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# An outdoor educator's self-study of enacting a pedagogical model for outdoor adventure education to facilitate affective learning experiences

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#### ABSTRACT

*Background*: Outdoor Adventure Education (OAE) has a long history of being associated with the facilitation of affective learning experiences. This research explores this relationship between OAE and the facilitation of affective learning experiences by enacting a pedagogical model. This inquiry was prompted by the publication of two papers in *Physical Education and Sport Pedagogy* – 'A new pedagogical model for adventure in curriculum' [Williams, A., and N. Wainwright. 2016a. "A New Pedagogical Model for Adventure in the Curriculum: Part One – Advocating for the Model." *Physical Education and Sport Pedagogy* 21 (5): 481–500. doi:10.1080/17408989.2015.1048211; Williams, A., and N. Wainwright. 2016b. "A New Pedagogical Model for Adventure in the Curriculum: Part Two – Outlining the Model." *Physical Education and Sport Pedagogy* 21 (6): 589–602. doi:10.1080/17408989.2015.1048212].

*Purpose*: Two research questions were developed for this exploration: (i) What are the realities of enacting a pedagogical model for OAE?; and (ii) When facilitating a programme for OAE, what affective learning experiences emerge and what are the processes involved in their facilitation?

*Method*: A self-study methodology was used for this research and was guided by LaBoskey's [2004. "The Methodology of Self-Study and Its Theoretical Underpinnings." In *International Handbook of Self-Study, of Teaching and Teacher Education Practices*, edited by J. Loughran, M. L. Hamilton, V. K. LaBoskey, and T. Russell, 817–869. Dordrecht: Springer] approach to self-study. Ciaran (first author) – a facilitator of OAE programmes – conducted a self-study of their enactment of the pedagogical model for OAE in facilitating affective learning outcomes/ experiences. Data sources included reflective journal entries and micro (a co-instructor of OAE) and macro (Dylan [second author]) critical friend meetings. Data was analysed following Charmaz's [2014. *Constructing Grounded Theory*. Sage] approach to data analysis.

*Findings*: The findings are captured in three categories: (i) Handing over the control to the students: realities of enacting a pedagogical model for OAE; (ii) The importance of creating an environment where affective learning can occur; and (iii) The potential of the pedagogical model for the creation of an environment where affective learning can be facilitated. ARTICLE HISTORY Received 19 January 2023 Accepted 16 October 2023

**KEYWORDS** Outdoor adventure education; affective learning; self-Study

\*All authors contributed to the construction of this paper.

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*Discussion*: Throughout the findings, examples and considerations are given where the 'non-negotiables' of the pedagogical model for OAE can support and/or enhance and/ or facilitate affective learning outcomes/experiences of motivation, emotional responses, self-concept, and resilience [Teraoka, E., H. J. Ferreira, D. Kirk, and F. Bardid. 2021. "Affective Learning in Physical Education: A Systematic Review." *Journal of Teaching in Physical Education* 40 (3): 460–473. doi:10.1123/jtpe.2019-0164].

*Conclusion*: This research highlights the possibilities and potentialities of a pedagogical model for OAE [Williams, A., and N. Wainwright. 2016a. "A New Pedagogical Model for Adventure in the Curriculum: Part One – Advocating for the Model." *Physical Education and Sport Pedagogy* 21 (5): 481–500. doi:10.1080/17408989.2015.1048211; Williams, A., and N. Wainwright. 2016b. "A New Pedagogical Model for Adventure in the Curriculum: Part Two – Outlining the Model." *Physical Education and Sport Pedagogy* 21 (6): 589–602. doi:10.1080/17408989.2015.1048212] in facilitating affective learning experiences/outcomes. We strongly encourage and advocate OAE facilitators/teachers to adopt, adapt, and enact the model to benefit the students' affective learning development in OAE settings.

As I sit down to write this piece of research, I am entering my sixth year as a facilitator of OAE [Outdoor Adventure Education] programmes. Throughout these six years, my teaching approach, and the way that I prioritise learning experiences has changed quite a lot. At the beginning of my career, I was mostly concerned with facilitating learning outcomes in the cognitive and psychomotor domains, i.e. physical movements and movement concepts. I heard about the potential of OAE experiences regarding learning outcomes in the affective domain and witnessed some affective learning taking place in my students. However, this was mostly 'by chance' and I was unsure of how to intentionally facilitate these types of outcomes. (Ciaran – reflective diary 1)

#### Introduction

The above extract is taken from my (Ciaran – first author) reflective diary as I embarked on this piece of research. Frustration was the central emotion of this journal entry as I questioned how can affective learning experiences/outcomes be facilitated in Outdoor Adventure Education (OAE). OAE has a long history of being associated with the facilitation of affective learning experiences (Nicol 2002a; 2002b) and I want to explore this relationship and specifically, how it applies to me and my work as an instructor on a long-term programme of OAE at a local authority Outdoor Education Centre (OEC). This curiosity was sparked by the publication of two papers in Physical Education and Sport Pedagogy: 'A new pedagogical model for adventure in curriculum' (Williams and Wainwright 2016a; 2016b). From these papers, Williams and Wainwright's (2016b, 599) encourage the readers to engage in research, to 'implement and research the model in practice ... in order to evaluate pupil and teacher responses and develop a robust, empirically tested, pedagogical model for outdoor adventure education'. Despite a lack of research conducted on OAE in Ireland (Pierce and Beames 2022), and this being another rationale for this research, there is a historic and growing international literature base which suggests a strong relationship between OAE and the facilitation of affective learning and development of social and emotional learning (e.g. Dismore and Bailey 2005; Price 2019). Research in OAE highlights how participation in OAE programmes can enhance, for example, autonomy (Sibthorp et al. 2008), resilience (Ewert and Yoshino 2011), self-esteem and relationship building (Beames, Higgins, and Nicol 2012), and group trust (Sutherland and Stroot 2010). This positive relationship between OAE and affective learning, and my desire to enhance my facilitation of affective learning in my practice, alongside a call for research on the enactment of the pedagogical model for OAE, adds weight to the justification for this research. Informed by Williams and Wainwright's research, two research questions were developed: (i) What are the realities of enacting a pedagogical model for OAE?; and (ii) When facilitating a programme for OAE, what affective learning experiences emerge and what are the processes involved in their facilitation? The intent here is to adopt a self-study methodology to explore William and Wainwright's (2016a; 2016b) pedagogical model for OAE and its potential for facilitating affective learning experiences. Further on in the paper we provide context to the enactment of the model, i.e. the instructor, the programme elements, and how the programme aligns with the non-negotiables of the pedagogical model so that it can be studied. Before delving into the self-study methodology, we outline the pedagogical model for OAE and the characteristics of affective learning.

# A pedagogical model for outdoor adventure education

In the development of a pedagogical model for OAE, Williams and Wainwright (2016a, 496) use the term OAE to 'represent the varied range of alternative names such as adventure education, outdoor education, outdoor activities, outdoor and adventurous activities and outdoor learning that are to be found in the literature'. Williams and Wainwright's (2016a; 2016b) also recognise the main learning outcomes of a programme of OAE are primarily in the affective domain: 'the major impact of OAE is upon the affective domain' (481). Williams and Wainwright (2016b) propose four 'non-negotiable features' of a pedagogical model for OAE that are identified as 'essential for pupils to gain maximum benefit from their outdoor adventure experiences' (Williams and Wainwright 2016b, 489). These four non-negotiable features are:

#### Being mainly outdoors

Williams and Wainwright (2016b, 590) 'emphatically believe in the value of learning activities being located outdoors'. It is important to note, however, that Williams and Wainwright (2016b) also acknowledge that an absolute focus on only using outdoor locations ignores the broader cultural influences of a materialist, technologically focused society. They recognise the value of 'indoor venues such as climbing and traversing walls and swimming pools for kayaking' (590). Williams and Wainwright (2016b) outline that their understanding of being outdoors aligns closely with Beames, Higgins, and Nicol's (2012) 'four zones of outdoor learning' approach. The four zones in this approach are: (a) the school/centre grounds; (b) the local neighbourhood; (c) day excursions or field trips; and (d) residential experiences/expeditions. This approach emphasises the importance of place when facilitating outdoor learning experiences and Beames, Higgins, and Nicol (2012) explain how availing of the outdoor learning opportunities present within the school or centre's locality makes for more relevant and developmentally appropriate OAE programmes.

#### Experiential learning

Williams and Wainwright (2016a) advocate for the use of experiential learning as a method for involving students directly in all stages of the learning process and maximising affective learning experiences. The authors encourage the 'familiar and trusted Plan-Do-Review approach used by outdoor pedagogues throughout the world' (592). With regards to the 'Review' phase of this approach, Williams and Wainwright (2016b) emphasise the need for a move away from a review process that is completely run by the facilitator. Moreover, they recognise the importance of regular student-centred and student-led reviewing so that students to have the opportunity to construct their own meaning from OAE experiences.

#### Challenge by choice

'Challenge by choice' is not an uncommon feature of many OAE programmes and, in fact, it comprises one of Dyson and Sutherland's (2015) five essential practices in Adventure Education programmes. They describe it as the act of sequencing activities that allow students to make different choices about their levels of participation in different challenging activities (Dyson and Sutherland 2015). Accordingly, as a facilitator, challenge by choice requires designing appropriate, thought provoking, and progressive learning opportunities that allow all students to reflect upon, gain insight into, and come to understand their own level of comfort when taking risks. This self-awareness allows them to choose to participate at a level where they feel safe, physically, emotionally, and cognitively (Tannehill and Dillon 2009). Williams and Wainwright (2016b) echo this student-centred approach as they advocate for students to set their own challenges and take responsibility for their own learning which they argue engages them in all three domains of learning.

#### Managed Risk

Williams and Wainwright (2016a; 2016b) suggest the use of managed risk as an educational tool in which students have an element of uncertainty as to whether they can meet the challenge before them. They also propose an understanding of managed risk that includes social, emotional, and psychological risk as equally relevant to the OAE model as physical risk. As such, the authors encourage facilitators to broaden their understanding of social and emotional risk (Williams and Wainwright 2016b). Davis-Berman and Berman (2002) explore both actual and perceived risk in OAE programmes, as well as the impact of anxiety on the assessment of risk and participants' ability to cope with such risk. They note that while OAE activities pose little physical risk, and are reasonably safe for the students involved, risk can still be felt very strongly on an emotional level. It is this perceived risk that strongly affects how participants behave and cope in some OAE settings (Davis-Berman and Berman 2002). Some of the most pertinent reasons for the development of perceptions of risk include 'an individual's past experiences, media presentations, vicarious experiences, and a predisposition to anxiety' (Davis-Berman and Berman 2002, 306). Understanding how these sources of perceived risk apply to each individual student is paramount in understanding how to manage it (Davis-Berman and Berman 2002).

With an understanding of the pedagogical model for OAE and its 'non-negotiables', we now move onto briefly discuss affective learning and its key elements.

#### Affective learning

Gano-Philips (2009, 3) describes affective learning as 'concerned with how learners feel while they are learning, as well as with how learning experiences are internalised so they can guide the learners' attitudes, opinions and behaviours in the future'. Teraoka et al. (2021) carried out a systemic review of physical education programmes that were found to have facilitated affective learning experiences, and the pedagogical practices employed in such programmes. As a result of this review, Teraoka et al. (2021) grouped affective learning outcomes into four themes: (i) motivation; (ii) emotional responses; (iii) self-concept; and (iv) resilience. The authors described motivation not as a unitary concept but a continuum of different types of behavioural regulation, ranging from autonomous motivation to amotivation. Emotional responses were identified as a common affective outcome and included 'enjoyment, interest, satisfaction, effort, boredom, pleasure, fear and worry' (Teraoka et al. 2021, 468). Self-Concept refers to an individual's descriptive and evaluative perceptions of oneself, and sub-components of self-concept include perceived competence, body satisfaction, self-efficacy, and self-worth (Teraoka et al. 2021). Lastly, the authors describe resilience as 'an ability to recover from stress or misfortune' (468).

Teraoka et al. (2021) discusses how their findings revealed the different ways that physical educators enhanced affective learning in their programmes. For example, they found that providing choice in tasks increases autonomous motivation and decreases controlled motivation and amotivation. When these authors explored the methods involved in facilitating positive emotional responses, they found that experiences that had an element of novelty were the most likely to result in enjoyment, interest, and satisfaction. They also found that programmes that adopted a studentcentred approach were effective at enhancing emotional responses among students (Teraoka et al. 2021). Similarly, programmes that implemented individualised learning strategies had the most positive effects on student self-concept and related outcomes, along with strategies intended to promote positive feelings of body image and perceived competence (Teraoka et al. 2021). Furthermore, with regards to resilience, the authors alluded to the importance of reflecting on the sources of stress and negative thoughts, and then practicing relaxation techniques such as mindful breathing and positive self-talk in order to cope with stressful situations. Teraoka and Kirk (2022) emphasise on the importance of trusting, positive educational relationships when attempting to facilitate affective learning experiences.

When we look to the OAE literature for the facilitation and development of affective learning, studies, such as Wang, Liu, and Kahlid (2006), who explored the effectiveness of a five-day Outward-Bound programme on young females, found how outdoor programmes can have positive influences of participants' social skills, interpersonal skills, leadership, and self-esteem. OAE research also highlights how autonomous student expeditions can provide students with affordances to develop and experience autonomy in meaningful ways (e.g. Sibthorp et al. 2008). Interestingly, Scarf et al. (2018), whose research explored the influence of belonging on self-esteem through participation in sail-training-based adventure education, found that group belonging (e.g. the need to belong in a group setting) has importance for personal development (e.g. increasing self-efficacy and self-confidence). Further, Ewert and Yoshino's (2011) research, which explored the influence of a three-week adventure education expedition on levels of resilience, highlighted how affect learning outcomes can be enhanced through OAE, particularly the development of a sense of resilience. There are clear connections between OAE literature on for the facilitation and development of affective learning and Teraoka et al.'s (2021) framework of affective learning.

While we acknowledge Teraoka et al.'s (2021) affective framework resides in the field of physical education, there are studies which have utilised OAE in physical education settings to facilitate affective learning. For example, Beames, Higgins, and Nicol's (2012) research explored the use of a nine-week adventure-based learning programme in physical education and found enhanced self-concept, self-esteem, and relationship building among students. We have adopted Teraoka et al.'s (2021) framework of affective learning as we believe it provides a well-rounded understanding of affective learning. This is in contrast to some of the frameworks used in the OAE literature, for example, self-determination theory (SDT; Deci and Ryan 1985). Houge Mackenzie and Hodge (2020) suggest the use of psychological frameworks, such as SDT, can lead to better understandings of the relationship between wellbeing, motivation, and OAE. Research in OAE supports this suggestion, for example, Son et al. (2017) whose research explored programmes of cross curriculum learning (i.e. science and adventure activities). The authors found how students' psychological needs were enhanced as a result of engagement in the programmes. While it is important to understand psychological development and behaviour in OAE (e.g. Sheard and Golby 2006), we believe a more balanced understanding of behaviour (cognitive, affective, and psychomotor) is needed and Teraoka et al.'s (2021) framework encapsulates this. This framework further expresses the conceptualisation of affective learning which Ciaran wanted to facilitate in his enactment of Williams and Wainwright's pedagogical model for OAE.

With an understanding of a pedagogical model for OAE (Williams and Wainwright 2016a; 2016b) and the key elements of affective learning experiences/outcomes (Teraoka et al. 2021), we remind the reader of the two research questions of this paper: (i) What are the realities of enacting

a pedagogical model for OAE?; and (ii) When facilitating a programme for OAE, what affective learning experiences emerge and what are the processes involved in their facilitation? In answering these research questions, a self-study methodology was adopted by Ciaran which we will now discuss.

#### Self-study methodology and context

Self-study methodology has been increasingly used in educational research to improve understanding of the 'self' in 'practice' and to provide guidance and practical advice to other educators in the community (e.g. Casey and Fletcher 2012; Hamilton, Smith, and Worthington 2008). Guided by LaBoskey's (2004) approach to self-study, five characteristics of a self-study were adhered to: (i) Self-initiated and focused (i.e. the justification for research engendered from a problem of practice); (ii) Improvement aimed (i.e. the research aimed to improve and develop new knowledge of/for practice); (iii) Interactive (i.e. the research was done in collaboration with macro and micro critical friends); (iv) Multiple qualitative methods (i.e. reflective journals, micro and macro critical friend meetings); and (v) Exemplar-based validation (i.e. the research demonstrates trustworthiness and methodological rigour). Given this is a self-study, from now on, 'I' refers to Ciaran (Author 1).

The context for the self-study was a long-term programme of OAE at an Irish OEC. The programme ran from September 2021 to May 2022 with a month-long break at Christmas. Research was carried out over a period of 8 weeks in January and February. There were 10 students enrolled on this programme and all students were in their mid-teens, from areas in close proximity to the OEC and have a range of personal reasons for taking part in the programme (e.g. enjoyment, encourage by parents/carers). All students were aged between 15 and 17, and most were in Transition year (i.e. fourth year of post-primary schooling in Ireland which is optional) at the time of the programme. There were 8 males and 2 females. Students came to the programme with varying degrees of experience with OAE activities. Some students were already members of organisations like kayaking and sailing clubs, and local scout troops, and some had little to no experience before joining the programme. The only prerequisites to joining the programme were concerned with availability on the days that activities were scheduled to take place and a genuine interest in learning new skills. I met with students, on average, one day every two weeks, however, sometimes I would have multiple days in a row with students, for example, during mid-term breaks and school holidays. One example of was a week of river kayaking that took place during the February midterm, and accounts for four of the contact days with the students during this period of research. The most common activities were water sports such as sailing, powerboating, sea-kayaking, river-kayaking, surfing, stand-up paddleboarding, and snorkelling. However, we would also make use of other OAE activities such as rock climbing and hiking. The facilities available to us were provided by the state funded OEC where the programme was based, and included a large building with changing rooms, a canteen, classrooms equipped with whiteboards and projectors, as well as powerboats, sailing dinghies, sea kayaks, river kayaks, surfboards, stand-up paddleboards, rock climbing equipment, and camping equipment. The main facilitators involved in this programme were myself and one other full time, permanent OAE instructor working at the same Outdoor Education Centre (OEC).

It is important to note that the while the programme aligns with the premise of Williams and Wainwright pedagogical model with regards to the context the model was developed, Williams and Wainwright pedagogical model directly influenced my's teaching approach to OAE and therefore, the enacted practice directs the programme enactment. In saying that, the programme needed to align with the non-negotiables of Williams and Wainwright's pedagogical model so that they model could be studied. 'Being mainly outdoors' was part of the existing OAE programme. 'Experiential learning' and 'challenge by choice' were underpinning approaches/features to the existing programme but this needed more focus in my's practice; Williams and Wainwright pedagogical model influenced practice in this non-negotiable which therefore shaped the programme's use of experimental learning. 'Managed risk' needed to be further built into the programme in multiple ways; as such, the activities chosen for the programme incorporated more opportunity for students to manage different forms of risk.

#### Positionality statement

I am a 26-year-old male with experience in OAE activities. I am a facilitator of OAE programmes at this centre and have been a facilitator for 6 years (at different centres). I completed an OAE Bachelor's Degree previous to enrolling on a Masters of Education so I have experience in OAE content knowledge and pedagogical knowledge. I am quite experienced in OAE activities, both personally and professionally. I have a lot of international white-water kayaking experience, and have been lucky enough to enjoy sailing, surfing, and rock climbing in a wide range of countries, with different climates and environments, and the different challenges and opportunities that come with them. I would describe myself as someone who is truly passionate about varied, nature-based physical activities that challenge me both physically and mentally. Professionally speaking, I have worked continuously as a white-water rafting guide, kayaking instructor, rock climbing instructor, hiking guide, or general OAE facilitator ever since finishing secondary school eight years ago. I have personally experienced the cognitive, psychomotor, and affective benefits of these types of nature-based physical activities and am passionate about helping others to experience them as well. A studentcentred approach informed my philosophy to this programme, in that I considered the traits, attributes, strengths, weaknesses, and individual personalities of the students when designing learning activities. For example, there were some students who were living with conditions such as ASD and dramatically impaired sight, and as such, I designed learning activities that incorporated challenges that were developmentally appropriate for these students. In the next section, data collection and data analysis will be discussed.

#### Data collection

Data collection occurred over an eight-week period and there were multiple data points: professional reflective journal entries, and micro and macro critical friend meetings. The research was carried out over an 8-week period in January and February. Over the 8 weeks, the following occurred in terms of OAE specific activities: Day 1 – River kayaking trip in local area; Day 2 – Sailing in local harbour; Day 3 – Day of climbing at indoor climbing wall; Day 4 – River kayaking trip in local area; Day 5 – Practicing technical kayaking skills in indoor swimming pool; Day 6 – River kayaking and white-water rescue training; and Day 7 – River kayaking trip in neighbouring county. While we would have preferred a longer data collection period, time constraints existed with regards to requirements of the teacher education programme I was enrolled in. We believe the multiple data collection points and the level of depth in the data collection somewhat counteracted this limitation.

#### Professional reflective journal entries

Professional reflective journal entries were used to record as much detail as possible about critical incidents whereby affective learning that took place. Critical incidents were defined as any time an explicit attempt was made to facilitate affective learning experiences or any incident that occurred due to a practice I facilitated – either implicitly or explicitly planned for. Using an evidence-based structured reflection template is a common strategy in self-study research (Fletcher et al. 2016). With this in mind, a structured reflection template with specific prompts was used to maintain a clear focus on the challenges and issues that were faced while facilitating affective learning experiences alongside the four non-negotiable features of Williams and Wainwright's (2016a; 2016b) pedagogical model for OAE. The first four questions were structured on the four non-negotiable features and the latter four questions were reflective prompts on

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Teraoka et al.'s (2021) themes of affective learning experiences/outcomes. The main reason for choosing to use a professional reflective journal was to provide fellow educators with an intimate portrayal of, and an 'insider' perspective on, the experiences of facilitating this model for OAE and the affective learning experiences that it makes possible. Overall, 10 journal entries were collected (one pre-enactment, eight during enactment [one per week], and one post-enactment). To provide a broader perspective on these critical incidents, two critical friends were recruited.

#### Critical friendship

LaBoskey (2004) notes that, in self-study research, it is not sufficient to simply view a situation from one perspective. Critical friendship can assist here. Adams, Holman Jones, and Ellis (2015) describe conversations with critical friends as:

a way to connect our personal experiences, epiphanies, and intuitions to those of others. Sometimes these connections confirm our experiences; other times, these conversations contradict or conflict with our experiences. In both instances, the insights we acquire from talking with and listening to critical friends can deepen and complicate our own stories. (38)

MacPhail, Tannehill, and Ataman (2021, 14) ascertain that critical friendship always has three defining characteristics; 'a reciprocal collaborative relationship, a willingness to be challenged, and an intrinsically motivated willingness to engage in the relationship'. For this study, there were two critical friends. The first was a micro critical friend who was a colleague who I had developed a relationship with over a prolonged period, and throughout this time-period, trust was developed by coming to understand each other's teaching context (MacPhail, Tannehill, and Ataman 2021). Claire (pseudonym) has extensive experience facilitating programmes of OAE and was someone who was available to meet regularly to discuss and challenge my thinking, reasoning, and ideas (MacPhail, Tannehill, and Ataman 2021). I met with Claire once a week over the eight-week period. Claire observed my facilitation, and this informed our critical friend meetings as she based her evidence on what she observed. All critical friend meetings were recorded and transcribed. Interview questions focused on the enactment of the non-negotiable features of the pedagogical model for OAE (e.g. How do you think I did with respect to facilitating challenge by choice?) and the components of affective learning (e.g. From your observations yesterday, is there anything I did that helped to facilitate one or more of the different components of affective learning?). The second critical friendship was a macro critical friend - Dylan (second author) who I met with every second week to further challenge my thinking and enactment of the pedagogical model. The meetings with Dylan followed an unstructured interview style whereby I would report back on the enactment of the model, the critical incidents, and the micro critical friend interviews. Dylan would then challenge different aspects of my enactment by asking me questions around doing something differently (e.g. Have you thought about doing embedding more student-centred approaches?) or challenging assumptions (e.g. How do you know the student engaged in this affective learning experience?). While my micro critical friend – Claire – was involved in my daily teaching, Dylan added a detached lens which enhanced the critical nature of the enactment.

#### Data analysis

Critical friend interviews and the reflective diaries were analysed following Charmaz's (2014) approach to coding. This method of data analysis is both inductive and deductive in its approach and involves a coding process that occurs in three phases: initial, focused, and theoretical (Charmaz 2014). Initial coding involved line-by-line coding where every line in the written data was named and the data was broken down into component parts and properties (Mordal-Moen and Green 2014). This phase also included incident-to-incident coding which, when combined with line-by-line coding, helped to identify implicit concerns as well as explicit statements (Mordal-Moen and Green 2014). Similar to Scanlon, Calderón, and MacPhail (2021), I was concerned with

identifying the processes and relationships in the data, therefore, I avoided labelling the data with single words as I feared this would reduce the data to words and not processes. The second phase of coding, focused coding, involved selecting the most worthwhile and meaningful initial codes and constructing categories and sub-categories through a constant comparative approach (Charmaz 2014). This allowed me to reduce/compress 11 pages of initial codes to compile 1 page of more directive, selective and conceptual focused codes. In the theoretical phase of coding, connections and relationships were made between the constructed focused codes and theoretical underpinnings.

# **Findings and discussion**

In this section, I outline and discuss the findings captured in three categories. In keeping with LaBoskey's (2004) characteristics of self-study research, 'I' is used throughout this section.

# Handing over control to the students: Realities of enacting a pedagogical model for OAE

In this section, I illustrate how I experienced 'handing over control to the students' by looking closely at the features of Williams and Wainwright's (2016a; 2016b) pedagogical model for OAE: (i) being mostly outdoors; (ii) experiential learning; (iii) challenge by choice; and (iv) use of managed risk.

# Being mostly outdoors

Students preferred outdoor learning environments to indoor spaces, but challenges (e.g. the weather) meant indoor spaces (e.g. swimming pools and climbing walls) were utilised. The location of activities was co-decided on with the students; we gave a choice of locations and the students had to rationalise their collective choice. Most of the time, activities took place close to the OEC except for times when travelling to a far-off location was deemed valuable and worthwhile by instructors and students:

We went kayaking on a river in a neighbouring county [in Ireland] and your idea behind using that location was to go on a bit of a day trip to a location a bit further away to get the whole sort of adventure experience beyond their local area. (Claire, interview 7)

Beames, Higgins, and Nicol's (2012) 'four zones of outdoor learning' were very influential when I – in collaboration with the students – was deciding on an environment where learning would take place as it provided limits (and options) in which environment to choose and therefore, align with the enactment of the pedagogical model. Choosing learning environments that were close by to the OEC aligns with Williams and Wainwrights' (2016b, 591) recommendation that initial OAE experiences should be located in the 'immediately accessible and known environment before working outwards towards more distant locations that can provide increasingly demanding experiences'.

# **Experiential learning**

In attempting to facilitate experiential learning, I tried to avoid taking complete control during this programme, which proved to be challenging at times (as it was somewhat unfamiliar to me). For this to occur, I drew on student-centred approaches and the 'plan, do, and review' strategy. As the programme progressed, I witnessed students becoming increasingly involved in the 'plan, do, and review' stages of the learning experiences:

Numerous times throughout the day, the students would approach a rapid [fast flowing, potentially hazardous feature on a river], **plan** how they would like to run the rapid, choose a route and **do** it, and then gather together in an eddy [sheltered area on a fast-moving river] at the end to briefly discuss how it went. Also, on a larger scale, the students set learning goals for the day, practiced certain skills in order to achieve these goals and then **reviewed** their performance at the end of the day in a debrief. (Reflective Journal Entry 5)

I also made the conscious decision to give students the freedom to let learning experiences naturally develop. A typical example of this was allowing the students time for 'free play' at lunch time which resulted in some valuable social and emotional learning:

I think it's those moments, where they are allowed to just have free play, that the bonding really happens and then when you get back on the river and you want them to listen to each other or throw throwbags [piece of rescue equipment used on fast flowing rivers] for each other, it's a lot easier because you've allowed that opportunity for them to naturally come together and to naturally figure out their position within the group. (Claire, Interview 1)

Students were also encouraged to take ownership of their own learning experiences. For example, they drew on their previous experiences which helped them to plan the next activity and how they wanted to engage with it:

They all had some experience to draw on already before they all practiced rolling to some extent on the river already and they could sort of build on that. There was a level of them choosing how they sequenced their learning and interacting with it in different ways, so it was guided by their experiences as well. (Claire, Interview 5)

Involving students in the 'plan' and 'do' stages of the learning process seemed to naturally occur in my pedagogical practice but encouraging the students to lead the 'review' stage proved to be more challenging. Through reflecting with Dylan, this may have been due to how I was attempting to push the students into reviewing their experiences in a traditional, group debrief style review that takes place at the end of the day with everybody standing together in a circle. I began to recognise different ways in which the students naturally reviewed the activities they took part in, for example, one-on-one reviews. Interestingly, as I adapted my 'review' stage, I began to recognise how the students were constructing their own individual meaning from these experiences (Williams and Wainwright 2016b). This was a learning curve for me in this self-study. Engaging in reflective practice, I began to understand how I challenge my traditional approach to reviewing (through my critical friend discussions) by introducing more one-on-one reviews which centralised the individual experience alongside group experience. This proved much more beneficial for an enhanced experience, and I will continue to adopt this approach to reviewing in future facilitation practices.

# Challenge by choice

Challenge by choice was facilitated by offering the students a range of options for engaging with an activity, both in terms of psychomotor skills and affective learning. With regards to the affective space, encouraging students to challenge themselves proved useful:

One student was very reluctant to come on the trip initially and we encouraged him to challenge himself throughout the day to be social and inclusive within the group. With support, and without trying to pressure him into conforming, by the end of the trip he was interacting with his fellow students. (Reflective Journal Entry 1)

I also found that facilitating challenge by choice required good time management and careful planning to be effective. For example, when timing was not carefully managed, I would sometimes have to take control for efficiency reasons, and this meant that students missed out on the opportunity to challenge themselves.

Challenge by choice is a concept terms originally by Karl Rohnke (1989). Since this, there has been confusion around the concept where some have interpreted as a choice to opt out of the activities (Lisson 2000). An important distinction here is students opting out and therefore, not participating compared to opting out and still being involved in the learning experience. Chase's (2015, 126) research, which explored the role of challenge by choice in participation in adventure activities, emphasises the instructor's view and understanding of challenge by choice and how they enact such an approach; 'key ingredients in developing a climate of involvement'. Supported by these findings, an additional feature to Williams and Wainwright's (2016a) 'challenge by choice' could be the

importance of recognising 'the value of participating by observing'. Some students took time to become comfortable enough to physically engage with an activity, and at first, I judged this to be non-participation. However, my critical friend helped me to see that they were participating by being active observers, and when given time, these students would eventually become more physically engaged in the activity. In this way, my experience was more similar to that described by Tannehill and Dillon (2009); for no matter what a student's comfort zone was, they always had an option that allowed them to participate at a level where they feel safe physically, emotionally, and cognitively. This – value of participating by observing – is a valuable finding that is not explicitly referenced by Williams and Wainwright (2016a) and could be considered an additional feature to the existing framework.

#### Use of managed risk

Students were gradually introduced to risky situations so that they could experience it first hand and subsequently make better risk assessments going forward:

One student wanted to jump off of a bridge into the river. I did not tell him that he couldn't and, instead, encouraged him to do a personal risk assessment. After doing so, he came to the decision not to jump as the landing area was unsuitable. (Reflective Journal Entry 1)

The findings highlight how managing perceived risk and social and emotional risk is as important as managing actual physical risk. In fact, most of the time perceived risk and social and emotional risk were deemed a higher priority for myself and my co-instructor, and a great deal of time and effort was invested into managing this type of risk. One way that this was achieved was by helping students to develop their skill level and their belief in their ability to negotiate environments and situations that they previously perceived to be risky. I also managed social and emotional risk by helping to create an environment where students felt at ease:

Maybe to start with that kind of social risk. A climbing wall can be quite an intimidating place sometimes, so I think what you chose to do at the start with your warmup routine, talking to them about being at the wall, all of that helped to just eliminate all of that. (Claire, Interview 3)

I attempted to use managing risk as an educational tool (Williams and Wainwright 2016a), and I found that students were quite responsive and motivated to engage with this approach. Williams and Wainwright (2016a) also propose an understanding of managed risk that includes social, emotional, and psychological risk as equally relevant to physical risk, and encourage facilitators to broaden their understanding of social and emotional risk. However, they do not explicitly mention how this can or should be done. Therefore, I endeavoured to manage social, emotional, and psychological risk by following the advice of Davis-Berman and Berman (2002). They note the importance of understanding the sources of each individual's perception of risk in order to effectively manage it. By working individually with each student to identify and understand how their past experiences and predisposition to anxiety might affect their level of perceived risk, I was able to create an environment where students felt at ease and confident in their ability to succeed (Davis-Berman and Berman 2002). Williams and Wainwright's (2016a; 2016b) model could be developed by more explicitly referring to these techniques for understanding perceived risk and creating an emotionally and psychologically safe affective learning environment.

#### The importance of creating an environment where affective learning can occur

Data highlighted how students experienced a range of different affective learning experiences built on affective skills, including: (i) motivation; (ii) emotional responses; (iii) self-concept; and (iv) resilience (Teraoka et al. 2021).

It was clear to see the students experienced different parts of the spectrum of motivation at one stage or another. As the programme progressed, I observed students relying less on external sources

of motivation and experiencing more autonomous motivation, especially when they were given the freedom to choose how they interacted with the learning environment:

At the beginning of the day, I had to guide most of the students and prompt them to participate in the activity by asking questions like 'how do you think we could navigate this rapid differently?'. After we had spent some time at the location however, the students began to take control of their own learning, and at one point, each of them were practicing different skills at different parts of the feature. (Reflective Journal Entry 6)

Some of the emotional responses that I observed students experiencing were enjoyment, interest, satisfaction, effort, boredom, pleasure, fear, exhilaration, and worry. For many students, the activities they were taking part in were very new to them, and this often meant that they would experience a wide range of emotional responses, for example:

One student expressed interest and excitement at the idea of experiencing something brand new and all the unknown factors that go along with that. He also expressed some fear and worry about sailing out into the deeper water beyond the harbour as he said he has a phobia of deep bodies of water. However, after he experienced this first-hand, he expressed enjoyment and satisfaction at his ability to overcome his fears and be fully present in experiencing this unique opportunity. (Reflective Journal Entry 2)

Not every student would experience this sequence of emotional responses. Some students did not initially experience enjoyment and satisfaction as they judged themselves to have failed at the task they were attempting. It is here that I found the role of the instructor to be most crucial, as I can help the student to see the experience in a different light by focusing on the positive aspects:

Another student experienced fear when he climbed passed halfway on the top rope routes, and despite my best efforts at encouraging him to continue, he would always insist on coming down once he had reached a certain point. When he came down from the climb, he was visibly subdued, disappointed and a little bit embarrassed, therefore it was important for me to focus on the effort that he was putting in instead of the outcome in order to reframe this experience as a positive one. (Reflective Journal Entry 3)

Similar to emotional responses, I mostly observed improved self-concept by noticing changes in the students' body language and attitude towards taking part in activities. While many students experienced an improved sense of perceived competence when they successfully took part in an activity, some required assistance in reframing the experience and focusing on the process rather than the outcomes:

One student in particular was not successful in completing a full, unassisted eskimo roll [an advanced kayaking self-rescue skill] but came very close. I made sure to provide a lot of positive feedback and encouragement for the effort that she was putting in and this appeared to have a positive effect on her self-concept as she expressed that she is confident that she will be able to perform the eskimo roll soon if she keeps practicing. (Reflective Journal Entry 5)

In terms of resilience, I observed students recovering from stressful situations (e.g. overcoming testing weather conditions and feelings of nervousness and anxiety) by using a range of coping mechanisms. Encouraging students to practice coping mechanisms (e.g. mindful breathing) and allowing them to take breaks when needed seemed to build their resilience skills:

One student capsized her kayak and subsequently swam down one of the rapids, which was quite a stressful experience for her. I helped her to cope with this stress by adopting a positive attitude and encouraging her to do the same. We practiced some mindful breathing and positive self-talk and gave her time to recover and compose herself. We then re-joined the rest of the group when she was ready, and she continued on the rest of the river trip without any further difficulties. (Reflective Journal Entry 4)

Informed by Teraoka et al.'s (2021) work, and building on Williams and Wainwright's (2016a; 2016b) model, the role of the instructor in reframing experiences that were judged to be a failure by the students involved was crucial in supporting affective learning experiences. Williams and Wainwright (2016b, 593) do advocate the for regular reviewing of OAE experiences and suggest that 'teacher professionalism should determine precisely when, where and how this should happen'. We believe, based on the findings, that instructors/teachers should encourage students to reframe

negative learning experiences as positive by focusing on the effort and intention put forward by the student instead of the result (i.e. process over outcome). This can enhance students' self-concept (Teraoka et al. 2021) which was also reported in Beames, Higgins, and Nicol's (2012) research as they found, as a result of nine-week adventure education programme, students improved their self-concept and self-esteem.

As the title of the overarching category would suggest, the focus was more on creating an environment where affective learning could happen. One way that I created this learning environment was by developing positive relationships with the students. This was achieved by showing respect to the students and listening to their needs and concerns, as well as making their emotional wellbeing a priority:

I think the students feel very relaxed around you and very open to asking questions. It seems like they also feel like they are trusted. (Claire, Interview 2)

When students seemed to be motivated, I tried to maintain this by offering helpful feedback and positive reinforcement, as well as encouraging a level of ownership over the learning experience:

I guess the way that you involved them in the different steps of the process like the planning and everything, I think that helped with their motivation. Because they were more involved, they were more self-motivated than if you had have just told them what to do. (Claire Interview 4)

Another strategy that helped to create a positive affective learning environment during this programme was the facilitation of individualised learning. This meant that learning progressions could be altered and varied for individual students based on their individual needs. The development of positive teacher/student relationships (e.g. through initiating informal conversations with individual students outside of official lesson time) played an essential role in creating an environment where affective learning could happen (Teraoka and Kirk 2022). This is supported by Sutherland and Stroot's (2010) research which explored group dynamics in an inclusive three-day rock-climbing trip. The authors suggest the context of adventure education, alongside explicit teambuilding strategies, can enhance group trust and support an environment for development of positive relationships between teacher-student and student-student (i.e. interpersonal and intrapersonal growth).

# The potential of the pedagogical model for the creation of an environment where affective learning can be facilitated

In exploring the potential of the pedagogical model for the creation of an environment where affective learning can be facilitated, I outline the links between the features of the OAE model and different affective learning experiences observed.

Based on my enactment of the model, the first feature of the model 'being mainly outdoors' can positively improve 'motivation'. Students were given the opportunity to choose the outdoor location we would be learning in, which made them more involved in the whole process, and thus, were more likely to experience autonomous motivation. This feature also may be responsible for helping to facilitate positive emotional responses due to the wide range of multisensory affordances that some of these locations offer:

When you were choosing this location, you came up with a few different options and the group helped US to choose, so it was based on the skills that they wanted to focus on. (Claire, Interview 6)

The students enjoyed the affordances offered by the natural environment along the riverbank by sunbathing, playing games and organising relay races. (Reflective Journal Entry 4)

I found the second feature of the model 'use of experiential learning' to be linked with several affective learning outcomes, for example, when students were given the chance to learn experientially, I noticed a high rate of positive emotional responses. Interestingly, it was noticed that there

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were positive impacts on students' self-concept when they experienced activities that they initially had low perceived competence in, but overtime, developed higher competence, confidence, and self-efficacy. The third feature of the model 'challenge by choice' can encourage affective learning outcomes such as 'resilience' and 'motivation'. I noticed positive effects on students' motivation levels when they were presented with multiple challenges to choose from, giving them autonomy over their learning. It was apparent that there was improved resilience in students when they pushed themselves to attempt tasks with a high degree of challenge, and then learned effective ways to mitigate the stressful situations that would sometimes arise as a result:

Students were given autonomy to choose which routes they wanted to climb and for how long, therefore the students who were motivated to climb bouldering routes could do so and those who were motivated to climb top rope routes also had the freedom to choose. (Reflective Journal Entry 3)

I found a positive relationship between the fourth feature of the model 'use of managed risk' and the affective learning of 'resilience'. I observed students become more resilient as they learned to develop healthy coping mechanisms for dealing with the stress associated with a high level of perceived risk, as my critical friend acknowledges by reflecting on my practice:

Well there was one student who was particularly scared, so you took her back a step quite early on in the sequence, and just in a very controlled way, let her capsize and then flipped her back over within a second or two, and then helping her to build that confidence by asking her to count to five or ten, and just increasing the amount of confidence she had while under water. (Critical Friend Interview 5)

The above findings show that Williams and Wainwright's (2016a; 2016b) pedagogical model for OAE has a great deal of potential for facilitating an environment where affective learning can occur (Teraoka et al. 2021).

# Conclusion

This self-study allowed me to explore and improve my understanding of myself in my practice as a facilitator of programmes of OAE, and to contribute to knowledge within the OAE community. In returning to the research questions, first, the realities of enacting a pedagogical model for OAE was challenging but rewarding, for example, handing over control to the students was unfamiliar territory but proved to enhance the students' affective learning (and my own practice). Second, in terms of facilitating affective learning experiences, we argue for the importance of creating an environment where affective learning can occur and enacting the pedagogical model for OAE within such environment. The model can also assist in the creation of this environment too, for example and remaining with the previous example, handing over control to students and giving them autonomy over their learning, by using the strategies described in the findings, helped to facilitate a positive and productive environment where affective learning could occur. Furthermore, the development of positive and productive teacher/student relationships also helped to create a high-quality affective learning environment (Teraoka and Kirk 2022). This research highlights the possibilities and potentialities of a pedagogical model for OAE (Williams and Wainwright 2016a; 2016b) in facilitating affective learning experiences/outcomes. We suggest future research needs to further explore the possibilities of the non-negotiables identified by Williams and Wainwright being broadened, added to, or possibly amalgamated. In addition to this, future research could also investigate the transferability of students' affective learning outcomes to other experiences, be that school learning experiences and/or life post-OAE experiences. We strongly encourage and advocate OAE facilitators/teachers to adopt, adapt, and enact the model to benefit the students' affective learning development in OAE settings.

#### **Disclosure statement**

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