectives. Additionally, each interview was conducted in Finnish and translated to English for use in this thesis, a process which was challenging due to accurately translating Finnish to English without losing any important pieces of information. To avoid this issue in the future, we intend to conduct the interviews in English where it is possible and comfortable for the interviewees, even though common language between us would be Finnish. That way direct quotes could be referred to and everyone involved in the project could understand the content without the need to translate.

6.3 Data Analysis

The interviews conducted with both the guides and the head of Xwander Nordic provided us with significant qualitative data, enabling us to evaluate the current readiness of acting employees to deliver education-based adventure programs, as well as the company's future potential to offer educational experiences within their existing and prospective adventure programs. The findings from these interviews played a vital role in assessing how adventure education could be further integrated into Xwander Nordic's offerings and their desired future products. To analyse the extensive data gathered from these findings, we used content analysis and discourse analysis, using the manuscripts from each recorded interview. Content analysis is about analysing the reoccurring terms from the text. Content analysis was used to identify trends in words used and themes of discussion which related to our five main educational principles. We also used content analysis to examine Xwander Nordic's website, their current offerings, and the way they are promoted on their platform. This analysis of website material was used to create a base to compare results and findings from interviews and correlate our discourse analysis findings. With discourse analysis in this case, we mean the interviews and how we analysed them. Some examples of key terms and trends focused on during content analysis include "school," "skills," "learning," "transfer," "reflection," "feedback," "reflection," "review," "transfer," "follow up." We used these key terms to assess the current availability of education products already promoted on Xwander Nordic's website, and the responses of interviewees.

Our mission with the data was to analyse it based on the question of whether Xwander Nordic is ready to provide educational adventure programs with the resources they have. We searched from Xwander Nordic's website if there are any signs of using educational approach with any of their activities using key terms. Along with discourse analysis we analysed the interviews with the guides and the head of Xwander Nordic. We analysed based on the interviews what the knowledge of the guides is regarding adventure education and whether they practice the theories in any way. Through these analyses we determined whether Xwander Nordic currently provides educational experiences, which principles were already employed by employees, and which principles required further development to deliver adventure education.

7 RESULTS & FINDINGS

7.1 Education in Xwander Nordic

We found that Xwander Nordic currently delivers a wide variety of activity programs, many of which are already educational in nature. Xwander Nordic's activity programs include visits to cultural sites and guide interactions with local communities, providing insights into the history and traditions of the regions they operate in. This offers participants with a deeper understanding of the local culture, and education into different cultural experiences. We can find the educational value of Vygotsky's social constructivism in these activities, as learning takes place within cultural and social interaction. Xwander Nordic emphasizes responsible and sustainable tourism practices, providing workshops based around wilderness and survival skills and foraging, improving the human-nature connection, teaching valuable skills that show responsible use of nature, and the importance of preserving natural landscapes for future generations. These outdoor activities are guided by practice, feedback, and reflection, allowing the customers to train each skill themselves. Activities like hiking, skiing, or pack rafting are also currently provided by Xwander Nordic. These activities often expose participants to technical and physical skills, which can be delivered by Xwander Nordic for different skill levels. Xwander may provide information about local ecosystems, wildlife behaviour, and conservation efforts, and operates wilderness excursions with a Leave No Trace (LNT, 2021) approach, educating their customers about the principles of protecting nature.

Depending on the activity, Xwander Nordic's programs teach participants essential outdoor skills like navigation, wilderness survival, or photography, enhancing their outdoor expertise and confidence. Engaging in outdoor activities fosters physical fitness and encourages a healthy lifestyle, highlighting the importance of regular exercise and nature's positive impact on mental well-being (Larsson, et al., 2011; Beames, et al., 2012). Some Xwander Nordic activities are designed to promote teamwork, communication, and leadership skills, as participants work together to accomplish shared goals. Xwander Nordic's activities may involve certain risks, and participants may learn about adventure safety, risk management, and how to make informed decisions in challenging situations. Xwander Nordic's tours may involve interaction with people from different backgrounds, fostering cultural understanding and promoting intercultural

communication. Depending on the destination, Xwander Nordic provides educational insights into geographical features, geological history, and the natural wonders of the region.

7.2 Results from Data

We conducted interviews with five Xwander Nordic guides and the owner to determine the company's readiness to offer adventure educational programs. The primary question was whether the guides already possess the necessary skills, or if additional training is required. In the responses to the interview questions of the Xwander Nordic guides, it became evident that they have established some foundational elements for conducting educational activities, despite needing further instruction to clarify their goals. They unconsciously incorporate adventure educational perspectives into their activities. One of the interviewees provides a specific example of customers acquiring outdoor skills such as fire-making and navigation. This demonstrates the guides' ability to facilitate skill development and learning. Another guide emphasizes the satisfaction derived from customers acquiring seemingly simple outdoor skills, highlighting the value of experiential learning in adventure activities. Another guide expresses a keen interest in educating people and monitoring their learning progress, especially during structured courses, which aligns with effective educational practices. Additionally, one interviewee acknowledges the importance of setting goals for multi-day activities, highlighting a structured approach to skill development and learning. This individual also recalls addressing a specific challenge related to slippery boots and guiding customers to navigate safely, demonstrating problem-solving skills.

In the context of adventure education, reflection before and after the activity is crucial. While the guides engage in self-reflection after the activity days, customer reflection often gets neglected or forgotten. However, two of the guides actively engage in self-reflection after activities to identify areas for improvement and ensure future success. On the other hand, the third interviewee underlines the importance of post-activity reports for self-reflection and evaluation. The interviewees collectively emphasize a positive approach to guiding customers and continuous skill improvement. One interviewee provides constructive tips for skill improvement, reflecting a positive approach towards guiding customers. The second interviewee offers positive feedback in teaching situations, with a focus on encouraging customer progress and product improvement. The third interviewee acknowledges that providing feedback is more relevant for beginners but still values customers' feedback on his performance. It's worth noting that none of the respondents explicitly mentioned knowledge of formal learning or adventure education theories. Although it was mentioned by one interviewee, goal setting did not appear to be a common element employed with customer groups during different activities. Importantly, planning for transfer was not clearly seen in any responses, although the guides did seem to naturally have a relational perspective in their instructing that can serve as a great beginning to understanding and using transfer theory. These lacking principles provide an area for potential further development in their practice. While knowing these theories by name may not be essential, understanding different educational concepts and their application can significantly enhance their teaching methods. Therefore, we would recommend organizing a training day for the guides to help them gain a deeper understanding of various learning theory ideas and how to apply them effectively in their work. Overall, the interviewees appear well-prepared and motivated to offer adventure education activities. They emphasize skill development, positive experiences, and fostering a continued passion for the outdoors among their customers.

When interviewing the owner, we got an idea whether the company is ready to offer adventure educational programs and whether the owner is ready to invest in it. Based on the interview responses provided, the interviewee seems to have a willingness to incorporate adventure educational programs into Xwander Nordic. It was brought up in the interview that Xwander Nordic offers both adventure and educational programs. On top of the weekly adventure activities, they also offer different courses like first aid, travel industry safety passport, white water rescue, summer and winter bushcraft, ice safety, snow safety and avalanche safety courses. These existing educational products suggests a readiness to integrate adventure education into their existing first. The interviewee expresses a readiness to invest in additional training and development for staff to enhance their educational and adventure facilitation skills. This commitment to staff development aligns with the readiness for implementing adventure education.

In conclusion, the interviewee's responses indicate a readiness to incorporate adventure educational programs into Xwander Nordic's offerings, with plans for collaboration, staff training, and marketing to a broader audience. However, more specific details on their long-term vision for adventure education would provide a clearer picture of their commitment to this endeavour. Regarding staff readiness, it appears that they are not fully prepared to commence offering adventure educational programs, although they do have some foundational elements in place. To bridge this readiness gap, we recommend providing additional training for the staff. Furthermore, initiating partnerships with youth centres or other educational institutions can be an excellent way to gain practical experience and first-hand knowledge about adventure education. With such experience, staff members can boost their confidence and become well-equipped to deliver adventure educational programs in the future.

7.3 Next Steps for Xwander Nordic

Based on the interview questions and what we found out, we created a summary about what to do next. We suggest the next steps for Xwander Nordic to be able to offer adventure educational programs:

Staff training: Provide adventure education training for guides. The guides in Xwander Nordic have already technical skills, so the training should concentrate on educational methods, group dynamics, and safety measures specific to adventure education. Include learning theories in the training. While it's not essential to know the theories by name, understanding different educational theories, such as in experiential learning or constructivism, can help in designing more effective adventure education programs. Consider staff training days to explore these theories and their practical application.

Feedback, Goal Setting, Reflection, Transfer: Encourage guides and participants to engage in reflection before and after activities. Develop a system for feedback collection and analysis to continually improve the educational quality of the programs. Gather data on what kind of feedback customer groups may hope for and/or benefit from in different activities. Have guides open a dialogue with customers about their own personal goals before the activity and refer to these in reflection. Create a method of planning for transfer. This is a very important step to deliver adventure education. Guides can actively engage customers by relating hard skills to soft skills and relating knowledge gained during outdoor practice to everyday scenarios where they may also come in handy.

Outdoor Education Courses: Develop or partner with educational institutions to offer outdoor education courses or certifications that align with adventure education principles. This can attract individuals seeking educational experiences.

Collaborate with Educational Centres: Partner with schools, colleges, and youth centres (for example: Vasatokka, a youth centre also based in the area) to develop tailored adventure education programs. Collaborating with these institutions can help reach a broader audience and provide structured educational content.

Marketing Strategy: Develop a marketing strategy specifically targeting adventure education programs. Introduce the theory and highlight the educational benefits, including personal growth, problem-solving skills, and environmental awareness. This can diversify customer groups as people who might not otherwise have an interest in adventure may still be compelled to join based on the educational aspect and potential benefits gained.

Diversify Offerings: Offer a range of adventure education programs tailored to different age groups and interests. This can include programs for schools, youth groups, and adult learners. Summertime offerings can improve year-round function of the business and provides access to younger groups who are otherwise in school the rest of the year.

By taking these steps, Xwander Nordic can better position itself to offer adventure education programs that provide both adventures for visiting tourists and valuable educational experiences to participants.

8 CONCLUSION

Our main goal with this project was to explore the application of learning theories in adventure education and to explain the difference between adventure and adventure education. We aimed to investigate how the company, Xwander Nordic, could incorporate adventure education into their existing adventure programs. To begin, we needed to assess the capabilities and knowledge base of Xwander Nordic's guides regarding adventure education. Our objective was to determine whether they were ready to provide adventure educational programs or if they required assistance in implementation. To achieve this, we conducted two interviews: the first with the guides and the second with the head of Xwander Nordic. The first interview aimed to evaluate the guides' skill levels, while the second interview was intended to uncover opportunities and possibilities within the company. As a result of these interviews, we determined that the guides possessed strong practical skills but lacked sufficient information and knowledge about adventure education. The company's leadership expressed a willingness to invest in training and education for the guides to enable them to offer adventure education programs. They also expressed readiness to collaborate with youth centres to acquire additional knowledge and experience.

This thesis serves as a foundational resource for any other company planning to integrate adventure education into their existing adventure programs.

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APPENDICES

Appendix 1.

Interview questions for the adventure guides in Xwander Nordic:

Do you set goals for the customers? What kind of goals? Did it lead to significant learning experience or skill development?

Can you describe a situation where you observed a customer's learning experience or skill development? Personal growth and transformation?

Do you track the learning progress from your customers?

Have you ever encountered challenges in helping customers overcome their limitations or fears in outdoor activities, and how did you address them?

Do you give feedback for the customers about their doing? What kind of feedback?

Do you reflect on what happens during your workday?

How often do you reflect/discuss with your customers during your activity?

Do you know any learning/adventure education theories? (Group based, active, learning by doing, experiential, etc.)

What kind of skills do you teach? For example, technical, communication, teamwork, social, individual, safe decision-making and conflict resolution.

Questions targeted at discovering the usage of adventure education theories:

Transfer effect: Is one of your goals in activities that your customers learn new skills what they can use later on in their lives? Any examples? Navigation skills, knot tying, risk management, wilderness survival...

Experiential learning: Do you teach some skills that help customers gain concrete skills in the activities? Do you talk about their experience with them?

Vygotsky: the zone of proximal development: Do you ask the customers their prior skills and capabilities that they need in the activity? Do you help and guide them towards learning?

Vygotsky: the zone of proximal capability: Do you delegate responsibility to your customer if they have the skills already needed for the activity? Do you let them assist and mentor the less experienced customers?

How do you motivate your customers? Is it an important factor to you?

Do you consider yourself an educator? What ways? Why not?

In what ways do you encourage continued passion for outdoor activities among your customers?

Appendix 2.

Questionnaire for the Head of Xwander Nordic

Do you consider Xwander to be primarily focused on offering educational programs, adventure programs, or a combination of both?

Do you collaborate with educational institutions or organizations (like youth centers) to provide tailored programs, and if so, what types of partnerships have been successful for Xwander?

Do you consider in the hiring progress educational role, educational background? What are the key criteria or qualities you look for when hiring instructors or guides for your programs?

Why do you want to use adventure educational programming? In what way is it important?

If it is necessary, are you willing to invest in additional training and development for your staff to enhance their educational and adventure facilitation skills?

Are you interested in actively marketing adventure educational programs to a wider audience, or do you plan to offer them primarily to customers who specifically request this type of experience?

Are there specific target groups or customer segments that you aim to reach with your adventure educational programs?

Do you have a long-term vision for how the educational and adventure components of Xwander will evolve in the future?

Plans for going international?