ORIGINAL PAPER

"Immersed within the rock itself": Student experiences rock climbing in outdoor education

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Abstract

Outdoor education has a long tradition of using adventurous activities like rock climbing to achieve learning outcomes. Concepts like adventure, perceived risk, and flow have been used to justify the inclusion of these activities. However, the arguments for their inclusion have been eroded in recent decades, leading the authors of this paper to ask: How do students actually experience an activity like rock-climbing? In addition, outdoor activities/sports have often been grouped together, as if they were one activity, rather than distinct activities, that may require specific pedagogic considerations. This paper presents the findings of research into one group of secondary school students and their experiences rock climbing while on an OE camp at Mt Arapiles/ Dyurrite in Victoria, Australia. It re-tells their stories about two climbing contexts - top rope and multi pitch climbing. Data collected through interviews were used to retell the student's stories about their climbing experiences and inform our analysis of how rockclimbing practices may be modified to better suit evolving ideas within outdoor education. The study highlights the impact that guides have on student's experiences and the need for program design to be guided by intended learning outcomes. Finally, we recommend more research into students' lived experiences across the OE curriculum to develop more nuanced outdoor education programs.

Keywords Rockclimbing · Outdoor pedagogies · Outdoor program design · Top-rope climbing · Multi-pitch climbing

Introduction

The inclusion of rock climbing within outdoor education (OE) programs is one option for teachers to achieve desired learning outcomes. However, within the published literature there has been little written about how different climbing contexts are

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experienced by students, the potential learning each context offers, and the pedagogical implications of each context. Much of the literature has tended to lump outdoor activities together as though they are one thing, using terms like 'adventure education activities' (McKenzie, 2000) or 'adventure sports' (Eastabrook and Collins, 2020). Yet Kerr & Mackenzie (2012) argue that "by grouping them together, researchers … may have overlooked or over-simplified the contrasting characteristics of these types of activity or sport" (p. 650). Loynes (2020), paraphrasing Beames & Pike (2013), has noted recently that "outdoor activities are embedded in a set of values that reflect the cultural conditions of the time in which the activity was first developed and that these can persist in the rituals, technologies and symbols of the activity when they are transformed into educational experiences" (p. 138). Therefore, the purpose of this paper is to consider how the use of rockclimbing activities in outdoor education has been shaped by different climbing practices and what specific pedagogic approaches and strategies might be needed to successfully achieve desired learning outcomes.

Modern rock climbing has strong links with exploration, science, and the first ascents of the major peaks in Europe in the mid 19th Century (Williams & Donnelly, 1985). It is here where the modern ethics, or contexts of climbing began to be defined. Since then, climbing has continued to diversify (Beedie, 2014) with the addition of new forms of practice, such as sport climbing, bouldering, speed-climbing, and climbing gyms, each with their own new specific rules and norms. Once the domain of adventure specialists, rock climbing has also become democratised (Beedie, 2014) through the affordability of equipment, ease of access to information and venues, the availability of climbing instructors, and its inclusion in formal recreation (including the 2020 Olympics) and outdoor education programs. Despite the growing popularity of climbing, there is a paucity of literature that explores how rockclimbing might contribute to outdoor education. In one study, Preston (2001) used a feminist post-structuralist lens to reflect on a rockclimbing instruction experience that she led. She noted that the male participants in the mixed gender group of students tended to dominate the climbing experience making it competitive and task-oriented, which discouraged some female students from participating. Our analysis would suggest that the particular style of instruction used (top-rope, bottom belay) does increase the potential for these outcomes because of the group dynamics this particular form of climbing instruction encourages. Preston's work certainly highlights the need for outdoor educators to consider how our pedagogical choices intentionally and unintentionally shape the learning outcomes that are realised. The place of adventure in outdoor pedagogies has been the focus of much discussion in the literature.

Adventure and perceived risk persist as significant characteristics of outdoor adventure education pedagogy (Brown & Fraser, 2009). Outdoor adventure education also has historical influences that continue to impact upon student experiences. Mortlock's (1984) linkages between adventure, risk, and the outdoors claimed to provide young people with both an antidote to ailments of modern society and an alternative to less desirable values and behaviours. Csikszentmihalyi's (1975) research into flow experiences and his resultant flow theory have proved remarkably resilient. A person experiencing a flow state is said to be immersed in an activity that provides an absorbing challenge, where motivation for participation is intrinsic and deeply satisfying. These ideas have taken on almost doctrinal qualities insofar as they

appear to provide justification for the inclusion of adventure activities in education. Mortlock's stages of adventure were utilised and reframed by Priest (1991) into the 'adventure experience paradigm.' Nichols' (2000) tied the work of Mortlock (1984) and Priest (1991) together with Csikszentmihalyi and Csikszentmihalyis' (1990) ongoing research into the human experience of 'flow' to explain how an adventure experience can promote optimal arousal for peak learning. Boniface (2000) argued that an increased level of perceived risk and skill can lead students to obtain a feeling of peak experience, or peak performance, ultimately leading to expanded views of themselves associated with feelings of empowerment, self-fulfilment, sense of self, and joy. But how educationally sound are these ideas?

Critics of adventure and risk, and their deployment in education, are now well-represented in the OE literature. For example, Bell (2017) argued "Adventure has outgrown its use as a metaphor and motive for journeys into the cultural outdoors," (p. 280). The critiques have been gathering momentum over the last decade culminating in a 2017 special issue of the *Journal of Adventure Education and Outdoor Learning (JAEOL), and* a critical, re-appraisal of adventure in the book *Adventure and Society* (Beames et al., 2019), which sought to present a "scholarly, theoretical understanding of adventure practices" (p. viii). For the editors of the special JAEOL issue, "adventure education programmes that do not respond to the wider socio-cultural, ecological and geo-political circumstances in which they take place leave them educationally suspect" (Beames et al., 2017, p. 275). Wattchow & Brown (2011) argued that there is not a "sound educational justification for the use of risk as an outdoor learning strategy" (p. 105). Likewise, Brookes (2000) suggested that an excessive focus on adventure and risk places too much emphasis on individualism limiting the focus on social and cultural dimensions of outdoor education experiences. Hence, some have expressed concerns that an excessive focus on adventure can lead to narrowly focused outdoor education where the opportunity to explore the "mutual bonds of interdependence" (Wattchow & Brown, 2011, p. 179) between people and places is missed. More recently, Hill (2021) envisioned a post-activity outdoor education that "prioritises and celebrates the central role that people and place, along with accompanying histories, cultures, and stories can take in the learning process" (p. 24).

However, there are others who argue for the place of adventure in educational settings. Kirk (2021) cites empirical research and draws on personal experience to argue that "Adventure is in fact a necessity for everyone; we all need it in our lives to truly reach our potential and optimal wellbeing" (p. 37). Thomas (2005) attempted to find a middle ground on the issue of adventure and risk arguing that with careful facilitation and intentional program design it might be possible for students to participate in adventurous activities and still learn about the natural and cultural history of places. Prins & Wattchow (2020) and Mullins (2021) drew on the work of Ingold to challenge outdoor educators to move beyond 'either/or' thinking when it comes to adventure and place in outdoor education. They suggested that if outdoor educators help participants to develop 'skilfulness' in an activity then this can potentially lead to a deeper connection with environments. Prins and Wattchow explain:

> to be enskiled is to be skilful and knowledgeable at a particular thing in a particular setting. It refers to the deep practical know-how that skilled people seem

to possess in relation to their occupation and location. Enskilment then is the process of becoming enskiled. (p. 82)

Some adventurous activities do require students to engage more deeply, to pay closer attention, and to start the process of enskilment by spending time dwelling in a particular place. Early research by Martin (1996) explored the way human-nature relationships develop through participation in adventure activities. He noted the way his own relationship with nature had changed as he gained more climbing experience and became more familiar with particular climbing sites. He described the shift from treating nature like an object (a playground or gymnasium) towards viewing nature as a subject (a close friend or part of oneself). More recently, research by Brymer & Gray (2009) also found that experienced adventure athletes (including climbers) did not talk of conquering nature but rather described intimate relationships with places. Moreover, the extreme adventurers' success in their chosen activities required "learning to adapt to, participating with or being attuned to the natural world as in a partnership or 'dance'" (p. 143). These findings are significant to outdoor education, because how activities are framed can influence the way perceptions of nature develop for the participants.

As the outdoor education profession continues to evolve and debate these ideas this research asked how an outdoor activity like rock climbing, within a secondary school outdoor education program, is *experienced* by students. It is our belief that outdoor educators should choose appropriate pedagogies and activities that align with their program's purposes and practices. This is the intent of one of the threshold concepts that Thomas et al., (2019) identified for emerging outdoor educators. The relevant threshold concept (#2) states that "Outdoor educators demonstrate intentionality in their program design, the pedagogies they use, the places they visit, and the technologies they use" (p. 176).

Research methodology

The overriding theoretical framework informing the formulation of research questions, data collection, analysis and interpretation was through a social constructivist perspective (Creswell, 2009). Within social constructivism there exists an overarching belief that "individuals seek understanding of the world in which they live and work" (Creswell, 2009, p. 8). This understanding comes from an individual's past and present interactions with their social and cultural environment (Creswell, 2009). A social constructivist perspective assumes each student came to the rockclimbing experience with their own pre-constructed understanding of the world, which they have developed through their cultural and physical environment, and they were continually developing their understanding of their surroundings based on what they already knew (Crotty, 1998). This means the students' experiences of climbing are inseparable from the social, cultural and physical environment in which the research took place (Crotty, 1998; Creswell, 2009). It is because of this assumption that this paper includes descriptions of details of the scene where the climbing program took place, and the social events that were part of the experience in both rockclimbing

contexts. It is this subjective experience that is important in this study, so that a deeper understanding of the lived experience of outdoor education students rock climbing becomes possible. Taking a social constructivist perspective also allowed the researchers to explore multiple 'truths' within a single experience (Creswell, 2009). For example, on a multi-pitch climb with a guide leading two students, the three will almost certainly have different experiences, even though the climb is the same. Each subjective experience, or individual reality, is considered equally as valid as the other (Patton, 2002).

Using a case study strategy for this research bound the activity in a specific time and place, with the first author/researcher collecting in-depth information through a sequence of small group interviews and a final whole group interview (Creswell, 1998, 2009; Patton, 2002). This method allowed the researchers to look at the data as a whole and present the students' lived experiences through a narrative. Allowing the students thoughts, feelings and stories to speak for themselves rather than the researcher heavily analysing, judging and interpreting the data (Cohen et al., 2007). The stories that are finally told are always going to be "…one interpretation, and no single interpretation of human experience will ever exhaust the possibility of yet another complementary, or even potentially *richer* or *deeper* experience" (van Manen 2006, p. 31).

This research took place at Mt Arapiles-Tooan State Park in western Victoria, a location renowned within Australia and across the world for its traditional climbing opportunities. The aim of this study was to identify the differences and similarities in experiences for a group of secondary school students while rock climbing in a top-rope climbing and/or multi-pitch climbing context at Mt. Arapiles/ Dyurrite. As outdoor education researchers and practitioners, we were interested in possible qualitative differences in experiences from the students' perspectives and representing these ideas through the voice of the students.

The two aforementioned rockclimbing contexts explored in this study are those most commonly utilised in Australian school outdoor education programs. Top-rope climbing involves the belayer positioned at the bottom of the cliff with the climber's rope going from the belayer, up through a fixed anchor at the top of the cliff (which has been pre-rigged by a climbing guide), which runs back to the student climber. The belayer guards the progress of the climber by taking rope in through a friction device as the climber proceeds up the cliff. Once the climber is at the top (a pre-determined point – not always the top of the cliff) they are lowered back to the base by the belayer. There is also a back-up belayer in case the first belayer releases the rope too fast or loses control. Students nearly always perform these belaying roles, creating small working groups of three.

In multi-pitch climbing the guide climbs up a section of cliff, stopping at an appropriate resting place, then sets up an anchor to bring each student up individually to the top of that stage. This process is repeated until the top of the climb is reached. Each stage of the climb is called a pitch, and the climbs at Mt Arapiles/ Dyurrite range from one to nine pitches. When the team of climbers reach the top of the cliff, the guide and students typically walk back to the base. In addition to the unique group management challenges and technical aspects associated with guiding students in each context, self-imposed 'rules' or climbing ethics have been developed by the climbing

community to maintain a balance between challenge and the likelihood of success for participants in each rock climbing context (Halbert, 2010). This uncertainty is considered important when rock climbing, leaving room for all participants to have their own adventure (i.e., an appropriate challenge) in a rockclimbing session.

The role of the climbing guide, as a potential educator, is different in these two climbing contexts. In this instance each individual guide had the ability to have a significant impact on each student's experience. Therefore, it is important to understand that each guide has their own idiosyncratic ideas of the world and climbing and that students could be influenced by these views and the guides' climbing practices. As researchers in this study, it was important to be "…in the midst of the world of living relations and shared situations" (van Manen 2006, p. 32). To separate the students' lived experiences from that of the guides who led the climbing activities, and even the researcher present in the field, is impossible. Even so, it was beyond the scope of this research to also collect data from the climbing guides. Rather what we hoped to achieve was to be reliable witnesses to the climbing experiences of the students and a trustworthy re-teller of their stories.

Table 1 The codes, and their descriptions, used to analyse the data	Codes	Description
	Reward and Motivation	The reward of achieving their goal and how this motivated them to try hard.
	Risk and Fear	Their feeling of taking risks and being fearful while approaching or on the cliff.
	Challenge and Perseverance	Their need to persevere to be able to achieve the goal of reaching the top, overcoming or not the challenges that this posed during the climb.
	Achievement	Achieving a goal, this may have been the top of a top rope, or the end of a multi pitch, or a new high point on a climb they had previously fallen on.
	Safety and Knowledge	The understanding of the safety systems while climbing and how this impacted their experience.
	Encouragement and Teamwork	This related to students feeling encouragement from their peers, or a sense of needing to work together to reach the top.
	Social pressure	The pressure from the group watching, or the feeling of not wanting to let your peers down.
	Trust and Vulnerability	The need to trust their peers when climbing as it was their peers who were belaying them, this at times left the students feeling vulnerable.
	Independence	At times students have a sense of being alone on the cliff, this often comes from the need to problem solve on their own.
	Place	The environment they are in, the scenery, the wildlife, and the views.
	Body and Mind	The movement of climbing and the introspective thoughts surrounding the activity.
	Process and Experience	Comparing TR and MP climbing and the experiences of the two.

Data collection and analysis

For this study there were 11 students of a possible 16 in the OE group who expressed interest, provided consent, and returned written parental/ guardian consent. Seven of the participants were female, and four were male. The smaller group interviews (2–4 students) relating to the TR climbing were held at the conclusion of the TR sessions, and were held throughout the afternoon at opportune moments, as to not disturb the rhythm of the program. The MP interviews were held either on the climb at the end of a pitch, at the top, or back at the meeting location. The variety of locations were based around access to climbs, and time constraints of the guides and students. The whole group interview took place near the top of Central Gully walking track the following day. The interviews followed a semi-structured interview process with a set of questions asked of all students in each interview. There was scope for the interviewer to follow up on specific events from the session or on topics that seemed to interest the students more than others.

The intention of the analysis process of transcripts that resulted from the interviews was a process of "…reflectively bringing into nearness that which tends to be obscure, that which tends to evade the intelligibility of our natural attitude of everyday life" (van Manen 2006, p. 32). The analysis of the qualitative data aimed to interpret, generate themes, and discover commonalities, differences and similarities in the data (Cohen et al., 2007). Several readings of the verbatim transcriptions were conducted by the researcher (author Jack Jane) to manually code the data using 12 codes shown in Table 1. These codes were later thematised into one major and two minor themes. This process was discussed with, and guided by, one of the other authors (Brian Wattchow) as part of the Masters Degree research supervision process.

The themes that emerged were developed by observing plausibility to make sense of the data using informed intuition to reach a conclusion. Patton (2002) refers to this as thematic analysis and involves analysing the data to reveal insights into the students lived experience, as opposed to breaking the experiences down into a set of numbers and pre-meditated categories. This meant rather than extracting sentences or phrases that used a particular word the researcher could take sentences that had the same meaning or intent to make the 12 codes. From several readings of these codes one major and two themes emerged. The emergent of these themes was from re reading the codes and linking overarching ideas. Pseudonyms for participants were created and are used in the findings presented in the next section.

Findings: re-telling the students' stories

This section will first provide some context for the program, and then introduce the major and minor themes. The major theme, '*Working with others and yourself,*' presents the students' experiences with others while TR and MP climbing. The minor themes identified were '*Being alone on ledges*' and '*Independence.*' These two minor themes were no less relevant to the students' experiences; however, they were not as widely shared amongst the students as the major theme.

Setting the scene

To re-tell the students' stories it is first necessary to gain a picture of where their stories were created. As the students arrived at Mt Arapiles/ Dyurrite they were met by a golden sandstone monolith rising out of the Wimmera plains, with the sun shining through the clouds as it threatened to rain. For centuries this place has been worshiped and cared for by the Wotjobaluk First Nations people. There is now a strong push for local and international climbers to become more active stewards of the area, in part based on an appreciation of its near-perfect stone and variety of climbs. The program was designed to provide a climbing progression in both the difficulty and height of the climbs to a group of students who all except one had never rock climbed before. Day one at Mt Arapiles/ Dyurrite was a day of TR climbing, followed by two potential days MP climbing. the weather permitted one day MP climbing and a day walking and exploring the upper reaches of this stunning place. This program was designed with this progression in mind, it is not imperative to have a progression whereby students TR climb prior to MP climbing. There are benefits to both with each climbing context having potentially different outcomes from the student's perspective as discussed below.

Major theme: working with others and themselves

The major theme that emerged from the data, '*Working with others and themselves*', captures significant aspects of the climbing experience commented upon by the students. These data refer primarily to climbing in the top-rope context and tended to be more focused around working with others, whereas the experiences of multi-pitch climbing seemed more orientated around self and their small team. In this section, we will discuss the sub-themes of trust, motivators, and achievement drawing on selected quotes from the interviews with the students that are representative of the theme.

Trust

The first area within this major theme we will explore describes how the students developed trust. Being able to trust others appeared as a prominent feature in both top-rope and multi-pitch climbing contexts. This seemed central to their experience while climbing and belaying others. The ability to develop trust between each other allowed the students to focus on their rock climbing. When top-rope climbing, students developed trust with their peers when learning the process of belaying and back up belaying.

> Umm, and it was a bit nerve-wracking because the belayers sometimes didn't know what they were doing, and (pause) but I felt like after our initial practice today (I) felt a lot better and more confident. (Ava, 1; 23–25)

This process of building trust with others was a key factor in the students being able to focus on the climbing rather than what the belayers were doing.

> If you just focused on the task and trust your belayer, and like focus on what you are doing, and like not what is around you, then I feel like it is a lot easier. (Logan, 2; 10–11)

Building trust amongst themselves seemed to be a process of skill acquisition and observing others doing the same. Some students found that by being part of the small team of three and keeping others safe while they climbed, helped when they were climbing. James noted that,

> …it helped you by belaying to know that you were keeping them safe which enabled you to have more confidence when you were actually climbing to know that you are safe, so you can focus on the more physical and technical aspect of things. (2; 27–28)

This trust that develops as their understanding of the processes developed was transferred across to their following day multi-pitch climbing where the students found that as well as the need to trust others, they also needed to trust themselves. They found that the sense of being alone while climbing between belay stations meant that they had to learn to trust themselves and their ability, often drawing on the experiences from the previous day's top-rope climbing experience:

> I felt like you had to be a lot more independent when like just trust yourself, because if you put doubt in your mind then you are just not doing it right I feel, you are just like, if you have doubt in your mind you're not gonna be able to trust yourself on the rock. (Logan, 6; 133–136)

It was during these times of duress that the need to trust in themselves seemed the strongest.

I felt like um with multi pitching you had to trust yourself a lot more, you had to trust that like when your legs were shaking, and your hands were hurting you weren't gonna fall off the cliff. (Aria, 8;179–181)

Sophia summed up this process of being alone and trusting herself many meters off the ground.

> …you are going at your own rate, which is nice as well, and to sort of take your own time but also umm (pause) take less risks and concentrate on what you are doing as you can't see your belayer and most of the time you can't see the people below you. So, you have to trust in what you are doing and trust in the people above you as well. (8;21–25)

This ability to trust others and themselves was one component of working with others to achieve their climbing goals. The major difference from this sub theme between the two contexts was around trusting others in a top-rope context, and trusting themselves and their ability in a multi-pitch context.

Motivators

The atmosphere surrounding the TR climbing activity was electric. The students worked in groups of three; one climbing, one belaying and the last person back-up belaying. Four out of the six climbs set up were near each other, with a perfectly positioned viewing rock in the middle. The atmosphere was created by a group of young people encouraging each other. Whether someone was on the crux (hardest section) of one of the easier climbs or nearing the crux on the hardest climb, people would be yelling out encouragement and advice. This was not restricted to the students; the guide and teachers present were all caught up in this vibrant atmosphere. This environment created a place for students to try as many climbs as they liked, from climbs that everyone could achieve to those that seemed nearly impossible. James found that this environment,

> encourages you because you think you can like (pause) you were thinking of giving up, because there is no hope so you should just go back (down), and then suddenly people are saying like come on let's go, you can put your hand there, move it up. And it really feels inside you because you start thinking mentally, ok, I can kinda gotta (go) down now I am getting really tired, but then they distract you from that, and it just focuses you on putting yourself up one step at a time. (2; 100–105)

Aria described how the others helped her through the thin technical crux of a single pitch climb.

> It helped a lot when you were going through a really difficult climb and you had people underneath helping you out especially if they were yelling out like footholds or just encouragement and I think it had just like a really good atmosphere, it made you wanna try a lot harder. (1 ;124–127)

These external motivators helped the students try harder to reach the top of the climb, or to simply try ascend as far as possible. It meant that everyone was involved, creating a shared experience between the students and onlookers.

> I wanted to motivate them, keep them positive because I know that they can get like that extra step further like give them that energy boost to really like c'mon you can do it (pause) um to get that next step. (Ava, 1; 48–49)

Through this shared experience, students were working as a whole group: "everyone gets involved, everyone pitches in and like does their belaying, does their back up, and it's like really good team, like it's a team you know you come together" (Ava, 1; 236–238). These largely external sources of motivation seemed to create a very supportive environment, where young people were extending themselves and testing their skills: "I think that top roping is more like your kind of like testing your own skills with rock climbing and stuff" (Luna, 8; 14–15).

The external motivators that were present in the top-rope experience were different to those in the day multi-pitch climbing. There was a variety of experiences had by the students while multi-pitch climbing. Each small group set off on a different climb, and each student was in a different position in the small group's sequence as they progressed up the cliff. When it came to motivators in this climbing context it seemed less about everyone encouraging each other. Rather, it seemed more a process of internalisation and seeking motivation from within, to keep going and being responsible for the small team's success. The small teams and individuals experience are described by Ava.

> I think it is more peaceful and like it is a different kind of environment definitely, you definitely feel different, you are more like taking it in and you definitely feel more vulnerable by yourself. But there is no one there pressuring you to keep going, it's all yourself like um there is no one there to see you like give up or fall or do something good or bad. Um it's only yourself who can see that, and then whether it is good or bad like you will be the one to deal with like if you give up you would be the only one to deal with the fact that you gave up. (4; 126–136)

This emphasis on internal motivation was shared by many students, and Ava described the experience as,

> … trying to complete this one thing and it's all for yourself, but you are all doing, you can um (pause) there is no one there to see what you do while like you're there, so like you could give up at any point and it would only personally (be) your decision, no one else would see you and you kind of have to support yourself as well, because there is no one else supporting you. (8; 75–80)

These internal motivators were coupled with a motivation to get to the next pitch to support and allow the team to succeed. Sophia described how everyone in the group is connected and if any team member cannot make it up to the next pitch then they must retreat.

> If Olivia doesn't get up we can't all, none of us can get up, and I feel like that sort of makes it more as a team because we have to, all like we all have to pull our weight and make it to the next pitch. (4; 140–142)

However, while the students report being alone they still felt the support from their peers as there are times when they can see each other, and times when they all meet up again after a pitch.

> … like it helps that at the end when everyone says good job and stuff, but then when you kind of like in the zone you kind of just want to block out everything else, just get up there. (James, 6; 53–55)

It seems the sense of achievement on reaching the high point or end of a pitch is a driving force in the experiences of both top-rope and multi-pitch climbing. However, this sense of achievement was quite different amongst the participants.

Achievement

When reflecting on their participation in top-rope climbing, students talked about their experience trusting others and their team while being encouraged by the group to achieve a goal. In top-rope climbing this goal is a pre-determined top set by the guide when rigging the climb which is identified by the karabiners through which the rope runs. This point is not necessarily the physical top of the cliff, but the completion of the hardest climbing. Top-rope climbing provided a shared experience for the students, and a place where a sense of achievement can be attained. Top-rope climbing, allowed students to share their success with others. Mason referred to being supported by his peers, who help him to the top: "It makes me want to finish it, and like do it for people who supported me" (2; 96–97). This was not an uncommon feeling presented by the students. Aria found that, "Whereas for top roping like everyone has like helped you get there, so it feels like it is more of a shared payoff, I guess" (8; 84–85). Others report feelings of greater achievement when the climbs were closer to their limit: "the longer you are up there the more sore you are, and then to make it to the karabiners, that makes it worthwhile" (Sophia, 1; 111–112).

While some found it important to build up their confidence by completing the easier climbs first before attempting some of the harder climbs, this conversation between Harper, Mia and Luna shows the impact that progression, or a lack of progression, can have on their day of climbing.

> Harper: I prefer doing the easy ones first because you get to the top of them and feel more motivated to do the harder ones, and you are like, I am ready to do the harder ones.
> Mia: Like if you start with a hard one and can't do it, it kind of stuffs you for the rest of the day.
> Luna: Yea I should have started with an easier one.
> Mia: But if you start with an easy one and get it you are like, yea I've got this, like.
> Harper: Yea, that was me the first day, I got the easy one and I was like, yea I am ready.
> Mia: And then you did the chimney. (3;414–421)

The sense of achievement the students felt and shared when reaching the karabiners was crucial to their drive to keep climbing, or to try harder climbs. This contrasted with the sense of achievement the students felt while multi-pitch climbing that was more related to achieving a larger goal, reaching the top that only days before was thought impossible by some. *"Standing on top of the cliff it's something you would never, well I never thought that I would be able to achieve"* (Sophia, 8;247–248). Luna described multi-pitch climbing and the sense of achievement she experienced as: "You are actually getting to different heights on the mountain and whatever,

so you are like actually like achieving like I don't know, going up" (8; 15–17). This process of multi-pitch climbing, regardless of the difficulty, left the students feeling accomplished: "I think you feel more of a sense of achievement after multi pitching because after you have finished a pitch you have had to make all your own decision and you are on your own" (Aria, 8;82–84). The major outcome of the experience seemed to be the students trusting each other and themselves, motivating others and themselves, and their sense of achievement in these two climbing contexts.

Minor themes

The following narratives have been classed as minor themes, although these are of no less value in the students' overall climbing experience. However, they were less frequently mentioned topics in the interviews. These minor themes were *Independence* and *Spending time on ledges*. These two minor themes were linked much more closely with the students' experiences of multi-pitch climbing. Both minor themes hinge around time spent alone, whether climbing out of sight of the others, or sitting on a belay ledge on their own. For the students this time was reportedly especially important.

Independence

During, and following, the multi-pitch climbs students were more likely to report feelings of independence than when top-rope climbing. These reported experiences were based on having control over the outcome through their role in the team and/or the specific task required of them to complete the climb. While multi-pitch climbing, students were 'on their own', often out of sight of the guide and other students in their sub-group. Each student often had to figure out their next moves and play their role in the sub-group without the vocally supportive larger group below. Several students commented on this feeling.

> Um well it is different from having everyone there and supporting you and tell-ing you where you should put your foot, to no one um but I kind of like figuring it out on my own sometimes, because I feel better afterwards and like aww I did it. (Olivia, 4; 124–126)
> Yea, and there was like heaps of places to go, whereas that one is more like one, you have to figure out where your handholds are and everything. (Luna, 5; 125–126)
> Mmm, well it was all like, all on me I guess, it felt more like, I felt a bit more independent like I could make my own choices a bit more. (Aria, 7; 90–91)

The experience of figuring out the climbing puzzle alone was transferred to feelings of independence when coupled with the students fulfilling their task. Examples of the multi-pitch climbing process that differ from that of top-rope climbing process include things like managing the ropes past each piece of gear or removing the gear

as the final student ascends. Logan described this after completing a long multi-pitch climb:

> A lot more independence I feel, because … some of us had to like carry some extra gear, so there was a lot more independence, so you couldn't just rely on a friend to come over and help you, like so when I would go up like by myself at the end it was like just me, so I had to double check everything, and I had all like, because I didn't want to leave anything behind or do anything wrong so I felt, so I felt like you had to be a lot more independent. (6; 128–134)

These feelings of independence were linked with a sense of achievement after completing the climb, or a pitch of the climb. As each multi-pitch climb is broken into 'pitches' due to the ropes only being 50 meters long a natural part of the process is that students spend time on ledges high off the ground, clipped into an anchor by the guide.

Being alone

While on multi-pitch climbs students reported having time to themselves to reflect or look out over the landscape, considering their place in it. The majority of students commented on how this style of climbing was more 'peaceful' or 'relaxing', which allowed them time to take note of where they were.

> Yea, I every time we get to a new pitch I sort of relax and go, I made it, and then I sort of realise, oh wow, I am actually sitting on this um cliff. (Sophia, 4; 172–173)
> I think that um (pause) the multi pitching it gives you a chance to kind of be around like the environment and take it in more and focus on something other than just the climb and the difficulty, you can feel more relaxed and it like immersed within like the rock itself. (Ava, 8; 89 – 71)

These experiences were commonly reported by the students while multi-pitch climbing or when reflecting on their experience. One group, while being interviewed on a good-sized ledge approximately 150 m above the ground, found themselves being checked out by a resident Peregrine Falcon. Sophia commented just after one of these powerful birds' zipped past.

> That's what I am talking about, yea, like you get to experience these amazing things, like seeing a Peregrine just fly right by you, and while you were sitting, how many metres? (4; 176–178)

Several students made similar comments about experiences with the place. However, the feeling of truly being alone was only reported by the final climber in the group during MP ascents. The feeling of being on a ledge, on your own, waiting for your time to climb is rare. Logan was last in his group and climbed one of the longest

climbs at Mt Arapiles/ Dyurrite. When describing what it felt like to spend this time on his own, he stated;

> Like being last sometimes I will be on a cliff by myself for maybe like half an hour or so and I will climb up, so I won't have seen them for like 45 min or more, which I quite enjoyed it at times, because it allowed me to try and relax and be peaceful with myself. (6; 32–40)
>
> It was like pretty peaceful, if I got comfortable, I would just lay down and sort of took in all my surroundings, and like it's, I found it a lot easier to be calm that high up with just a rope protecting me, like when I was alone. (6; 92–97)

This time alone created space for the last climber to be with their thoughts, without distraction from others. They relayed a sense of being at peace with the idea of where they were.

Discussion

The major and two minor themes presented above are not the full extent of the students' experiences while climbing, or their time during the whole outdoor education program. These experiences described in this paper were part of the students grappling to understand their world, with each student's interpretation bound by past and present interactions with their social and cultural environment. Therefore, it would not be possible to tell their story in full. Even so, our analyses of these students' lived experiences rock climbing, may help to inform our pedagogical practices.

During the interviews, on or near the climbs, it seemed that students shared their experiences in these two rock climbing contexts with few inhibitions. The students' stories represented above are told through their own words, leaving readers to interpret the data for themselves as much as possible. The intent it is to allow the reader a window into the lives and thoughts of these 11 secondary school students' experiences rock climbing in two contexts at Mt. Arapiles/ Dyurrite. From our perspectives as researchers several key insights may be drawn from their stories.

One area of interest was how students' spoke about their progression when top-rope climbing. For some students when there was a suitable progression in climbing difficulty, they were able to succeed more often, which allowed them to feel more confident to try, and possibly fail on a harder climb later in the session. This led to an increase in motivation levels which, overall, lead to increased confidence. This outcome is heavily influenced by the guide and their ability to set a good range of climbs, creating an appropriate progression for students. Consequently, the quality of learning outcomes is shaped heavily by the guides' ability to create these progressions and their willingness to note, and work with, the students' abilities. This could mean the guide needs to set up extra climbs or move them during the session so that all students have the opportunity to start their day on climbs that they can achieve, and progress to climbs that are at their limit. This progression then enables students to feel more confident to explore the upper reaches of the cliffs at Mt Arapiles/ Dyurrite on a day multi-pitch climbing. Another area of interest were the stories told by the

students about how the top-rope environment promoted significant encouragement and opportunity for teamwork.

This encouraging environment helped the students challenge themselves leading to more students reaching the top. The students heavily attributed their success on their climbs to the encouragement and verbal aid of the others on the ground, whether they were belaying, back-up belaying or watching. One area that aided in creating this environment was the proximity of the climbs to each other. The students reported when they were 'around the corner' climbing on a route set away from the main group, they were more focused on their small group with less verbal encouragement present. Hence, the different experiences of the students are shaped by the guides choice of climbing area, and the proximity of climbs to each other. While top-rope climbing, students reported climbing in an encouraging and supportive environment and building trust with each other. Interestingly, the experiences described by the students in this study differ starkly from those in Preston's (2001) study where the top-rope climbing activities led to competitiveness and the exclusion of some participants. While students continued to tell stories of trust while multi-pitch climbing, there were some differences in reported experiences.

Students reported feelings of independence while multi-pitch climbing. This came from their need to problem solve and the necessity to complete tasks on their own. There are times when multi-pitch climbing where students are safely on their own with the guide as far away as 50 m. This created an environment where the students felt the need to work things out on their own. This related to the physical act of solving the movements required to complete the pitch of climbing as well as solving the puzzles of the ropes and gear. This led to feelings of achievement from succeeding at perceived difficult tasks on their own. On a small scale, the experiences of these students are consistent with Prins and Wattchow's (2020) description of how the need to develop skills to be successful engaged the students and led to high levels of personal satisfaction and enjoyment.

On a multi-pitch climb there is only one group at any given time on a particular climb and the guide will pick only one climb for the day. The climb the guide chooses plays a large role in the students' experiences, for example, whether the climb is achievable for all participants, and whether it is challenging enough to keep them engaged. This might be the difference between creating a peak learning experience for the students or not (Nichols, 2000). For the guides, this is a major part of a multi-pitch day and guides generally understand the importance of choosing a well-matched climb for their students. Another key aspect of multi-pitch climbing is waiting for the guide and each student to climb a pitch. This time was reported by the students as time to reflect.

The time students have while multi-pitch climbing, sitting alone, or with a few friends on a small ledge high above the trees looking down at the plain below was important. It was a time to look out on the landscape and reflect. It seems possible that the guide can impact this time by creating more, or less time where the students are with their thoughts. How a climbing guide understands these considerations, and how their local knowledge of the area interact with choices of climbs and their perceptions of students, are all likely to be critical factors impacting upon the students climbing experiences. These findings are consistent with Thomas' (2005) sugges-

tions that how we choose to facilitate outdoor education experiences can significantly shape the way students engage with the place.

A greater understanding of the depth, breadth, and knowledge (individual and collective) of guides might allow for the development of future teaching practices. Further research into the knowledge of the guides who are working in an outdoor education context, while not the focus of this research, would seem to be important. Research that studies the choices they make, how they choose to interact with the students, as well as the assumptions they hold about the culture of climbing, has the potential to provide greater insight into the guide's role as an educator.

Conclusions

The outdoor education literature tends to focus on adventure activities without acknowledging the nuances that exist for each outdoor activity. The findings in this study, indicate that the two different contexts of 'rock climbing' studied, produced different types of experiences for students. It therefore seems wrong to presume that outdoor educators could apply Priests' (1991) 'Adventure Experience Paradigm' model across all activities expecting the same, or even similar, outcomes. Moreover, the findings of this study indicate that outdoor education professionals should think about the particulars of each outdoor activity when considering how they might contribute to the desired learning outcomes for a program. From listening to the stories of these students it comes to light that there are some apparent differences in the experiences of top-rope and multi-pitch climbing. Some of these differences are that top-rope climbing encourages students to work together, support each other, and build their confidence in their climbing abilities. While multi-pitch climbing provided a more introspective experience. It provided students space to sit and think while also allowing them to problem solve on their own, creating a sense of achievement through this process of paying close attention and being skilful in particular environments. The multi-pitch experiences described in this study demonstrate the early stages of enskilment in an outdoor activity, which Mullins (2021) described as:

> learning how to inhabit and participate in dynamic settings, which become meaningful in the context of the activity, and which grow in familiarity and resonance as participants grow in ability and experience, over time and with practice. (p. 383)

This study has also highlighted the impact that guides have on the students' experiences. We recommend that guides understanding the specific outcomes the program is aspiring to achieve so that they can craft the climbing experiences they provide to their students so that they contribute to the desired learning outcomes of the program. For example, if a school is wanting the student to gain a greater understanding of how the Peregrine Falcons live in this place a guide would be more likely to climb in the northern parts of Mt. Arapiles/ Dyurrite. This strategy will increase the chance of students encountering a Peregrine Falcon and engaging the students in discussions about topics such as the impacts of habitat loss, the impact of disturbance on nest-

ing and feeding patterns, and other human impacts. When guides better understand the specific program outcomes before the programs it allows them to craft learning experiences that will contribute to those outcomes. To use the same example, guides could research the ecological impacts on Peregrine Falcons at Mt. Arapiles/ Dyurrite and they could research how and where students could study them in a manner that does not have negative impacts on the birds' behaviour or health.

We contend that more research into students' lived experiences in different rock-climbing contexts, and across the OE curriculum is needed in order to develop more nuanced and structured outdoor education pedagogies. A clearer understanding of the students' experiences in different climbing contexts might allow for better program development for each rockclimbing context, and for programs as a whole. Currently, the full scope of rockclimbing contexts are grouped in an overarching category, 'rock climbing' which misses the unique affordances that different climbing contexts may provide.

Through this research, it is apparent that the students had quite different experiences from the two contexts. It is, therefore, reasonable to argue that more in-depth studies with a greater scope would have the potential to identify these differences in more detail as well as identifying other contexts of climbing that provide different outcomes from the student's perspective. This idea can also be applied across other 'adventure' activities. It is likely that if all 'adventure' activities engaged in similar kinds of reflective analysis a deeper understanding of each context and or sub context would be identified, leading to more nuanced program design aiding in achieving desired pedagogical outcomes and aims. Importantly, the findings of this study align with the work of Prins & Wattchow (2020) and Mullins (2021) and encourage outdoor educators to think about how outdoor activities that promote and require skilfulness might also provide opportunities to be place focused.

Finally, the stories told by the student participants in this modest study have provided insights into the benefits of engaging in guided outdoor activities in the natural environment. The joy experienced by a small group of young people when climbing in a beautiful landscape with a long and varied history, is immense. We conclude here with a remark from Logan after a top-rope session in the morning. As some of the students prepared lunch, the conversation turned to the following day and how they perceived climbing. Mason remarked, "you look at the tall mountain and it makes me wonder like the duality … like how beautiful and how deadly it can be" (2;153–155). The group had been looking out across the plain to the striking walls of Mt. Arapiles/ Dyurrite, with the knowledge that he and a few friends would be departing on a journey to the summit the following day. The potential for long-term impacts beyond the climbing program were evidenced in Logan's wise words:

> Rock climbing represents life in a way, like not even kidding, you could have a hurdle in life (laughter) I am not even kidding, I am not even kidding, you could have a hurdle in life, and you are like how in the hell am I going to get around this, people around you support you, tell you what to do, and you can actually get past it and reach the top. (2; 167–170)

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