Vietnamese Public High School Teachers' Perspectives on Integrating Place-Responsive Outdoor Learning into the General Education Programme

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Abstract

This qualitative inquiry (Tisdell et al., 2025) explored Vietnamese public high school teachers' perspectives on integrating place-responsive outdoor learning (PROL) into the 2018 general education programme (GEP). The theoretical frameworks guiding this research included theories of place (Casey, 2009; Massey, 1994; Relph, 1976; Tuan, 1990), pedagogy of place (Gruenewald, 2008; Wattchow & Brown, 2011), embodied and experiential learning (Dewey, 1938, 1916/2012; Merleau-Ponty, 2012), and sociocultural and professional practice theories (Lave & Wenger, 1991; Schön, 1994; Vygotsky, 1978; Wenger, 1998). The study involved nine homeroom teachers from a public high school in Ho Chi Minh City, Viet Nam. Data collection comprised four main components: nine face-to-face interviews with teachers before the workshops, five professional development workshops, three teachers' group reflections following the workshops, and nine online interviews via Microsoft Teams or email conducted four months after the final workshop to revisit teachers' perspectives of place-responsive outdoor learning, collaborative lesson planning (CLP), and their actual outdoor learning practices with students. The researcher maintained reflexivity through analytic memo writing throughout data collection and analysis. Reflexive thematic analysis (Braun & Clarke, 2022) was the primary method of data analysis. NVivo R1 was utilised for data management and analysis (Beekhuyzen & Bazeley, 2025). Theoretically, the research contributes to understanding the possibilities and challenges of integrating PROL within the 2018 GEP, illuminating the tensions between competency-based objectives and their practical application. It equips the participant-teachers with the requisite knowledge, skills, and dispositions for PROL implementation in an urbanised, non-Western, and centralised educational context that is currently underrepresented in the literature. Empirically, the findings reveal that professional development workshops enhance the teachers' confidence and capacity to deliver PROL through CLP. The study presents practical recommendations for sustainable curriculum integration, underscoring PROL's potential to strengthen teachers' engagement with local environments and to cultivate a culture of care and wellbeing. Finally, it delineates the conditions necessary for the contextual relevance and long-term viability of PROL within the Vietnamese educational system.

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List of commonly use abbreviations

CLP: Collaborative Lesson Planning

CoP: Community of Practice

DOE: Department of Education

GEP: General Education Programme

HCMC: Ho Chi Minh City

HPE: Health and Physical Education

IIQI: Inductive Interpretive Qualitative Inquiry

ITPD: In-service Teacher Professional Development

MOET: Ministry of Education and Training

OBV: Outward Bound Viet Nam

PROL: Place-Responsive Outdoor Learning

RTA: Reflexive Thematic Analysis

RTARG: Reflexive Thematic Analysis Reporting Guidelines

SDG: Sustainable Development Goal

TP: Thinking Play

Attestation of Authorship

"I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning"

Nguyen Thi Yen Nhu

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Ethics Approval

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Chapter 1: Introduction

What is the research problem? How do I address it?

The current Vietnamese General Education Programme (GEP) is influenced by Sino-sphere ideologies, French post-colonialism and socialism. The need for innovative pedagogical approaches and novel curricula was identified as crucial elements in shaping Viet Nam's future educational landscape (Le et al., 2022). Given the disconnection from nature (Duong et al., 2026) and poor mental health outcomes among youth in Viet Nam (Thai et al., 2026), further research on the national and local provision of outdoor learning for school students in Viet Nam is timely. However, in urban areas of Viet Nam such as Ho Chi Minh City, the centralised urban development (Yue et al., 2021) and barriers such as traffic, noise, air pollution, long distances to urban nature, biodiversity loss, and security concerns are some of the problems caused by the rapid urbanisation which appeared to reduce the frequency of visits and weaken its residents' connection to urban nature (Duong et al., 2026).

A recent investigation with secondary school students from five different European countries affirmed the effectiveness of outdoor activities on student learning and positive sense-making from learners (Arslantaş & Bavlı, 2022). A longitudinal study in England revealed that the value teachers placed on outdoor spaces as an optimal learning environment for creative approaches to achieving curriculum objectives, and their utilisation of nearby localities, was sustained over 22 years (Prince, 2020). Teachers' beliefs, drive, effort, and enthusiasm were considered important factors in enabling outdoor learning to happen at school (Prince, 2020). Distribution of leadership and in-school cooperation was a mechanism to empower teachers to experiment with outdoor learning in their pedagogical practices (Prince, 2020). At present, outdoor learning does not explicitly feature in the Vietnamese curriculum, hence opportunities for curriculum enrichment and enhancement of student wellbeing are being lost. My aim was to investigate Vietnamese public high school teachers' perspectives of place-responsive outdoor learning (PROL) and collaborative lesson planning (CLP), the affordances and barriers they experience with PROL that may affect the varying adoption of PROL across Viet Nam considering

contextual sensitivity, cultural influences and local perspectives and values (Prince et al., 2026; Waite, 2020).

In this study, place-responsive pedagogy is integrated in the Vietnamese experiential learning and career education curriculum to enrich learning experiences, enhance learners' wellbeing, and develop their connection with local places. The integration of PROL into the Vietnamese experiential learning and career education curriculum is expected to develop students' connection and attachment to their everyday taken-for-granted places. Investing in an innovative pedagogical approach is one way to nurture young Vietnamese to strengthen their empathetic connection and attachment to places with the hope that they will play their part in the urban regeneration process for Vietnamese community wellbeing, and for the common good of the entire society.

This doctoral study is an effort to influence Vietnamese public school teachers to integrate place-responsive pedagogy into the current Vietnamese experiential and career education curriculum as a solution to reinforce meaningful and democratic teaching and learning experiences for Vietnamese public school teachers and students. By locating learning in the everyday activities of the community, place-responsive pedagogy envisages schools to act as an extension of the lived experience for students to enrich their lives, their community and their places (Wattchow & Brown, 2011). The PROL pedagogical approach was envisaged as offering Vietnamese teachers and students opportunities to develop a deeper understanding of local conditions and to relate these to global changes through the perspective of an existentially engaged and empathetic insider.

This thesis argues that PROL can enrich the implementation of the current Vietnamese GEP by positioning local places as co-teachers in the learning process. However, the pedagogical possibilities of place are not realised simply by moving learning outdoors. Rather, they are shaped by Vietnamese teachers' professional knowledge, pedagogical practices, and interpretation of place, as well as the institutional conditions in which the teachers work. Consequently, supporting the Vietnamese teachers

to engage collaboratively in place-responsive professional learning is important for enabling meaningful outdoor learning within Vietnamese general education.

The research questions are as below.

1. What were the teachers' understandings of the potential contribution of outdoor learning at the commencement of the study? What changes occurred as a result of participation?
2. What was the teachers' experience of their collaborative lesson planning with colleagues, and how might this inform future teacher collaboration in lesson planning?
3. What knowledge, skills, and attitudes have the teachers gained after participating in the place-responsive outdoor learning workshops?
4. What affordances or constraints did Vietnamese public high school teachers encounter while implementing place-responsive outdoor learning sessions?
5. How might the learning from this study inform the integration of place-responsive outdoor learning into the Vietnamese public high school curriculum?

My working definition of outdoor learning

In this thesis, I define outdoor learning as purposeful learning in, about, with, and for the significant places where learning happens. I understand outdoor learning as encompassing four distinct pedagogical orientations, where the natural environment can function as a context, a subject, a partner, or a goal for learning.

Expanding on this idea, I envision place-responsive outdoor learning (PROL) as a pedagogical strategy that acknowledges significant locations as valuable co-teachers or facilitators, each possessing unique social, cultural, historical, and ecological attributes that can enhance educational experiences. The crucial element is place-responsiveness, which involves attentively considering the specific characteristics and opportunities inherent in each place. Instead of merely determining what and where to instruct, place-responsive educators also contemplate how they can effectively teach using the resources available and in cooperating with that particular place as their teaching partner, be it the school

ground, a nearby park, an inner-city canal, a river, or the surrounding community near their school (Brown, 2012; Wattchow & Brown, 2011).

Finally, I use PROL specifically when discussing what emerged from my workshops, to distinguish the particular pedagogical approach introduced through my intervention from outdoor learning as a broader concept.

What is the significant original contribution to the knowledge of my research?

The significant original contribution to the knowledge of my research was to introduce and equip Vietnamese public high school teachers with the knowledge and skills to put into practice place-responsive pedagogy in an urbanised and non-Western context. This topic is currently not represented in the literature. As professional development this initiative acted as a catalyst to empower and equip local teachers to incorporate place-responsive pedagogy into their experiential learning and career education curriculum, and their professional practices. This research provides empirical evidence to advise Vietnamese public policies in revitalising and enriching the Vietnamese General Education Programme and supporting in-service teachers' professional development. Another significant outcome is the pedagogical innovations that resulted from the intervention with the participant-teachers in the workshops through the shift in their thinking about collaborative lesson planning. My research also offers recommendations for integrating place-responsive outdoor learning into the Vietnamese national curriculum to support its accessibility and sustainability by translating curriculum aspirations into place-responsive practices at both the local school and national levels.

Why does this thesis matter?

> *Where I was born and where and how I have lived is unimportant. It is what I have done with where I have been that should be of interest (Abrams, 2009, p. 13)*

I have included this quote because it resonates deeply with my own values of agency, creativity, and personal choice. Like O'Keeffe (Abrams, 2009), I believe that meaning is derived from how we shape our lives, not from the circumstances we are born into. Her philosophy of transforming surroundings

into a wellspring of creativity and purpose mirrors my own aspirations to cultivate a life rich in creativity, innovation and intentionality.

This is significant for me as I am a product of the Vietnamese General Education Programme. I experienced a curriculum heavily focused on theories, with limited authenticity, engagement, and reflection in the learning process. Outdoor learning was not included in my pre and in-service teacher training. It was not until I pursued postgraduate studies in Sweden, after my first year of teaching practice, that I encountered this pedagogical approach. Inspired by its potential to support the holistic development of school students, I was eager to adapt outdoor learning to the Vietnamese context once I completed my studies. During that period, the Vietnamese hierarchical and reserved management system in education (Tran & Li, 2025) influenced my sense of agency and limited my ability to achieve my vision of inclusive outdoor learning for Vietnamese school students. I was alone in that journey. A decade later, I found my way back to outdoor learning through my doctorate studies.

My doctoral research aims to understand the perspectives and practices of local teachers teaching at a public high school, both before and after participating in place-responsive outdoor learning workshops as part of their professional development. Through active participation, reflection, collaborative lesson planning during workshops, and the implementation of their own versions of PROL with their students, teachers will gain a deeper understanding of what it means to be place-responsive in their teaching within urban outdoor environments. They will also recognise how teacher collaboration can influence their lesson planning and facilitation. Ultimately, through this research, I am endeavouring to influence Vietnamese teachers' practices and foster a community of PROL practitioners in Viet Nam. I hope these practices can inform local authorities to improve policies and promote an inclusive, innovative, meaningful, and place-responsive education for Vietnamese public school students.

Why do I do it now?

A deep human need exists for associations with significant places (Relph, 1976, p. 147).

I believe it is important to begin by sharing a bit about who I am as an individual and my connection to the places that hold significance for me, as noted by Relph (1976). My childhood in Viet Nam was diverse, each place leaving a lasting impression. In primary school, I lived in a remote mountain town called Madagui, where my father worked as a general practitioner with the Red Cross. This unique upbringing allowed my siblings and me to explore the wildlife and nature around us. I remember cycling on my sky-blue bike beside my father on his silver Vespa, observing my mother helping a pig deliver a baby, tending to seedlings, chasing butterflies on the church farm, and getting soaked in a nearby creek or occasional rain. In secondary school, I lived in a metropolitan city. Despite my love for cycling, I joined other sports clubs, mostly soccer and badminton, with other kids from the nearby blocks. I enjoyed exploring our neighbourhood and seeing how it has transformed over the years. I was also one of the first cohort of students at the first national standard high school in our district, which had well-insulated classrooms, a library with real books, and a school ground with a canopy of trees and a sport field. I spent more time roaming the school ground and the sport field than in the better-equipped but to my mind 'boring' classrooms. During this time, I enthusiastically volunteered at a Taichi club, where I supported the local older adults.

During my undergraduate years, commuting to university on my scooter every day in the early morning provided me with the opportunity to observe the city in its serene state at dawn, contrasting sharply with its bustling hours until nightfall. During my freshman year, I continued volunteering by tutoring underprivileged children at an open home near my university. This experience provided me with fantastic opportunities to meet many international peers who had joined the volunteer efforts in Viet Nam. Additionally, in my sophomore year, I volunteered at a summer camp to assist drug addicts in a rehabilitation centre. I vividly remember the young faces undergoing their recovery. This powerful experience profoundly shifted my perspective and prompted me to reflect on my life's purpose and mission. After four years of undergraduate studies, my most vivid memories were the daily commutes across the many bridges in my hometown, accompanied by the breathtaking dawns and golden sunsets of my beloved city. I then went overseas for postgraduate studies, continued my young adulthood in various places, and eventually settled down in my hometown with a full-time appointment at a private

university. During the pandemic in 2020, I embarked on a doctorate journey, driven by significant questions for which I eagerly sought answers.

I have obtained a bachelor's degree in English Language Teaching and a master's degree in Outdoor and Environmental Education. After completing my postgraduate studies in Sweden, I returned to Viet Nam to continue teaching in the field of TESOL at various institutions from the public to private sector. This career has allowed me to work with diverse learners, from young students to adults. Through these years of teaching experiences, I realised that each learner has a unique way of learning and tends to engage more with authentic materials and hands-on learning opportunities. Drawing on my postgraduate studies, I am convinced that outdoor learning provides an inspiring, meaningful, and alternative approach to traditional education, particularly for Vietnamese public school students.

Engaging in sensory and embodied learning within local outdoor environments can significantly enrich Vietnamese students' educational experiences, fostering a deeper sense of belonging, connection, environmental awareness, and stewardship. This is particularly pertinent as the country continues to address the enduring impacts of Chinese rule over a millennium, French colonisation for nearly a century and the Viet Nam - American war over two decades. Hence, I focused my doctoral research on exploring the potential of incorporating place-responsive outdoor learning into the public school curriculum, taking into account the viewpoints of Vietnamese educators. My vision is to ensure equitable and sustainable access to meaningful outdoor learning that responds to local contexts, aligning with the United Nations Sustainable Development Goal (SGD) 4: Quality Education, specifically Target 4.7, which aims to equip learners with the knowledge and skills necessary for sustainable development (United Nations Department of Economic and Social Affairs (UN DESA), 2025). I am convinced that transformation in innovative ways of thinking begins with individuals through education, with local teachers playing a vital role in championing the adoption of place-responsive pedagogy. This pedagogical approach should be accessible and sustainable for all students in Vietnamese public schools. In partnership with local educators, I am dedicated to integrating place-responsive outdoor learning into the Vietnamese public school curriculum.

The thesis structure

This thesis follows the traditional format, consisting of an introduction chapter and five other main chapters.

In the literature review chapter, I present insights into the Vietnamese general education curriculum, Vietnamese outdoor learning and outdoor life, conceptualisations of outdoor learning, theories of place and pedagogy of place, and in-service teacher professional development.

In the research design chapter, I discuss the research paradigm underpinning my doctorate. These are constructivism and interpretivism, ethical considerations, theoretical framework underpinning this research includes embodied and experiential learning, and sociocultural and professional practice theory, and inductive interpretive qualitative inquiry. I give details of the research site, participant-teachers, and data generation tools, including pre-workshop interviews, in-service participant-teacher professional workshops, group reflections, post-workshop interviews, and reflexive thematic analysis as the primary data analysis method. I explain how I used NVivo R1 for data management and analysis, declare my ethical use of AI tools, and articulate the trustworthiness of my research.

In the results chapter, I use a temporal narrative structure that contrasts the period before and after the professional development workshops to illustrate the evolution of participant-teachers' sense-making over time. The results are analysed through an interpretivist lens, emphasising how meaning was co-constructed through dialogue, reflection, and participants' professional experiences.

In the discussion chapter, I critically reflect on the results chapters, and situate them within existing research perspectives.

In the conclusion chapter, I present the major findings and contributions. I address the ultimate research question by proposing recommendations for integrating PROL into the Vietnamese public high school

curriculum. Furthermore, I reflect on my research limitations and suggest potential directions for future research.

Chapter 2: Literature review

Introduction

This literature review provides insights into the Vietnamese educational context, Vietnamese outdoor life, Vietnamese outdoor learning, global concepts of outdoor learning, and in-service teacher professional development. The chapter critically discusses how these issues have influenced Vietnamese general education, identifies the shortcomings of outdoor learning in the public school curriculum and highlights the knowledge gaps that my research aims to address. In this chapter I recommend that Vietnamese educators adopt place-responsive outdoor learning to enrich the local curriculum and improve the holistic wellbeing of teachers and learners. Collaborative lesson planning will serve as a method for in-service teacher professional development enabling the participant-teachers to work with colleagues [in the study] to incorporate place-responsive pedagogy into their teaching practices by fostering a connection with local places. Place-responsive outdoor learning will be integrated with the experiential and career education modules for public high school students within this research.

Insights into the general education of Viet Nam

History of the Vietnamese educational system

The Vietnamese educational system before French colonisation (10th–18th century)

Located in Southeast Asia, Viet Nam was principally influenced by the ideologies and philosophies of the Sinosphere given the four eras of the Chinese Domination (Glomb et al., 2020). Between the 10th and the 15th centuries, the primary religious and philosophical principles were based on Buddhism under Chinese rule. The national civil service examination over the first four dynasties of Viet Nam had a focus on Buddhism and Daoism. From the 15th century, Confucianism officially replaced Buddhism due to political and cultural evolution.

Up until the 18th century, Viet Nam had at least three formal schools established. The Lan Kha Academy was located in the North during the Tran dynasty (1226-1400), and the Sung Chinh Academy and Phuc

Giang Academy were located in the central area during the Tay Son dynasty (1778-1802). Nguyen Thiep, a renowned Confucian scholar at that time, was the head of Sung Chinh Academy. He played an extraordinary role in compiling, translating, editing, and distributing Confucian classics into teaching materials in Nom script (Vietnamese written language used between the 10th and the early 20th century) to facilitate the use of Vietnamese language instead of Han script (Chinese version). The civil war between the Trinh Lords and Nguyen Lords left people in the centre of Viet Nam in poverty as the region served as a border and battlefield for nearly two centuries. During the Trinh-Nguyen war, both public and private schools remained very primitive with moderate and small size classes in villages facilitated by local Confucian scholars.

The Directorate of Education (Quoc Tu Giam) was the largest public school which was established in the capital Thang Long (now Ha Noi) since the Ly dynasty in the 11th century. The school was built beside the Temple of Confucius (Van Mieu) to primarily serve the royal princes and the sons of the elites. From the 13th century the school was opened to enrol potential and exceptional talent from lower-class families. Students from other regions of Viet Nam had to travel to the North, especially to the capital Thang Long, to pursue a formal education focused on Confucian classics, writing skills, and literary commentary (Glomb et al., 2020). Vietnamese Confucian scholars at that time were those who had expertise in multiple fields including Confucian classics, geography, history, medicine, literature, foreign relations, and education. They represented a typical model of the polymath intellectual versed in various fields in the Sino world (Glomb et al., 2020).

The Vietnamese educational system during French colonisation (1862–1954)

In the late 19th century and early 20th century, the colonial French education system gradually replaced the Confucian domination in Viet Nam (Nguyen & Albright, 2022). The French schooling system did not provide mass education for all. Instead it served the elite and urban populations with limited access for the general population. The main aim was to educate the children of French colonisers and privileged Vietnamese families (Nguyen & Albright, 2022). The French introduced Western-style education into Viet Nam with an effort to assimilate Vietnamese students from the upper and middle classes into the

French language and culture through a French curriculum (Nguyen, 2020). The education system during French colonisation promoted French ideals and suppressed Vietnamese culture which led to a sense of cultural disconnection among those Vietnamese students who participated in the French schooling system. This period played a pivotal role in the later fight for independence among the young Vietnamese at that time.

One of the highlights in the early 20th century was the establishment of the Vietnamese written language utilising the Latin alphabet. The Vietnamese language called Quoc ngu was perfected from a Romanised script by Alexandre de Rhodes, who also brought an influence of Christianity to Viet Nam. Since then, Quoc ngu has become the national language of Viet Nam and has helped to increase the literacy rate and facilitation of Christianity (Britannica T. Editors of Encyclopedia, 2023).

The Vietnamese educational reforms since independence (1954 – present)

From the beginning of the Viet Nam war in 1954, Northern Viet Nam retained a Soviet educational model typified by a centralised government and teacher-centred approach, whereas the Southern Viet Nam educational system was heavily influenced by French colonialism. After the fall of Saigon in 1975, Viet Nam experienced a withdrawal of both private and religious Westernised educational institutions guided by humanistic, nationalist, and liberal values in Southern Viet Nam. Since 1986, the Vietnamese government has pursued a policy of holistic educational reform as part of Doi Moi - the economic and political reform series. The establishment of the Ministry of Education and Training in 1990 marked a milestone in the Vietnamese educational system after the Viet Nam and America war (Nguyen & Albright, 2022). The implementation of the socialisation of education has reflected the notion of a 'learning' society as mentioned in Resolution 29 in 2013. Viet Nam has strategically supported local human resource capacity building based on upskilling, foreign languages, and ICT competencies (Le et al., 2022).

Since 1986, educational reforms on a national scale have been conducted in Viet Nam every ten years. The education reforms have been responsible for training a Vietnamese skilled labour force with global

competency and action education for sustainable socio-economic development and collective wellbeing (Nguyen & Albright, 2022).

The 2018 General Education Programme

The current General Education Programme (GEP) of Viet Nam was established in 2018 and concentrates on enhancing Vietnamese students' personal qualities and competencies valued by the Vietnamese government (London & Duong, 2023). This refreshed national curriculum aims to create a harmonious learning environment for students' holistic development. The curriculum is designed to nurture students' confidence by equipping them with effective learning skills, fundamental knowledge, career education, and essential skills for work and life. Students are encouraged to become patriotic, humanistic, and responsible citizens, who are well-educated, hard-working, creative, upskilled, and life-long learners (Ministry of Education and Training, 2018).

The refreshed GEP included two different and continuous learning stages: fundamental education and career-oriented education. The fundamental education is a nine-year programme (Year 1 to Year 9) which includes five years of primary school, children start school at age six, (Year 1 to Year 5) and four years of junior high school (Year 6 to Year 9). The career-oriented education is a three-year programme of senior high school (Year 10 to Year 12). Contemporary teaching and learning approaches, and pedagogies are encouraged in appropriate learning contexts at school and out of school which include; flipped classrooms, experiments, task-based learning, project-based learning, play-based learning, role-play, seminars, excursions, camping, library/reading period, whole class/school meetings, and community service. Both formative and summative assessments are introduced to inform students' learning progress and to improve teaching quality and curriculum development (Ministry of Education and Training, 2018).

The Viet Nam Ministry of Education and Training (MOET) identified five major problems of the Vietnamese education system before 2013 which include; an excessive focus on theory with insufficient

practical application, concerns about equity, a fragmented and poorly connected system between formal and continuing education, outdated teaching and assessment methods, unclear and inappropriate mechanisms for autonomy in educational institutions, and a shortage of quality teachers and administrators (Le et al., 2022). Local teachers and students appeared to become institutionalised in their teaching and learning styles (Nguyen & Albright, 2022). The application of a competency-based curriculum (Le et al., 2022) and authentic assessment (Tran et al., 2022) is now being promoted across various learning stages of the Vietnamese GEP and in higher education to address the outdated assessment methods. These approaches have been adapted to the Vietnamese national curriculum to enhance students' performances in analytical and interactive tasks in real-life contexts (Tran et al., 2022). Environmental education has also been well-documented in Vietnamese institutional policies. However, the current overloaded curriculum has become fractured and difficult to deliver to students in schools. It is essential to develop a common framework and guidance to help school teachers implement environmental education within the curriculum of Vietnamese public schools (Nguyen & Albright, 2022).

The Vietnamese government has resolved that modernising the education system is a key strategy for socio-economic development (Nguyen et al., 2020). To enhance national competitiveness the government outlined the transition of K-12 education and higher education systems in Viet Nam towards Science, Technology, Engineering and Mathematics (STEM) fields (Chen et al., 2021). Another key feature of the 2018 GEP is the shift to a competency-based curriculum, marking a departure from the previous content-based curricula that have defined the history of education in Viet Nam (Le et al., 2022). The Vietnamese experiential learning and career education modules are among the notable new learning areas introduced in this refresh GEP.

The mandated educational activities of the experiential learning and career education

The experiential learning and career education modules are compulsory educational activities for Vietnamese public high school students. These learning modules are often planned flexibly and implemented by homeroom teachers and/or a particular assigned group of teachers in response to school

culture and budget. The learning objectives are to develop key qualities and competencies for learners through practising self-directed activities, social-oriented activities, nature-oriented activities, and career-oriented activities. Students are expected to have opportunities to experience learning via real-life contexts to develop interdisciplinary knowledge, practise problem-solving to prepare for work and life, and become lifelong learners (Ministry of Education and Training, 2018). In this thesis, learning themes, objectives, and outcomes of the Vietnamese experiential and career education modules for Years 10 and 11 are explored in the process of integrating place-responsive outdoor learning into the Vietnamese GEP within the scope of this research. The 2018 GEP already mandates experiential activities and promote active, practical, inquiry-oriented and locally connected learning. I position PROL as a pedagogical means of enacting these requirements, while place-responsive pedagogy contributes a more specific proposition that the particular qualities and meanings of place should actively shape the learning of Vietnamese students.

Summary

The present Vietnamese GEP is influenced by Sinosphere ideologies, French post-colonialism, and socialism. The contextual changes shaping today's Vietnamese education reflect thousands of years of Vietnamese history and a twentieth century strategic plan for the country's social, cultural, political, and economic development. The educational reform policymaking highlights the Vietnamese government's endeavour to establish a prestigious, high-quality education standard (World Bank Group, 2025). Globalisation, in terms of the demand for an upskilling workforce, international educational standards and goals, and climate change, has played an important role in the Vietnamese education reforms (Le et al., 2022). Given the uncertainty of the future for young people, life transitions are no longer linear. There is no single formula for success. By equipping students with qualities such as improved education, resourcefulness, flexibility, independence, and entrepreneurship, the life course of young Vietnamese people could be experienced more positively, meaningfully, and constructively (Brady & Kennedy, 2014). Innovative pedagogical approaches and novel curricula are suggested as key factors in shaping the future educational landscape of Viet Nam (Le et al., 2022).

I have highlighted insights into the national curriculum of Viet Nam over a significant timeline. I now explore the role of outdoor learning and outdoor life in Vietnamese society and culture, and its current GEP.

Vietnamese outdoor life

Viet Nam has a diverse topography, including the north-central highlands, the Red River Delta in the north, the central highlands in the southwest, the Mekong River Delta in the south, and a long coastline of more than 3,000 km on the east side of Viet Nam. At least half of Viet Nam's topography is covered by forest with more than 2,000 native species of forest vegetation, thanks to the diverse climate and soil classification (Tan, 2007). The northeast monsoons occur every year between October and April and contribute to milder temperatures compared to those in other countries in the same region. The tropical and humid characteristics of Vietnamese nature are changed by its monsoon system. As a result, the south of Viet Nam experiences higher temperatures and a more stable climate, with a hot, wet season between May and November and a cool, dry season between December and April, whereas the north of Viet Nam has four distinct seasons (Tan, 2007). Given the natural diversity, Viet Nam has become an attractive destination to the tourism industry.

Ho Chi Minh City (HCMC), the largest, most vibrant, and financial hub of Viet Nam, has been influenced by the French colonial-era infrastructure, with well-designed, large parks located in the city centre, that were built in the 19th century. In contrast, the most recently built urban parks on the city's outskirts are small, poorly equipped, and far from residential areas (Hoang et al., 2019). Similarly, Ha Noi, the capital of Viet Nam, has faced the same situation in urban planning where distance and accessibility to parks, green spaces, and recreation areas limit urban dwellers' uptake of park visits (Pham et al., 2019; Schetke et al., 2016). A gender disparity in park access is also evident, with women visiting less often and for shorter durations compared to men (Pham et al., 2019). Those living near parks were more likely to visit them for walking and/or other sports and recreation, such as spending time with friends and family or exercising at the available outdoor gym for a couple of hours (Schetke et al., 2016). University students appeared to be the most frequent users of urban parks, given their

flexible learning schedule, whereas school children had limited access to these green spaces due to their parents' safety concerns about traffic, transportation, long distances to access a local park, pickpockets, and other criminals (Schetke et al., 2016). Environmental concerns, such as air and noise pollution are commonly found in developing countries, and Viet Nam is no exception (Nguyen et al., 2021; Nguyen, 2021; Rakholia et al., 2023). Heat is another concern that limits Vietnamese people's outdoor time (Tran et al., 2018).

In conclusion, the outdoor life of Vietnamese urban dwellers is restricted by the poor quality of urban green space, long distances between residential areas and local parks, weather conditions with high heat and heavy rainfalls throughout the year, and personal safety concerns (Schetke et al., 2016). Given the high population density exceeding ten million inhabitants of some Vietnamese megacities such as HCMC (World Population Review, 2026), innovative ways of engaging with open and green spaces would need to utilise vacant spaces in public buildings, canals, riverbanks, etc., to enhance the availability, accessibility and utility of outdoor spaces in these urban areas (Hoang et al., 2019; Pham et al., 2019).

Vietnamese outdoor learning

There has been limited research on outdoor learning in Viet Nam. The following sections outline four outdoor learning initiatives that have been researched.

A model kindergarten incorporating farming in an industrial city in the south of Viet Nam has highlighted environmental, client, and social benefits from a green, open educational space (Vo, 2016). This kindergarten provided a flow between outdoor and indoor zones within the school property and utilised natural resources, natural ventilation, and recycled water in its design and construction. The low-tech passive design helps the school maintain low water and electricity consumption. It is called a farming kindergarten because food is grown on the rooftop garden. The kindergarten children

participate in gardening activities. The farm products are distributed to children's lunches and help support the families of children who are experiencing financial hardship (Vo, 2016).

Think Playgrounds (TP) (Muto, 2021), a dynamic social enterprise established in 2016 in Ha Noi, is another model promoting outdoor play in Viet Nam. TP has contributed to promoting outdoor play for Vietnamese children through raising funds, designing, and constructing outdoor playgrounds in the north of Viet Nam. They have utilised recycled materials and unused spaces in urban areas to create outdoor playgrounds that promote creative, loose-part, and risky play for Vietnamese children in low-income residential areas. The success of TP was built on local human resources and capacity, and on international cooperative relationships with global experts (Muto, 2021).

Since 2016, Outward Bound Viet Nam (OBV) is another social enterprise that has operated outdoor adventure programmes in Viet Nam (Outward Bound Vietnam, 2025). According to the OBV impact report 2020-2024 over the past five years, they have delivered 261 outdoor education programmes to more than 7,000 participants, mainly school-aged students and young adults. The report highlights a significant positive contribution, with strong outcomes across key areas such as environmental responsibility, compassion, resilience, self-confidence, and social skills. The organisation also prioritised safety, staff development, and community outreach, offering over 250 scholarships and engaging in sustainability projects. Looking ahead, OBV aims to expand its reach, strengthen collaborations, and continue to provide transformative outdoor learning experiences. Although the implication on accessibility is evident, the report does not explicitly examine equity issues or systemic barriers, such as differences in participation between public and private schools, rural and urban access, gender, or disability. A more detailed discussion of diversity and inclusion strategies, including language support, and inclusive curriculum design, was also absent. The report provided insights into OBV's strong commitment to accessibility for public school students through programme delivery, scholarships, and partnerships. However, it falls short of offering a comprehensive reflection on inclusion and equity frameworks, which could be areas for future focus or ongoing reporting. My concerns about OBV's work so far are that the organisation seems to attract corporate training, and

international and private schools, which may create inequality in access to outdoor learning for Vietnamese public school students.

In the latest peer-reviewed research on outdoor learning in Viet Nam, Lynch et al. (2025) used the framework of experiential learning theory, to identify themes related to student outcomes in an outdoor leadership course. A total of 218 university students participated in a three-day, two-credit course focused on leading by serving. The course placed the growth, safety and wellbeing of others at the centre of leadership practice. The study investigated student-centred themes, the benefits of outdoor learning, and examples of contextually relevant concrete experiences. The findings indicated that students perceived the advantages of outdoor learning in terms of nature appreciation, mental health improvement, stress reduction, health and wellness, and moments of pride linked to risk-taking and physical challenges (Lynch et al., 2025).

Summary

The paucity of published research about outdoor learning in Viet Nam indicates the need for further investigations. There is no official information about outdoor learning modules available in the Vietnamese GEP. Waite (2020) suggests that the loss of connectivity to nature, and poor mental health outcomes for youth, require further research on national and local provision of outdoor learning is essential to understand the outcomes, purposes, and barriers that might lead to different uptake of outdoor learning across Viet Nam, given the contextual sensitivity, cultural influences, and local narratives and values.

In the upcoming section, I explore the global concept of outdoor learning, assess its benefits, and review the pedagogical approach of place-responsive outdoor learning. My goal was to discover processes to boost the adoption of outdoor learning in Viet Nam, thereby enriching the local curriculum, enhancing students' holistic development, and fostering their attachment, connection, and integration into their local communities.

Conceptualisations of outdoor learning

Outdoor learning has a rich and enduring legacy, rooted in progressive educational philosophies that emphasise the significance of experience, location and the connection between students and their environment. Visionary thinkers such as Dewey (1938) regarded experiential learning as vital for meaningful education a concept further developed by Kolb's experiential learning theory (Kolb, 2014) and formally established as a discipline of outdoor education by Priest (1986). Recent studies consistently brought attention to the cognitive, social and emotional benefits of learning outside the traditional classroom, while also highlighting the critical role of teaching methods and context (Beames et al., 2012; Rickinson, 2004).

Over the decades, outdoor learning in Western countries has been shaped by policy-making, mass media, and private business, which has made it a high priority in government policy and documentation (Joyce, 2012). Outdoor learning is defined as purposeful learning that takes place in natural and outdoor environments, extending beyond classroom walls (Learning and Teaching Scotland, 2010). Outdoor learning is a pedagogical approach to enhance students' engagement, physical activity, and connection to the environment through sensory, hands-on, and place-responsive learning activities (Irwin et al., 2012). Formal outdoor learning has existed in many Western countries since the 16th century (Joyce, 2012). Since then, outdoor learning has been gradually developed and features the following key principles, which include experiential learning, nature connection, holistic development, child-led exploration, risk-benefit assessment, integration with the curriculum, inclusion and diversity, reflective practice, sustainability, and environmental responsibility (Joyce, 2012).

Outdoor learning, especially at the early stages of life, is proposed to offer new pathways to how students can learn to communicate and collaborate in an authentic, constant changing world, and provide radical solutions to work within this interdependent and global environment (Wattchow et al., 2014). Specific elements such as geography, society, politics, culture, and individual situations should be taken

into account, as they may influence the outcomes of outdoor learning (Brookes, 2003b; Sutherland & Legge, 2016). Issues of inclusion and equality must be addressed to ensure the outdoor curriculum is accessible to all learners. Working in partnership with professionals or volunteers with specific expertise would help plan long-term professional development for school staff, strengthen their capacity, and illuminate a mutual understanding of the purposes of outdoor learning among outdoor learning practitioners (Wolsink, 2015).

In the 21st century, outdoor learning has undergone a significant transformation, shifting from a focus on justifying programmes through activities, adventure, or settings, to a more nuanced examination of how learning is intentionally designed, facilitated, and assessed in outdoor environments. Current research prioritises pedagogy, educator decision-making, and learning processes over mere outcomes (Beames & Brown, 2016; Beames et al., 2012). This shift has resulted in increased emphasis on curriculum alignment, reflective practice, and learner meaning-making. My research aligns with this pedagogical shift by exploring how outdoor learning is enacted, experienced, and interpreted by Vietnamese public school teachers, rather than merely assessing its effectiveness. My aim is to promote the recognition of outdoor learning as a valid educational practice within the formal public school system in Viet Nam (Fraulo et al., 2025).

Another emphasis in twenty-first century outdoor learning, is the connection to people and places, shaped by cultural, ecological, and social factors, rather than generic outdoor settings (Gruenewald, 2003b; Wattchow & Brown, 2011). Place-responsive outdoor learning involves interacting with the place itself, including its history, stories, and power dynamics, rather than treating it as a neutral backdrop. This theme supports my research as contextually grounded, challenging universal claims and emphasising local meanings, practices, or relationships. It also validates focusing on place, landscape, and community as active influences on learning, rather than variables to be controlled.

Recent literature has critically analysed who benefits from outdoor learning and who is excluded. Scholars have questioned historical narratives that focus on white, middle-class, able-bodied

experiences, advocating for more inclusive, culturally sustaining, and socially just approaches (Loynes, 2002; Warren et al., 2014). This involves considering gender, disability, race, socioeconomic status, and cultural belonging. My research addresses these calls by highlighting underrepresented voices, experiences, or contexts in outdoor learning, thereby enhancing its ethical and social relevance and aligning it with current critical scholarship (Zong et al., 2024).

Outdoor learning, which is increasingly associated with environmental education, sustainability, and human-nature relationships, particularly in the context of climate change and ecological uncertainty, is now being scrutinised for its complexities in promoting pro-environmental behaviours (Breunig et al., 2014; Sterling, 2010). To enhance conceptual clarity and provide pedagogical direction, Beery (2025) advocated for transitioning from activity-focused or site-neutral teaching to a place- and landscape-responsive pedagogy. Beery recommended that environmental and outdoor educators create learning experiences that emphasise continuity, belonging, and enduring relationships with landscapes. Furthermore, landscapes should be recognised as ethical and educational partners rather than merely learning environments. This theme enables my study to critically engage with assumptions about environmental outcomes and to explore how outdoor learning contributes to ecological understanding, environmental care, and responsibility in nuanced ways.

The benefits of outdoor learning

Engaging in outdoor learning activities within urban green spaces offers numerous advantages for schoolchildren. These benefits include enhanced physical and socioemotional wellbeing, a positive reported changes on mental health, support for academic growth, and the development of essential twenty-first century skills such as communication, collaboration, creativity, critical thinking, problem-solving, self-regulation, and empathy (Bentsen et al., 2021; Mann, Gray, & Truong, 2022; Mann, Gray, Truong, et al., 2022; Mygind et al., 2021; Nisbet et al., 2008; Petrigna et al., 2022; Shanahan et al., 2019; Twohig-Bennett & Jones, 2018). A review by Faskunger et al. (2018) on the significance of outdoor teaching in formal schools highlighted that schools could improve holistic development of students by incorporating more outdoor lessons and alternating between outdoor and classroom

teaching. Information from this review also suggested that students were likely to perform better and feel more positive as a result of participating in outdoor learning (Faskunger et al., 2018). Additionally, the review indicated that outdoor teaching can enhance study motivation, especially among students who have previously shown lower motivation in traditional classroom environments (Faskunger et al., 2018). Another systematic review by Mann et al. (2021) underscored several key benefits of outdoor learning, aligning with findings from the review conducted by Faskunger et al. (2018), whether it takes place on school grounds or in community outdoor settings. This review highlighted additional benefits of outdoor learning, such as fostering a sense of identity, enhancing social cohesion, and cultivating pro-social behaviours and personal executive functioning (Mann et al., 2021). A recent systematic review (Mahmud & Sainorudin, 2025) of effective outdoor science education practices highlighted learning outcomes such as heightened student interest in science, a more robust science identity, enhanced self-efficacy, and a deeper connection to nature.

An investigation involving secondary school students from various five European countries, including Turkey, Italy, Portugal, Romania, and Spain, confirmed the effectiveness of outdoor activities in enhancing student learning and fostering positive discourses of outdoor education (Arslantaş & Bavlı, 2022). Similarly, a study among secondary schools in Amsterdam revealed that students appeared to enjoy school fieldtrips to nearby urban green spaces, and their concentration and behaviour improved (Wolsink, 2015). In comparison, individual guided walks in urban parks appeared to have reported changes on improving children's attention, especially those with ADHD (Taylor & Kuo, 2009). In lower-income countries, urban parks have played a crucial role as a community platform for physical sports and recreation (Fadjarajani & As'ari, 2020). Outdoor learning in urban green space appeared to have a strong contribution on human wellbeing, both physically and mentally (Wolsink, 2015). There appeared to be a link between outdoor learning and students' awareness and basic knowledge of environmental issues and sustainability (Wolsink, 2015). A place-based, culturally grounded nature programme called 'Guardians of the Park' in Sydney, Australia showed through strong qualitative evidence that it could improve wellbeing, social functioning, and ecological connection among

disengaged urban youth (Gray & Pigott, 2026). Improving access to urban green space has the potential to foster urban lifestyles that promote students' environmental ethics (Wolsink, 2015).

Teachers' views on the significance of outdoor learning

Frances et al. (2025) found that consistent, curriculum-based outdoor learning provided Australian teachers with a range of interconnected professional and personal advantages. These included improved teaching experiences, strengthened relationships, enhanced wellbeing, and a deeper connection to nature ultimately supporting both teacher and student outcomes. A comprehensive literature review by Neville et al. (2023) found that feasible cross-disciplinary outdoor learning depended on the intentional alignment of environmental, learner and educator factors, supported by a robust pedagogical model that enhances teacher confidence and facilitates curriculum integration. A longitudinal study in England revealed that the value teachers placed on outdoor spaces, as an optimal learning environment for creative approaches to achieving curriculum objectives, and utilising nearby localities was sustained over 22 years (Prince, 2020). Teachers' beliefs, drive, effort, and enthusiasm were considered important factors in enabling outdoor learning to happen at school (Prince, 2020).

Teachers with greater competence and confidence in planning outdoor lessons are more inclined to engage in outdoor learning (Špernjak et al., 2026). In addition, the distribution of leadership and in-school cooperation empowered teachers to experiment with outdoor learning in their pedagogical practices (Prince, 2020). Ongoing professional development was identified as a crucial factor in facilitating meaningful curricular outdoor learning (Prince et al., 2026). The most significant results were achieved when policy, teaching methods, and the physical environment were in harmony (Boeve-de Pauw & Van Petegem, 2018; Dring et al., 2020; Mygind et al., 2019).

Given the benefits of outdoor learning, it is crucial to utilise open spaces at school for teaching and learning rather than treat them solely as decorative features (Boeve-de Pauw & Van Petegem, 2018). Outdoor learning at school grounds helps optimise the utilisation of school outdoor spaces (Learning

and Teaching Scotland, 2010). School gardens are among the school's open spaces, claimed to provide suitable materials and environments, for developing a social-emotional learning programme for school-age children (Lohr et al., 2021), which extends beyond common garden-based learning practices such as gardening, nutrition, nature studies, or science. School garden lessons appeared to effectively cater to various students' learning styles (Lohr et al., 2021).

Another user-friendly model school ground, developed through a child-led model-making exercise, revealed that children preferred an aesthetic school landscape with various settings, including a natural learning area, gardens, an outdoor classroom, a water feature, a loose materials zone, an open yard, a play area, huts, and pathways (Khan et al., 2019). These settings offered numerous natural elements and affordances for outdoor learning and play (Khan et al., 2019). Learning in outdoor environments fostered deeper emotional connections with these educational spaces. This experiential aspect facilitated reflective learning and enabled teachers to internalise ecohumanistic values, moving beyond viewing sustainability as merely abstract or purely scientific content (Baryosef-Paz & Gan, 2026).

For schools without a green school ground, school field trips to nearby urban green space have received positive feedback from both teachers and students (Wolsink, 2015). Urban localities that go beyond traditional indoor classroom environments are suggested as potential learning settings to help children enhance their cognitive achievement (Glaab & Heyne, 2019). However, teachers claimed that proximity to urban green space was the key factor in making school excursions happen (Wolsink, 2015). They showed little concern for biological diversity and the quality of urban landscapes in comparison to the distance between schools and the adjacent urban green space (Wolsink, 2015). It was suggested that collaborative planning visits before field trips, prolonged outdoor sessions, and ongoing teacher reflection would help sustain school excursions to nearby locales (Wolsink, 2015). Doing this would also help enhance teachers' confidence in organising field trips to destinations further afield (Mannion et al., 2013a). Additionally, teacher involvement before, during, and after the field trip was essential for scaffolding learning and assisting students in integrating their experiences with classroom instruction

(Behrendt & Franklin, 2014). Classroom consolidation was shown to improve the retention of the target knowledge acquired in outdoor settings (Glaab & Heyne, 2019).

Theories of place

Place can refer to a physical locality or represent human emotion arising from their relationship and experience of place (Vander Ark et al., 2020). A place has a cultural character shaped by the locality, religion, and politics (Freestone & Liu, 2016). For the sake of clarity in this thesis, I have used Relph's definition of place (Relph, 1976). For Relph, place is a phenomenon of our everyday existence, observable in human daily life and in how we perceive and interact with the world (Relph, 1976). It is the connection between a human and a particular place through a specific experience, rather than just its significant location, region, or space. Human attachment to a particular place is as important as our relationship with other people, given our deep emotional and psychological ties with that place (Relph, 1976).

Relph used the term insideness to refer to different levels of human attachment to a place (Relph, 1976). His work suggested four levels of insideness to interpret human relationship with a place through an experiential process: existential, empathetic, behavioural, and vicarious insideness. Each level of insideness reveals people's identity of, and with, place. It represents the degree of attachment, involvement, and concern that people have in places. The deepest level is an unselfconscious, or even subconscious, association with place, a home-like feeling of privacy, comfort, ownership, security, and belonging. This existential insideness is an authentic, individual, and personal experience. It can be intersubjective as people sympathetically share a sense of place. The next level is empathetic insideness, almost like the deepest level of insideness, but it carries an unreflective, cultural, and communal experience. This unselfconscious and authentic level of insideness often relates to both religious and non-religious experiences of place, and to the desire to identify significant places in the home region and to be recognised there. The less profound level is a self-conscious, authentic, sensitive, and open-minded experience. This behavioural insideness often occurs within an enclosed place or other

physically defined boundaries. The last level that Relph interprets, vicarious insideness, is a superficial, insensitive, absent-minded, mass-cultural, manipulated, attractive, and geographically alienated experience. This vicarious insideness is a second-hand experience that is fashion-driven and non-committal, a homeless-like kind of feeling (Relph, 1976). My doctoral thesis aims to continue the concept of place insideness and deepen students' attachment to their local places by guiding Vietnamese public school teachers in lesson planning and implementing outdoor learning sessions through a place-responsive pedagogy.

Having a sense of place is a fundamental human need that humans possess through our intuition (Park, 1995). A sense of place is a quality of awareness that lies between being unconsciously rooted in a place and being consciously alienated from it (Tuan, 1979). It is a balanced state between embodied and habitual awareness, grounded in lived attentiveness, felt cognition, and reflective awareness through mental and observational experiences. The relationship between humans and the places they inhabit is built upon their worldviews and meaningful experiences of place. The essence of a place is reflected in our sense of attachment, identity, care, and concern for it (Relph, 1976). Our experiences in a place influence our understanding of its purpose and objectives (Park, 1995). Such experiences are powerfully shaped by the culture and the environment we live in, primarily perceived through our dominant visual input. Consequently, we often overlook the senses of smell and touch, which require closeness to our environment and more deliberate, intimate, and attentive engagement (Tuan, 1990). Our identities, both as individuals and groups, are fundamentally shaped by the environments we live in, the air we breathe, and the ground under our feet (Abram, 1996). Sense of place is shaped through embodiment, memory, narrative, and practice. Cultivating a sense of place guides us in our journey of enculturation and situatedness, fostering meaningful connections, attachment, and a sense of belonging in our environment with care and respect (Casey, 2009).

The term place is frequently used in architecture and marketing to suggest a unique identity, image, and reputation (Anholt, 2010). Place is important, relevant, and timely because it promotes agency, equity, and community (Vander Ark et al., 2020). It is claimed that place provides an inspiring context for

learning, supported by current practice, policy, and technology (Vander Ark et al., 2020). Place carries a protective spirit (Wattchow & Brown, 2011), a so-called *genius loci* (Hunt, 2022). The spirit of a place is constituted by the gathering of meanings of that place (Weston, 2011). It has multiple layers of the past, present, and future, which are correlated to human development (Vander Ark et al., 2020).

Placemaking occurs through local activities. Meaningful placemaking cannot be achieved without lived and worked efforts and experiences within a particular place (Freestone & Liu, 2016). Acknowledging the unique complexities of each place, through its issues, communities, and people, will help develop a deeper understanding of and relationship to the place (Stewart, 2020). Massey (1994) argued that the formation of place is a relational and dynamic process, not static or bounded, involving the tension between returning to the comfort of conventional existence and pursuing a progressive project of becoming within a global-local context. The world faces a constantly changing future marked by rapid urbanisation, demographic shifts, economic fluctuations, social inequalities, and complex climate change. Developing principles for placemaking could help humanity address the quality of public places and direct the adaptation of different places in tackling the challenges of this constantly changing era (Freestone & Liu, 2016).

Seamon (2023) discussed a phenomenological perspective on place. In his work, he illustrated how direct experiences of places can serve as teaching and learning opportunities to understand the significance of places in human life and to improve places through architecture and environmental design. He emphasised the significant human existential aspects of relationality, corporeality, spatiality, temporality, and materiality in how we teach and learn about place and placemaking. Seamon suggested utilising phenomenology of place in pedagogical practices that incorporate local histories and cultural stories through embodied experiences, thereby strengthening ongoing connections between individuals and their immediate family, neighbourhood, community, and environment (Seamon, 2023). The activities in which my teachers engaged during the workshops were crafted to offer them opportunities to deepen their embodied connections with their local environments.

Place in education

Place is significant in its own political, economic, social, and cultural aspects (Hutchison, 2004). Within educational contexts, place is an unfolding phenomenon that embodies teaching and learning experiences through experiential, multidisciplinary, and transdisciplinary approaches, demonstrating the interactions among people, community, and location (Wattchow & Brown, 2011). Place promotes agency, equity, and community and plays an integral role in eliciting learning content, as it is the context for education, whether formal, non-formal, or informal (Vander Ark et al., 2020).

Places where we learn are often taken for granted. However, it is argued that place plays a crucial role in education as an institutional bridge, ensuring our cultural continuity and connecting people across generations (Hutchison, 2004). The inclusion of cultural studies, nature studies, real-world problem solving, internships, and entrepreneurial opportunities of a particular place in the school curriculum makes it pedagogical for participants. Learning can be tailored to the unique characteristics of a place so that learners can find a connection between their lives and the school curriculum. Centralising the experiences of place appears to help situate learning within its community context (Smith, 2002).

The pedagogical challenge of incorporating and making conscious a sense of place in education is to be aware of the story of the place we encounter and/or inhabit and to respond to that story as an attentive citizen (Gruenewald, 2003b). The role of place in education is expected to help reconceptualise formal education to enhance students' learning motivation; increase standardised test scores; create a holistic mindset of the role of school in society; involve all students' lived natural, social, and cultural environments in the school curriculum; make education alive and sustainable in different spatial and political contexts; and support healthier and more energetic learning experiences (Smith & Sobel, 2010). There is an effort to embrace place in education as a critical construct of pedagogy through human lived experience in real-world contexts (Gruenewald, 2008). The works of Gruenewald (2008), Gruenewald (2003b) and Smith and Sobel (2010) identified a cohesive framework that connects critical theory with ecological and cultural responsiveness, alongside practical educational strategies rooted in place, thereby guiding my research.

Place-based or place-conscious education is a pedagogical practice grounded in the lived experience of places that matter to educators and students (Gruenewald, 2003b). It reflects local expectations and empowerment regarding educational objectives and achievement indicators, as well as local progress towards social goals of community sustainability and development (Gruenewald, 2003b). Place-based education has also been adapted to service learning, civic education, and project-based learning (Smith, 2007). It is an educational revolution of re-engagement with local ecological, cultural, and social contexts (Gruenewald, 2003b). It is attentive to learning about and with place rather than in place, through ethical engagement and responsibility towards place (Gruenewald, 2003b). In a later work, Gruenewald discussed critical place-based education as an effort to re-educate individuals to understand what it means to live well in a specific place, by emphasising the cultural and ecological politics involved in human interactions with their place (Gruenewald, 2008).

A pedagogy of place

In essence, a pedagogy of place seeks a connection between education and the local environment and community. Place-responsiveness is the key feature of this pedagogy, in which educational practices are tailored to specific attributes of the learning environment to address global issues through local contexts (Renshaw & Tooth, 2017; Wattchow & Brown, 2011). In *A Natural History of Place*, Hutchison (2004) suggested that the utilisation of place in education should be based on six philosophies: disciplinary initiation, citizen education, inquiry learning, developmental congruency, community study, and global education. The first four philosophies are culturally constructed and highlight the context of learning through students' lived experiences in particular places. The latter two philosophies focus on the scale of places from nation to neighbourhood, and specific sensitive place experiences of children.

Place-responsive learning is a pedagogical approach which facilitates learners' responses to the local environment via ongoing appreciation of local places and sustainable dialogues with the multicultural

world (Cameron, 2002). This contemporary, flexible, and localised pedagogical approach encourages educators and learners to conduct and reflect on their learning through lived experiences, recognising and embracing the interconnectedness of people, places, and different layers of experience (Wattchow & Brown, 2011). The distinction of place-responsive pedagogy lies in the combination of sensory experiences within particular places and the reflection and representation of place experiences (Wattchow & Brown, 2011). This pedagogy involves thinking, knowing, and being in places to create a meaningful and relevant learning environment, making sense of one's being and becoming on common ground, and extending it to a broader context of the world (Brown, 2012).

If place-*based* learning educators focus on what and where to teach, place-*responsive* educators shift their focus to how to teach with what is available in this place, meaning places become lived entities, co-teachers that facilitate learning (Wattchow & Brown, 2011). To assist educators in navigating their pedagogical practices towards place-responsiveness, Wattchow and Brown proposed four signposts of place-responsive pedagogy: being present in and with place, the power of place-based stories and narratives, apprenticing ourselves to outdoor places, and the representation of place experiences (Wattchow & Brown, 2011). Such practice is characterised by a keen awareness of local significance, pedagogical improvisation shaped by specific place conditions, and opposition to uniform, placeless curricula (Gruenewald, 2008). Place-responsive pedagogy has the potential to effectively address one of our most significant pedagogical challenges: fostering genuine connections to place and nurturing a culture of care (Wattchow & Brown, 2011).

In my doctoral thesis I apply the four 'signposts' to place-responsive pedagogy (Wattchow & Brown, 2011) to help Vietnamese public high school teachers navigate their lesson plans and implement place-responsive outdoor learning with their students, relevant to their local places, and cultural and social contexts. These 'signposts' encompass: fully engaging with a location; the influence of stories and narratives rooted in a place; learning in, about, and with outdoor places; and depicting experiences related to that place (Wattchow & Brown, 2011). The value of place 'mindfulness' will be highlighted in learning activities both in and about local contexts to foster learners' engagement with their

community. Mindfulness is a contemporary practice to renew outdoor learning, which encourages attentiveness and thoughtfulness toward an accessible, engaging, comfortable, and friendly learning place. Integrating mindfulness into professional development workshops and presenting it as a core skill will enhance teachers' reflective practice improve place-attentiveness and foster pedagogical intentionality (Deringer et al., 2020). Vietnamese participant-teachers in my research will be empowered to share their stories of place by accommodating their voices and agency. By telling their own stories of places or facilitating other people's stories, will create an opportunity to connect nature and culture and make sense of their originality and identity. By participating in a place-responsive learning activity, the participant-teachers will have the opportunity to apprentice themselves to outdoor places, thereby contributing to sustainability and environmental stewardship. They will be exposed to experiential and inquiry-based learning with a focus on understanding that place experiences lie within their narratives about their immediate environment (Wattchow & Brown, 2011). Application of the four signposts will help Vietnamese educators interpret whether their lesson planning and implementation are responsive to a particular local context. They will be guided to apply place-responsive pedagogy into their teaching practices, which are learner-centred, non-prescriptive, flexible, sensitive, and culturally and materially place-conscious (Renshaw & Tooth, 2017; Tooth & Renshaw, 2017). The participant-teachers will be shown how to create linkages between place, students, and curriculum, and how to provide an abundance of choices for learning to happen in real contexts and beyond the classroom walls (Lloyd et al., 2018). The lived engagement with places is likely to define the emergence of their place-responsive pedagogy as there is no single formula for it. Teachers learn place-responsive pedagogy through hands-on practice (Stevenson & Smith, 2017). Amid climate change and socio-economic uncertainty, place-responsive outdoor pedagogies have emerged as a contemporary approach to enhance human-place connectedness and address global issues with care and respect (Brown, 2012).

Place-responsive outdoor learning

Outdoor education researchers have critiqued the sustainability of outdoor adventure education (Beames & Brown, 2016; Brookes, 2003a, 2003b, 2022; Goodman, 2022; Webber & Hardwell, 2019). Contemporary and innovative outdoor learning pedagogies have been developed in response to cultural values, student diversity, and environmental concerns worldwide (Gruenewald, 2008; Renshaw & Tooth, 2017; Smith, 2002; Vladimirova, 2022; Wattchow & Brown, 2011). One approach is place-responsive outdoor learning (PROL). Wattchow and Brown (2015) suggested a definition of place-responsiveness as below.

> To be place-responsive is to enter into a relationship of interdependence that requires sensitivity and empathy for and with the place(s) rather than the imposition of beliefs and associated actions that render the specifics of the local invisible. It is clear that places, and the relationships that are fostered with them, have a bearing on learning and individual and collective identity. (p. 37)

This vision of outdoor learning lays out an approach toward a school curriculum focused on human-nature interconnectedness, sustainability, and place-responsiveness rather than the conventional practice of outdoor education in which the outdoors is often used as a backdrop venue (Dyment & Potter, 2015; Wattchow & Brown, 2011). A localised and innovative approach to outdoor learning is claimed to create opportunities for educators to express their genuine interest in the localities and help students gain insights into the importance of connections and belonging to certain places (Wattchow & Brown, 2011). Building up a strong connection between young learners and the local environment might help strengthen their understanding towards the land they are living in/on (Wattchow & Brown, 2020).

Learning outdoors through practical and experiential learning experiences that are affordable and accessible for public and mainstream schools could be achieved through everyday outdoor learning contexts on school grounds or other nearby natural places (Thorburn & Allison, 2017). The greater the reflection on various place-responsive experiences, the greater the degree to which students embody and enhance a sense of belonging to a certain place (Häggström & Schmidt, 2020). Dolan (2016) claimed that students became more self-driven and responsible for their cognitive development as well as their spatial awareness, which connected to their identities, communities and localities.

The integration of PROL into Vietnamese experiential learning and career education is a means to provide insights into how to develop students' connection and attachment to their everyday taken-for-granted places via learning in, about, with and for their local environment. Through PROL, teachers could potentially foster their students' biophilia values through naturalistic, ecologistic-scientific, aesthetic, symbolic, humanistic, and moralistic experiences of the natural environment. (Kellert, 2013). Such learning experiences diverge from the utilitarian reliance on nature, as well as from dominionistic and negativistic views of nature, where humans either tend to exploit nature for material and commodity benefits to satisfy their physical security, or attempt to control, subdue, or dominate nature using their mechanical skills, or even seek to protect themselves from fear and adversity by alienating themselves from nature (Kellert, 2013).

To help pre- and in-service teachers plan and deliver their place-responsive curriculum, Mannion and Lynch (2016) have suggested the following manifesto for an effective place-responsive practice. As a place-responsive educator, one is expected to gain in-depth knowledge of places to inform their teaching. They should learn how to help students understand and appreciate places through regular visits to the same or similar places, which lead to students' embodied, cognitive, emotional, aesthetic, and ethical responses to those familiar places. They encourage learners to partake in unexpected encounters in places. They support students in promoting environmental and social justice and equity for themselves and others by encouraging practical and sustainable actions in various contexts. Their teaching is expected to be 'one of a kind' as beholding a sense of place-uniqueness (Mannion & Lynch, 2016).

Place-responsive educators need to be aware of the three levels of place-responsiveness: place ambivalent, place sensitive, and place essential (Mannion & Lynch, 2016). This awareness will help enrich teachers' strategies to use the available resources in a certain outdoor place, to adapt to local contexts, and make outdoor learning experiences happen. As well, place-responsive educators will offer in-depth teaching and learning experiences aligned with lesson objectives to happen in and about that locality (Mannion & Lynch, 2016).

In one study, teachers' sensitivity to place and their collaboration with students and others indicated important factors in making a place-responsive curriculum a reality (Mannion et al., 2013b). In another, pre-service and in-service teachers needed training in facilitating effective place-responsive outdoor learning activities for their school children with careful consideration of their particular local environment and social context (Lloyd et al., 2018). Through professional development workshops on PROL with Vietnamese public school teachers, I aim to connect them and their local environments by highlighting the interconnectedness of ecology, society, politics, and the economy. This approach seeks to reframe the common-sense values associated with outdoor learning and enhance the diversity of its participants (Goodman, 2022).

In the age of globalisation, a holistic, interdisciplinary learning approach like PROL has the potential to influence and inspire local teachers to enhance students' intellectual and moral development by reconnecting them with their familiar local places (Thorburn & Allison, 2013). PROL can help students and educators to explore concepts of place, loss, responsibility, and possibility in ways that traditional classroom environments do not typically provide (Ward, 2026). Place-responsive pedagogy can be seen as a creative practice that could become regarded as a fundamental professional skill for teachers, particularly in intricate and swiftly evolving educational environments (Terzidis & Borloz, 2026).

Summary

To assist teachers to integrate outdoor learning into their professional practices, it is crucial to address existing barriers to their perspectives. These barriers might include a lack of recognition of outdoor learning, insufficient confidence in outdoor teaching skills, challenges in getting started, and other physical constraints (van Dijk-Wesselius et al., 2019). Teachers' framing of outdoor learning values were among the most vital non-spatial factors for the inclusion of outdoor practices within the statutory curriculum (Prince, 2020). Other non-spatial factors such as curriculum requirements, teacher engagement and funding, also emerged as areas warranting greater attention in relation to the uptake of school outdoor learning (Walker et al., 2021). Well-designed teacher professional development is

needed to enhance teachers' capacity to conduct lessons out of doors (Feille & Nettles, 2017). Future research needs to look at the connection between planning holistic, interdisciplinary, curriculum-based outdoor learning experiences, and appropriate assessment protocols (Thorburn & Allison, 2017). While research on outdoor learning has predominantly been spearheaded by English-speaking countries, forthcoming studies in underrepresented nations are poised to provide a rich tapestry of diverse and insightful perspectives. These studies will broaden our understanding of outdoor learning across a more extensive range of geographies, enriching the field with varied cultural and environmental contexts (Yemini et al., 2025).

This doctoral thesis examined the possibilities of the integration of a place-responsive outdoor learning pedagogical approach into the current Vietnamese experiential and career education curriculum. The intent was to promote meaningful democratic teaching and learning experiences for Vietnamese public school teachers and students, working towards the key qualities and competencies outlined in the national curriculum. This innovative outdoor learning method will give Vietnamese teachers and students opportunities to understand local conditions and connect with global developments as empathetic and engaged insiders. By situating learning within the everyday activities of the community, PROL envisions schools as an extension of students' lived experiences, enriching their lives, their community, and their environment (Wattchow & Brown, 2011). Given the enormous social, economic, and environmental challenges as a result of the Viet Nam war and the rapid urbanisation in this country, investing in PROL is one way to nurture young Vietnamese to strengthen their empathetic connection and attachment to places with the hope that they will play their part in the urban regeneration process for Vietnamese community wellbeing, and for the common good of the entire society.

The following section provides a detailed analysis of in-service teacher professional development in Viet Nam and globally. It explores the current state of teacher training and the importance of collaborative lesson planning.

In-service teacher professional development (ITPD)

Global trends of ITPD

Over the past few years, global trends in in-service teacher professional development (ITPD) have been studied and shaped by evidence from organisations such as the OECD (2019, 2023, 2025), UNESCO (2024), the World Bank (Quota et al., 2022), International Task Force on Teachers for Education 2030 (2025), and other significant independent international reviews (Allen et al., 2024; ASEAN (Association of Southeast Asian Nations), 2022; Çam & Koç, 2024; Chong et al., 2024; Ishika et al., 2025; McAleavy et al., 2022; Menter & Assunção Flores, 2021; Popova et al., 2021; The Office for Standards in Education (Ofsted), 2024, May 24). These trends illustrate how countries are addressing teacher shortages, rapid technological advancements, equity issues, and the necessity to enhance classroom-embedded and practice-based ITPD on a large scale.

There has been a shift from episodic training to continuous professional learning (OECD, 2019, 2025). This means ITPD is transitioning from single workshops where teachers passively listen to facilitators, towards career-long, continuous professional learning models. The OECD (2019; 2025) and UNESCO (2024) highlighted that effective systems view ITPD as a lifelong process, integrated throughout the entire career rather than being focused solely on induction or compliance stages. This transformation was motivated by evidence indicating that brief, fragmented training has minimal effect on classroom practices or student learning, especially when it lacked follow-up or contextualisation (Popova et al., 2021). Consequently, numerous education authorities were rethinking ITPD as an extended, cohesive learning journey that aligns with curriculum reform and system priorities (OECD, 2025).

A World Bank review (Popova et al., 2021) highlighted a significant gap between research evidence and common practice in ITPD. By analysing perceived influence evaluations and reviewing ITPD programmes globally, the authors showed that programmes that enhance teaching and student learning are generally sustained. These programmes focused on subject-specific pedagogy, active learning, practice, and ongoing coaching. In contrast, most ITPD initiatives worldwide relied on brief, theory-

heavy workshops with little relevance to classroom practice and minimal impact evaluation. Popova et al (2021) argued that redesigning ITPD systems to prioritise evidence-based features and implementation quality is necessary, rather than merely increasing expenditure. This approach contrasted sharply with traditional lecture-style training and is now promoted worldwide (Chong et al., 2024; McAleavy et al., 2022).

McAleavy's research findings suggested practical principles for effective ITPD (McAleavy et al., 2022). Firstly, that ITPD be driven by pedagogy, with digital tools supporting instructional goals and classroom practices. Secondly, programmes need to embrace blended models, integrating technology with human support like coaching and mentoring. Thirdly, designers prioritise accessibility and scalability, using low-cost, widely available technologies that suit teachers' conditions. Fourthly, effective ITPD design involves local adaptation, alignment with curricula, and empowering teachers to tailor materials. Lastly, ITPD is best when iterative and evidence-informed, incorporating piloting, monitoring, and feedback loops to refine approaches before scaling, ensuring sustainability and contribution. Liu et al. (2025) extended McAleavy's findings by incorporating reflective practice as a core professional competency that requires intentional pedagogical design rather than being considered a personal trait or casual habit. Consequently, effective ITPD instructs, supports, and validates reflective practice within authentic school environments.

The World Teachers' Day 2025 fact sheet, produced by the International Task Force on Teachers for Education 2030 (2025) (TTF), advocated for redefining teaching as a collaborative profession to address the global teacher shortages, improve education quality mentioned in the United Nations Sustainable Development Goal 4 (United Nations Department of Economic and Social Affairs (UN DESA), 2025). The fact sheet revealed that many teachers, especially in low-income countries, lack sufficient training and collaboration opportunities, leading to professional isolation, reduced teaching quality, and higher attrition rates. In addition, the fact sheet (International Task Force on Teachers for Education 2030, 2025) emphasised the importance of collaboration throughout the teacher's career, from initial education to induction, mentoring, and continuous professional development, as a crucial factor in

boosting agency, retention, and learning outcomes. The TTF also urged governments and education systems to invest in policies, working conditions, and indicators that foster peer learning, shared responsibility, and teachers' involvement in decision-making, positioning collaboration as central to transforming education systems globally.

Quota et al. (2022) argued that technology can enhance ITPD when designed around effective teacher learning principles, not just as a content delivery tool. The World Bank guidance notes, based on global research and examples, showed how both low and high technology solutions addressed common ITPD challenges such as limited access, low engagement, weak classroom application, and insufficient feedback. The report emphasised that effective technology-enabled ITPD was sustainable, practice-focused, collaborative, supported by coaching and feedback, and aligned with curriculum and system priorities, with a focus on equity and feasibility in low-resource contexts.

Ishika et al. (2025) proposed a framework to assess the quality of digital ITPD based on three key criteria: content quality, pedagogical alignment, technology, and design. Content quality ensures that learning materials are accurate, relevant, coherent, and aligned with the curriculum to support teachers' professional development. Pedagogical alignment evaluates whether the Educational Technology (EdTech) product incorporates evidence-based ITPD principles such as active learning, reflection, collaboration, feedback, and classroom application support. Technology and design assess the usability, accessibility, reliability, flexibility, data use, and privacy of the digital platform. This framework was practical for decision-making in India but could be adapted for other countries.

The Independent Review of Teachers' Professional Development in Schools: Phase 1 Findings (The Office for Standards in Education (Ofsted), 2024, May 24) emphasised the importance of high-quality, well-designed ITPD for improving teaching and pupil outcomes, although its effectiveness varies across state-funded schools in England. Effective ITPD was usually coherent, sustained, aligned with school priorities and teachers' needs, and focused on curriculum and classroom practice, providing opportunities for teachers to practise and reflect. National reforms in England, like the Early Career

Framework (Department for Education, 2021a) and National Professional Qualifications (Department for Education, 2021b) were generally well-received and provide structured, high-quality support, especially for early career teachers. However, many teachers not involved in these existing programmes found ITPD to be fragmented, generic, or lacking in impact, with workload pressures cited as the main obstacle to meaningful engagement. The report concluded that leadership, strategic planning, and protected time were crucial for professional development to result in lasting improvements in teaching quality.

In summary, global ITPD is evolving into a continuous process throughout a teacher's career, integrating practice with classroom learning, fostering collaboration, and leveraging digital tools while maintaining a human-centred approach. It focuses on competency and personalisation, aligning with career progression and retention strategies, and emphasises equity, contextual sensitivity, and evidence-based evaluation.

Current landscape of ITPD in Viet Nam

In Viet Nam, ITDP is considered a lifelong, self-regulated process aimed at enhancing teaching capacity and equipping Vietnamese teachers with professional skills to become effective teachers for life (Nguyen & Pham, 2023). To develop their teaching competencies ITPD is compulsory for Vietnamese teachers. Teachers are expected to complete 120 annual ITPD sessions (45 minutes per session) funded by the Viet Nam Ministry of Education and Training. The ITPD modules include face-to-face training courses, online learning, blended learning, and self-paced learning. Group discussion, problem-solving, practising, experience sharing, and self-study coaching are methods employed in the ITPD process. The materials for ITPD generally come from textbooks, audio, videos, and other social media (Nguyen et al., 2020). Vietnamese teachers are encouraged to upgrade their teaching degrees as part of their own PD. Other school-based professional learning activities such as the "Good teacher competition" at local levels, classroom observations; weekly professional meetings, mentoring, seminars, lectures from experts; and experience initiatives (lessons learnt from their practices) are common practices in Viet

Nam (Hallinger et al., 2021). The “Good teacher competition” and teacher observations appeared to create stress and anxiety among Vietnamese teachers (Hallinger et al., 2021; Tran et al., 2023).

In contrast, informal online communities and networks from social media platforms (Facebook and YouTube) were claimed as popular sources for self-study ITPD among Vietnamese teachers, given their flexibility and down-to-earth approach (Y. T. X. Nguyen et al., 2022). Experiential ITPD programmes, featuring hands-on activities relevant to the school curriculum and facilitated by demonstrations, were found to be effective in enhancing interaction between teachers and the facilitators of the PD (Y. T. X. Nguyen et al., 2022). In Viet Nam, self-directed, collegiality, and situated contexts were stated as three essential attributes for ITPD (Pham et al., 2023). Another factor contributing to the success of an ITPD course was time sensitivity. Vietnamese teachers appeared to prefer summer or weekend PD courses over those held during school terms, as they allowed them to accommodate their daily workload (Y. T. X. Nguyen et al., 2022).

In Viet Nam, ITPD was regarded as a form of professional capital for teachers. Individuals with greater access to this capital appeared to be better equipped to exercise agency within collectivist and hierarchical leadership structures (Tran & Li, 2025). Nguyen and Tran (2025) proposed that ITPD should not depict Vietnamese tradition as an obstacle to freedom but rather as a framework within which professional agency is practised. Consequently, productive ITPD involves assisting Vietnamese teachers in finding a balance rather than having to choose between individual innovation and social order.

To enhance the adoption of differentiated instruction in school practices, Tran (2025) proposed that ITPD should be tailored to be school-based, subject-specific, and adaptable to local constraints, moving away from standardised workshops. Schools are encouraged to integrate content differentiation, modify learning environments, employ varied instructional strategies, and adjust assessment outputs within ITPD, thereby providing tiered, collaborative and practice-embedded learning experiences. Le (2026) recommended incorporating emotional intelligence development and mental health awareness into

teacher education programmes to diminish mental health stigma and enhance teachers' wellbeing in Viet Nam. French et al. (2023) suggested that an effective ITPD must involve Vietnamese teachers as active participants rather than passive observers. The priority in ITPD was the development of professional identity over merely focusing on competency acquisition. Furthermore, ITPD must ensure that standards reflect the actual demands of teachers' roles encompassing teaching, research, and institutional duties. This strategy promotes enduring professional growth rather than merely improving superficial performance. Systematic ITPD could create an environment where teachers can continually practice and enhance their self-efficacy and self-regulation. These personal resources empower them to engage in proactive behaviour such as, self-initiated, future-oriented actions designed to improve their professional practices, particularly in complex and demanding work environments (Jörg et al., 2024).

Professional development through collaborative lesson planning

An international survey revealed that the practice of ITPD has remained varied, influenced by the political and economic climates of particular school systems and countries (Kelly et al., 2019). Admiraal et al. (2021) suggested that schools seeking to improve teacher professional growth could focus on building strong professional learning communities, supported by purposeful leadership, collaborative structures, and a culture of trust and inquiry. Effective ITPD was not an add-on to school life but an integral part of how schools functioned day to day.

Among numerous models of ITPD, collaborative lesson planning (CLP) (Nguyen, 2017) was regarded as an emerging paradigm because CLP effectively explored the link between teachers' beliefs and their actual pedagogical practices, values teachers' existing knowledge and experiences, and encourages bottom-up initiatives. Teachers worked collaboratively to achieve their desired outcomes through an active, inclusive, and collective planning process (Lam & Pitsaki, 2018). This collaborative process helped teachers gain ownership of their lesson plans and act as agents of change in curriculum reforms, playing crucial roles in constructing and implementing their creative products (Kyza & Nicolaidou, 2017). Collaborative processes position teachers not merely as implementers but as adaptive curriculum

designers operating under real constraints such as context-sensitive structures, hierarchical leadership, and limited institutional support (Lin et al., 2025).

Voogt et al. (2016) highlighted essential mechanisms by which teacher collaboration within curriculum design teams enhances professional learning and curriculum quality. Collective sense-making occurred as teachers interpreted curriculum objectives and challenges, fostering shared understandings through dialogue. This collaboration prompted reflection on practice, allowing teachers to compare their assumptions with those of their colleagues. The diverse expertise within teams combined subject knowledge, pedagogical skills, and classroom experience. Learning through the creation, implementation, and revision of curriculum materials supported an interpretation of iterative feedback loops that connect theory and practice. Shared curriculum artefacts, such as lesson plans and digital learning resources, acted as boundary objects, directing discussions and making abstract concepts tangible. The collaborative process encouraged mutual support and ownership, thereby increasing commitment to curriculum innovation and transformation.

Fluijt et al. (2016) emphasised several key implications for teacher education, particularly in preparing educators for effective co-teaching and inclusive environments. Firstly, teacher education programmes are best when they explicitly teach team reflection skills, focus on critical, dialogic reflection on pedagogy, student learning, and role distribution, rather than logistical coordination. Secondly, when ITPD offers structured opportunities for teams to practice reflective dialogue, such as guided reflection protocols, video-based reflection, or coached collaborative inquiry, teachers progress from descriptive talk to deeper professional learning. Thirdly, teacher education must emphasise interpersonal and relational competencies, including trust building, communication, and psychological safety, as these are essential conditions for meaningful team reflection. Lastly, school leaders and teacher educators need to be equipped to support reflective collaboration systemically, for instance by modelling reflective practices, allocating time for team reflection, and integrating it into professional development frameworks. Overall, teacher education needs to position team reflection as a fundamental professional competency vital for effective co-teaching and inclusive education. In this research, group reflection

was conducted three times during and after the PROL workshops to help the Vietnamese participant-teachers become familiar with reflective learning strategies to enhance their experiences from the workshops.

My research will provide Vietnamese public high school teachers with an opportunity to experience CLP in creating PROL lesson plans with their colleagues. They will collaborate in planning PROL sessions for the experiential learning and career education modules featured in the 2018 Vietnamese GEP. The CLP process was described as flexible, with each team deciding its labour division (Kelter et al., 2021). In my research the participant-teachers will organise collaborative efforts tailored to their specific local contexts, as Alloway (2013) suggests, positioning themselves as co-learners alongside their colleagues, rather than as experts or novices. During this process, I [the researcher] will act as a facilitator and coordinator as Kyza and Agesilaou (2022) suggest to empower the participant-teachers by encouraging them to join in and make their own decisions in constructing a lesson plan, acknowledging their expertise, reassure them about achieving professional growth through CLP with their peer teachers, enhance their autonomy, maintain the teachers' self-efficacy, and strengthening their influence within the school community and beyond. The participant-teachers will be motivated to engage in collaborative reflection, the expression of ideas and rationales, the integration of diverse inputs into cohesive lesson plans and the implementation of these plans in the classroom, followed by further reflection (Gutierez, 2021; Mendoza et al., 2022).

Collaborative lesson planning can offer teachers greater opportunities for flexible experimentation with new teaching methods and a significant influence on the syllabus teachers work with (Thorburn & Allison, 2013). When thoughtfully designed, CLP can serve as a powerful mechanism for fostering teacher agency, seamlessly integrating pedagogical skill development with interpersonal growth (Nagamine, 2025). Enhancing the quality and organisation of CLP was anticipated to not only improve teaching effectiveness but also bolster teachers' professional confidence and self-efficacy (Liu, 2023). These are important factors of CLP. Utilising CLP to help the participant-teachers practise planning

PROL lessons could potentially increase the momentum of these innovative pedagogical practices (Guo et al., 2025).

Summary

Ongoing professional development has been a compulsory component of Vietnamese teachers' professional practice since 2012. In line with efforts to improve educational quality, the Ministry of Education and Training (MOET) has developed innovative in-service teacher professional development (ITPD) programmes that seek to connect research with practice. These initiatives form part of a broader strategy to develop a competent and qualified teaching workforce in support of national educational reform (World Bank Group, 2025). Within this context, collaborative lesson planning (CLP) was incorporated into the PROL workshops as an approach to fostering an inclusive professional learning environment in which participating teachers could collaboratively explore and plan place-responsive outdoor learning (PROL) lessons. Rather than treating professional development as the delivery of information, the workshops were designed as learning interventions that encouraged teachers to engage actively with pedagogical ideas and consider their application in practice (Visscher et al., 2025). This approach highlights the potential of collaborative and practice-oriented learning to support ongoing ITPD within the Vietnamese teaching community.

Identified research gaps and how my thesis addresses these

This doctoral research examines how Vietnamese teachers engage with, make sense of, and sustain place-responsive outdoor learning (PROL) and collaborative lesson planning (CLP) before and after participating in in-service teacher professional development (ITPD) workshops. Its primary aim was to support local educators in incorporating PROL into their professional practices and to offer insights that may inform Vietnamese education policy, particularly the implementation of the Vietnamese General Education Programme (GEP) and the provision of ITPD opportunities. Integrating PROL into experiential learning and career education within the Vietnamese GEP could enrich local curricula by creating opportunities for teachers to develop place-responsive pedagogical practices and for students to engage meaningfully with the social, cultural, and ecological dimensions of their local environments.

This research is significant in exploring how equitable and sustainable opportunities for meaningful outdoor learning might be developed in a Vietnamese context that remains underrepresented in the international literature. It aligns with United Nations Sustainable Development Goal 4 (Quality Education), particularly Target 4.7, which emphasises learners' acquisition of the knowledge and skills needed to promote sustainable development (United Nations Department of Economic and Social Affairs (UN DESA), 2025).

Chapter 3: Research design and methodology

Introduction

My doctoral thesis examined teachers' perspectives on place-responsive outdoor learning (PROL) and collaborative lesson planning (CLP) at a prestigious public high school in Ho Chi Minh City, Viet Nam. Data were collected through pre- and post-workshop interviews, participant-teachers' group reflections after workshops to seek their understandings, experiences, and reflections on PROL and CLP, complemented by the researcher's reflexivity. Inductive, interpretive, qualitative inquiry (Tisdell et al., 2025) was employed to understand participants' perspectives. Various data-generation tools were employed, including individual pre- and post-workshop interviews and post-workshop group reflections. The semi-structured pre- and post-interviews aimed to capture the participant-teachers' evolving perspectives, while the professional development workshops fostered a community learning environment. Group reflections provided the participant-teachers with chances to enhance their understanding and interpretation.

Datasets were planned, generated, and analysed systematically to construct results by identifying patterns, consistency, and meaning (Gray, 2022). The research design process focused on understanding the knowledge, lesson planning, and teaching practices of the local public high school teachers involved, relating to integrating place-responsive outdoor learning into the 2018 Vietnamese general education curriculum. Reflexive thematic analysis (Braun & Clarke, 2022) was employed to interpret the results. NVivo R1 (Lumivero, 2025) was used for data management and analysis. Results were developed from participants' partial, situated, and embodied visions (Bryman, 2016; Waller et al., 2016), viewed through an interpretive lens. Grounded in a constructivist ontology and interpretivist epistemology, my research design prioritised teachers' subjective professional experiences, their school contexts, and their application of outdoor learning within the 2018 General Education Programme, viewing myself as both a qualitative researcher and a collaborator in knowledge creation. The precision and reliability of my qualitative research were built upon trustworthiness (Gray, 2022), which was

developed through the four suggested pillars of credibility, transferability, dependability, and confirmability (Ahmed, 2024).

The theoretical framework underpinning this research includes theory of place (Casey, 2009; Massey, 1994; Relph, 1976; Tuan, 1990), pedagogy of place (Gruenewald, 2008; Wattchow & Brown, 2011), embodied and experiential learning (Dewey, 1938; Merleau-Ponty, 2012), sociocultural and professional practice theory (Lave & Wenger, 1991; Schön, 1994; Vygotsky, 1978; Wenger, 1998).

Philosophical position

Ontology

Constructivism

The research paradigm underpinning my thesis is constructivism (Noddings, 2015; Steffe & Gale, 1995), which focuses on the local contexts of the teacher participants. Framed within the constructivist worldview, I believe in shared discourses of many different actively constituted realities through representation, discourse, and practices (Waller et al., 2016). In this study, the relationship between the researcher and the participant-teachers is collaborative and mutually respectful (Kelly et al., 2019). As a researcher within the constructivist paradigm, I am mindful of giving voice to research participants' experiences and understandings whenever possible and of taking their perspectives seriously.

From a constructivist perspective, I acknowledge self-regulated learning and conceptual development through reflection and abstraction (Steffe & Gale, 1995). During the workshops, the participant-teachers will be introduced to the principles of place-responsive pedagogy. They will be encouraged to actively participate in hands-on activities, collaborative lesson planning, and reflection on their learning. They will be encouraged to reflect on their place-responsive outdoor learning practices and connect them with their professional development knowledge through hands-on activities.

In this thesis the learning theories discussed in the theoretical framework section include theories of place, embodied and experiential learning, and sociocultural and professional practice theories, which align well with constructivism and shaped my ontology as a qualitative researcher. I believe that reality is neither fixed nor objective but constructed through individual understandings (Crotty, 1998). Therefore, I perceive reality as fluid and subjective, constantly moulded by human experiences, meanings, and interpretations. I collaboratively constructed the body of knowledge for this thesis with the participant-teachers, through their meaning-making of place-responsive pedagogy during the workshops, their understanding of outdoor learning, and their teaching practices before and after the workshops.

Epistemology

Interpretivism

Aligning with my constructivist ontological perspective, my research employs an interpretivist epistemology, also referred to as social constructivism (individual meaning-making) (Vygotsky, 1978) or constructionism (social construction of reality) (Berger & Luckmann, 1967) . While these approaches differ in analytical focus, they share core assumptions regarding the social nature of knowledge. Their collective perspectives assert that knowledge is generated through social interactions, language, and shared cultural practices The perspective is further refined through an interpretivist lens, emphasising participants' subjective experiences and the meanings they assign to outdoor learning.

Recognising that social, cultural, and historical contexts always mediate understanding (Vygotsky, 1978), the theoretical foundation includes; concepts such as active construction of learning (Dewey, 1938); knowledge as socially mediated (Vygotsky, 1978); situated learning within social contexts (Lave & Wenger, 1991); community of practice (Wenger, 1998); and reflection as essential for professional development (Schön, 1994). From a social constructivist perspective, knowledge is a dynamic construct that emerges through language, culture, and social interaction. It is actively co-constructed, not passively discovered. Consequently, my research methodology is relational, involving myself as the principal researcher, my supervisors as advisors, and participating teachers who collaboratively shape

knowledge. Knowledge and meaning are negotiated socially rather than individually uncovered (Wenger, 1998). To encourage Vietnamese public high school teachers to reflect on their sense-making of PROL and CLP, participants were invited to discuss their experiences before and after the professional development workshops through semi-structured interviews and group reflections.

Given my epistemological stance, I acknowledge that individuals interpret events differently based on their personal experiences. Therefore, data interpretation is influenced by the participant-teachers' understanding of their own knowledge and professional practices before and after the workshops, as well as my interactions between my supervisors as we negotiate meanings from the data (Waller et al., 2016). In constructivist research, trustworthiness replaces reliability, emphasising a rigorous process of data collection, from interactions with teachers to coding and analysis (Waller et al., 2016). I involved the participant-teachers actively in data generation, allowing them to validate their stories. I also maintained detailed reflexive journals documenting my engagement and the participant-teachers involvement throughout data collection and analysis, adopting an interpretivist approach. These practices contribute to the validity of the qualitative findings (Waller et al., 2016).

My goal was to interpret the participant-teachers' understandings of their learning and explore ways to integrate place-responsive pedagogy into their teaching (Creswell & Poth, 2025). I emphasised the subjective nature of their experiences (Crotty, 1998) and recognised that even within the same school, teachers' professional practices can reflect multiple realities shaped by their interpretations and mine (Tisdell et al., 2025). I constructed knowledge through dialogues with the participant-teachers, which helped me understand their historical and cultural background, community knowledge, social networks, and professional practices that shape their identities and places (Du, 2025). The interpretive process moved from the participant-teachers' narratives of their teaching and learning to my interpretation, validated through critical discussions with my supervisors. Knowledge was developed through reciprocal relationships (Slife & Williams, 1995) during pre- and post-workshop interviews, professional development workshops, collaborative lesson planning, and group reflections, including

data meaning-making with my supervisors. The final research outcome integrated my interpretation, participants' perspectives, and supervisors' insights (Slife & Williams, 1995).

Ethical considerations

My values and ethics underpin my philosophical foundation. I prioritised the funds of knowledge (Moll et al., 1992) and identities of my participant-teachers (Du, 2025) which influenced my interpretation of the research results. My relational ethics are rooted in core concepts from environmental psychology, including place attachment, place identity, and place integration (Nguyen, 2025). These ideas help me navigate my sense of connection and responsiveness to my hometown, Ho Chi Minh City, where I generated data with local teachers involved in the study. I acknowledge my background in English Language Teaching and Outdoor and Environmental Education. My professional training at universities in Viet Nam, Sweden, and, currently, New Zealand have shaped my worldview and ontological and epistemological positions.

I am committed to conducting rigorous qualitative research and building confidence in reporting trustworthy, credible, and meaningful findings. I strive to uphold ethical standards by respecting participants' privacy, recognising their right to withdraw at any point, ensuring data authenticity, acknowledging those who contributed to the data and its intellectual property, and maintaining data accessibility (Kivunja & Kuyini, 2017). I am deeply committed to the scientific values (Li, 2014) underpinning my research within place-responsive outdoor learning and in-service teacher professional development through collaborative lesson planning. The interpretation of data, its authenticity, and my core values, alongside those of my participants, guide my work, keeping it meaningful rather than trivial or overly idealistic (De Monticelli, 2021). I believe that knowledge is both intellectual and embodied, and that the methods I use to analyse data and the relationships within my data matrix influence the evolving nature of my interpretation (Lushetich & Campbell, 2022). I recognise the detrimental effects of disregarding values or allowing them to dominate (Râmbu, 2024). Therefore, I advocate for embracing a diverse range of values to foster a more equitable and inclusive society.

Theoretical framework

Embodied and experiential learning

In *Democracy and Education*, Dewey (1916/2012) examined philosophical traditions that privileged reason and abstract thought over experience, practical activity, and bodily engagement with the world. Within these traditions, experience was often positioned as epistemologically subordinate to abstract thought. Dewey's account is important for this study because it challenges the hierarchical separation of thought and experience, rather than treating knowing and doing as opposing processes. From a place-responsive perspective, this hierarchy is problematic because it risks privileging knowledge that can be detached from its context, relegating the social, material, cultural, and ecological particularities of places to the periphery of educational activity.

Dewey (1916/2012) argues that educational reform partially challenged this privileging of book learning but did not necessarily reconstruct the relationship between thought and experience. His reconstruction of experience is therefore more substantial than simply advocating "learning by doing". Experience involves both doing and undergoing: learners act upon situations, encounter consequences, and reconstruct their understanding through reflective engagement. Thought is not positioned outside activity as an abstract faculty applied afterwards; rather, it emerges within activity as a resource for making experience increasingly meaningful and intelligent. This distinction is significant for the present study. Place-responsive outdoor learning is not understood here as learning that becomes educational merely because it occurs outdoors or involves physical activity. Rather, the educational significance of being in a place lies in how learners encounter, interpret, question, and respond to what that place affords and constrains. The emphasis therefore shifts from learning outside to learning through situated participation.

For Dewey (1916/2012), reason is consequently not a detached capacity but a resource through which activity can become intelligent. Thinking, sensing, acting, and feeling are interconnected dimensions of

experience, while knowledge develops through reflective participation in situations. This conception provides a philosophical basis for understanding learning as embodied rather than exclusively cognitive. It also positions the teacher differently. Rather than transmitting decontextualised knowledge or simply facilitating learner activity, the teacher participates in the social and cultural organisation of experience, exercising professional judgement about how environments, relationships, activities, and subject matter might support further inquiry. Teaching, in this sense, is simultaneously intellectual, social, ethical, and democratic something I aimed to emphasise with my teachers.

This understanding informed the pedagogical intentions of the PROL professional development workshops in the present study. Teachers were invited to engage with particular places, attend to their social, material, cultural, and ecological characteristics, and reflect on how these encounters might inform their teaching. Through collaborative lesson planning (CLP), they were encouraged to consider how place-based experiences could be connected with subject knowledge, curriculum objectives, and students' learning opportunities within the Vietnamese General Education Programme (GEP). The intention was not simply for teachers to experience outdoor activities, but to explore how engagement with place, combined with reflection and professional dialogue, might inform their pedagogical judgement and lesson planning. In this way, the workshops created opportunities for teachers to consider the relationship between embodied experience, the interpretation of place, and the development of place-responsive pedagogical practices.

This understanding resonates with place-responsive pedagogy, while also sharpening what responsiveness entails. Place-responsive pedagogy is not simply the incorporation of local examples into an otherwise predetermined curriculum. It involves grounding inquiry in the histories, social relations, ecological characteristics, material conditions, and lived meanings of particular places, while drawing upon disciplinary knowledge as a resource for interpreting those contexts. Place therefore becomes more than a location in which curriculum is delivered. It becomes part of the conditions through which questions arise, meanings are negotiated, and knowledge is reconstructed. My interpretation is that the significance of place-responsive outdoor learning lies precisely in this

reciprocal relationship: learners bring prior knowledge, interests, and assumptions to a place, while the particularities of the place invite, constrain, unsettle, or extend those understandings.

Dewey (1938) discussion of continuity and interaction in *Experience and Education* further develops this relational conception of experience. He proposes continuity and interaction as criteria for considering whether experiences are educative. Interaction concerns the relationship between learners and the conditions of their environment, while continuity concerns how present experiences shape subsequent possibilities for experience. These concepts offer useful theoretical resources for interpreting place-responsive outdoor learning. Interaction draws attention to learners' encounters with the ecological, cultural, social, and material dimensions of place. Continuity, meanwhile, suggests that a relationship with place need not be exhausted within a single outdoor activity; repeated encounters can enable learners to notice change, develop familiarity, revisit questions, and potentially cultivate care and responsibility. From this perspective, place is not merely a backdrop against which experiential learning occurs, but one of the conditions through which experience becomes meaningful and potentially educative. The relationship is consequently reciprocal: learners encounter place, but their ways of attending to, interpreting, and acting within place also shape their experience of it.

Merleau-Ponty's *Phenomenology of Perception* (2012) offers a complementary perspective by foregrounding the embodied nature of perception. Rather than treating the perceiving subject as separate from the world perceived, Merleau-Ponty understands perception as a lived, bodily engagement through which the world becomes meaningful. This perspective extends the Deweyan emphasis on experience, action and reflection by drawing attention to how movement, sensation and bodily familiarity shape encounters with the world. For place-responsive outdoor learning, this means that places are not simply settings containing educational resources; they are encountered and interpreted through learners' and teachers' embodied, social and situated experiences.

Together, Dewey and Merleau-Ponty offer conceptual resources for understanding learning as an experiential and situated engagement with the world. Within this study, Merleau-Ponty's contribution

is specifically to foreground the embodied dimensions of encounters with place, while Dewey informs the broader understanding of experience, action and reflection. These perspectives do not constitute a prescriptive pedagogical model or assume that particular places produce predetermined educational effects. Rather, they inform an interpretive understanding of place-responsive outdoor learning as pedagogical practice whose meaning emerges through situated encounters with places and the ways teachers interpret and organise these encounters as educational experiences.

Sociocultural theory and professional practice

Vygotsky's (1978) sociocultural theory provides a starting point for understanding learning as a relational and culturally mediated process. Rather than conceptualising cognitive development as exclusively individual, Vygotsky argues that higher mental functions develop through social interaction and are subsequently internalised. Cultural tools and signs, particularly language, mediate how people interpret experiences and participate in activities. From this perspective, learning is not simply the accumulation of knowledge by an individual; it is also shaped by the social relationships and cultural practices through which knowledge becomes meaningful.

This understanding is relevant to teacher professional learning in place-responsive outdoor learning (PROL), where opportunities to explore unfamiliar pedagogical approaches are situated within existing professional knowledge, interactions with colleagues, and particular educational contexts. The PROL workshops provided opportunities for teachers to participate in place-responsive learning sessions related to the experiential learning and career education component of the Vietnamese General Education Programme (GEP), exchange interpretations of their experiences, and collaboratively develop lesson plans. These activities created opportunities for teachers to draw on their existing knowledge while considering how place-responsive approaches might relate to their professional practice. Vygotsky's sociocultural perspective therefore informed my understanding of professional learning as mediated through social interaction, dialogue, and engagement with cultural and material resources.

A sociocultural perspective (Vygotsky, 1978) also draws attention to the cultural and material circumstances through which people encounter place. Teachers and learners do not approach places as culturally neutral observers; they bring histories, languages, values, experiences, and existing understandings to their encounters. At the same time, the social and material characteristics of a place shape what can be noticed, discussed, investigated, and made meaningful. Place-responsive learning can therefore be understood as involving the negotiation of meaning among people, cultural practices, and environments, rather than simply transferring curricular content into an outdoor setting. This perspective provides an initial connection between sociocultural learning and PROL: learning is mediated through relationships, and those relationships are situated within particular cultural, material, and educational circumstances.

This understanding also informed my approach to working alongside teacher participants as a researcher and facilitator. Rather than positioning myself solely as an expert transmitting a predetermined PROL approach, I sought to create opportunities for dialogue, shared inquiry, experimentation, and feedback. These interactions provided contexts in which teachers and I could explore and interpret place-responsive practice together. My role was therefore part of the social conditions through which the workshops were enacted, rather than being external to the learning process. This does not imply that researcher and participants occupied equivalent positions or that they necessarily developed identical understandings. Instead, it foregrounds the relational nature of the research setting and the importance of attending reflexively to how knowledge was generated and interpreted within it (See appendices 11, 12 and 13 for my reflective journals).

Where Vygotsky foregrounds social interaction and mediation in learning, Lave and Wenger's (1991) theory of situated learning directs attention to the relationship between learning and participation in social practice. From this perspective, knowledge cannot be understood independently of the activities, relationships, language, material resources, and cultural practices through which it is produced and used. Learning is consequently not limited to changes in an individual's cognitive knowledge; it also concerns how people participate in, understand, and negotiate the practices of which they are part.

Lave and Wenger's concept of legitimate peripheral participation (LLP) offers a way of examining how learning may occur through engagement with social and professional practices. They describe participation as potentially developing from relatively peripheral forms of involvement towards more extensive engagement with the practices of a community. Peripherality does not necessarily indicate deficiency or an absence of knowledge. Rather, it concerns the position from which a person participates and the opportunities available to engage with the activities, relationships, and resources through which practice is sustained. This perspective is useful for considering teacher professional learning because teachers bring established professional knowledge and experience to new learning opportunities, while also encountering approaches, resources, and ways of working that may be unfamiliar to them.

In the present study, situated learning provides a conceptual resource for examining teachers' participation in PROL workshops, collaborative lesson planning, and subsequent group reflections. These activities brought teachers together to engage with place-responsive learning experiences, discuss their interpretations, and consider pedagogical possibilities in relation to the experiential learning and career education component of the Vietnamese GEP. Their participation can be considered in relation to the varied professional knowledge they brought to the workshops, the interactions and activities through which they explored PROL, and the ways they interpreted these experiences in relation to their teaching contexts.

Lave and Wenger's (1991) account of LLP also draws attention to the relationship between learning and becoming. Participation in professional practice may involve negotiating how one understands oneself in relation to colleagues, established practices, and professional expectations, as well as developing knowledge and skills. This is relevant to PROL because teachers may need to consider not only how to incorporate place-responsive activities into their teaching but also how such approaches relate to their existing pedagogical commitments and responsibilities within the Vietnamese GEP. Their engagement with PROL is therefore considered in relation to the possibilities and constraints of their professional contexts, rather than as an individual process of acquiring a new technique.

Wenger (1998) develops this concept into a broader social theory of learning that explicitly connects participation, meaning, and identity. He conceptualises learning as an ongoing process of negotiating meaning through participation in social practices. His account of communities of practice identifies mutual engagement, joint enterprise, and a shared repertoire as dimensions through which collective practices develop and are sustained.

His distinction between participation and reification further clarifies this process. Participation concerns involvement in social practices and the negotiation of meaning through interaction, whereas reification concerns giving form to experience through concepts, language, artefacts, routines, and other representations and in the case of my study this would occur through teachers participating in the professional development provided. This distinction is relevant to the PROL workshops, where teachers engaged in place-responsive activities and dialogue while also developing collaborative lesson plans. The activities provided opportunities to experience and discuss place-responsive approaches, while lesson plans offered a more tangible means of articulating how emerging interpretations might relate to curriculum and teaching.

The workshop setting can thus be examined in relation to the development of shared understandings without assuming that it constituted a fully established community of practice. Teachers participated in organised activities and collaborative discussions, but the duration and structure of the workshops do not, by themselves, establish the existence of all the characteristics Wenger associates with communities of practice. The concept is therefore used as an interpretive resource for considering how meanings of PROL were negotiated through participation and shared artefacts. The findings in my study do not assume that these understandings were transferred unchanged from the workshops into teachers' professional lives.

Wenger's (1998) emphasis on identity and learning trajectories further highlights that participation can involve ongoing negotiations of professional identity and belonging. His attention to boundaries

between practices and communities is also relevant to teachers who engage with professional development while remaining accountable to school structures, curriculum expectations, disciplinary traditions, and their own pedagogical commitments. For PROL, this perspective directs attention to how place-responsive approaches may be interpreted and negotiated within existing professional practices, including the responsibilities associated with experiential learning and career education in the Vietnamese GEP. It also acknowledges that institutional conditions shape which pedagogical possibilities are available and how teachers can engage with them.

I therefore draw on Lave and Wenger (1991) and Wenger (1998) to interpret teacher professional learning in terms of participation, negotiation, and becoming, rather than to claim that PROL necessarily produces a particular community, identity, or trajectory of professional development. These perspectives complement the sociocultural theory by directing attention to how learning is embedded in professional practices and relationships. Within the interpretivist orientation of this study, they provide conceptual resources for exploring how teachers construct and reconstruct meanings of PROL through engagement with colleagues, professional activities, curricular responsibilities, and particular places.

Schön's (1994) work on the reflective practitioner complements the sociocultural and situated perspectives by examining how practitioners interpret and respond to complex situations. Schön's work therefore complements situated learning: while Lave and Wenger direct attention to participation in social practice, Schön foregrounds the interpretive judgements practitioners make within the situations they encounter. Together, these perspectives help frame PROL as a form of professional practice that involves both participation in established practices and the situated interpretation of pedagogical possibilities.

In this study, Schön's concepts sensitised my interpretation of teachers' engagement in place-responsive learning sessions, collaborative lesson planning, group reflections, and post-workshop interviews. Specifically, they drew my attention to how teachers described revisiting teaching experiences,

articulating professional judgements, reflecting on pedagogical decisions, and exploring possibilities for integrating place-responsive approaches into their teaching contexts. These research activities provided opportunities for teachers to revisit experiences, discuss their interpretations, and consider possible relationships between PROL and their professional contexts. However, the presence of reflective activities does not establish that reflection-in-action or reflection-on-action occurred in every instance, nor does it demonstrate that teachers subsequently changed their practice. Instead, Schön's work provides a way to consider how teachers articulated their experiences, exercised professional judgement, and contemplated pedagogical possibilities within the accounts generated through the study.

Schön's concept of problem setting is particularly useful for developing this connection. Before responding to a situation, practitioners must interpret what is happening and determine what might constitute a worthwhile problem. This is important in place-responsive pedagogy because the educational significance of a local place may not be fully specified by the curriculum or an existing lesson plan. Teachers may need to identify what is worth noticing, formulate questions, and consider how the possibilities offered by a place relate to learning intentions and institutional expectations. PROL consequently involves more than selecting activities for an outdoor setting; it may also involve interpreting the educational significance of a particular place and deciding how that significance might be explored within a curriculum.

This perspective also has implications for understanding my role as a researcher. Reflexivity was incorporated throughout data generation and analysis through analytic memos in which I examined my interpretations, assumptions, interactions with participants, and emerging understandings of the research context. These memos provided opportunities to revisit analytical decisions and consider how my positioning as a researcher and facilitator shaped the knowledge developed through the research process. Similarly, group reflections following the workshops provided opportunities for teachers to revisit their experiences and articulate their interpretations. Reflection was therefore considered not simply as a possible outcome of professional learning but also as part of the processes through which participants and researcher made sense of experience. Schön's work informed this reflexive orientation

without being treated as a substitute for the study's methodological commitments to constructivism, interpretivism, and reflexive thematic analysis.

Taken together, Vygotsky (1978), Lave and Wenger (1991), Wenger (1998), and Schön (1994) offer complementary but distinct perspectives on teacher professional learning. Vygotsky foregrounds the mediation of learning through social interaction and cultural resources. Lave and Wenger direct attention to learning as participation in situated social practices, while Wenger extends this account by examining how meaning and identity are negotiated through participation and reification. Schön, in turn, draws attention to how practitioners interpret uncertain situations, exercise professional judgement, and reflect on their practice. The value of bringing these perspectives into dialogue lies not in treating them as interchangeable explanations of learning, but in considering different dimensions of the relationship between professional knowledge, participation, reflection, and place.

These perspectives informed aspects of the study's design and enactment, including the development of pre- and post-workshop interviews, the facilitation of workshops, collaborative lesson planning, and group reflections. They also informed my reflexive engagement with data generation and analysis. The theories did not function as a predetermined set of categories against which participants' experiences were assessed, nor were the findings organised to demonstrate the propositions of individual theorists. Consistent with the constructivist and interpretivist orientation of the study, the theoretical perspectives provided sensitising and interpretive resources for engaging with teachers' accounts and considering how meanings of PROL were constructed within their professional and educational contexts. The analysis itself remains inductive and was undertaken through reflexive thematic analysis and PROL in this study is approached not as a pedagogical package whose meaning remains constant across settings, but as a situated practice whose possibilities are shaped by teachers' engagement with colleagues, curriculum expectations, professional knowledge, and particular places.

Methodology

Inductive interpretive qualitative inquiry

Qualitative research is characterised by its focus on both naturalism and constructionism (Silverman, 2024). Silverman describes naturalism as the ability to understand people's experiences through thoughtfully constructed dialogues that seek deeper meanings in their narratives, thereby fostering empathy and shared understanding (Silverman, 2024). In this applied educational research, an inductive, interpretive, qualitative inquiry (IIQI) (Tisdell et al., 2025) was used to explore the educational perspectives and experiences of nine Vietnamese public high school teachers regarding place-responsive pedagogy and collaborative lesson planning. Inductive interpretive qualitative inquiry was appropriate because it offered methodological flexibility (Liu, 2016), allowing me to utilise a diverse data generation tools and reflexive thematic analysis (RTA) (Braun & Clarke, 2022) to support a responsive and practical educational research design (Merriam & Tisdell, 2016). Data were generated through various components, including 18 semi-structured interviews conducted before and after five professional development workshops, as well as written group reflections following the workshops. I interpreted the data and organised my interpretation chronologically.

This exploratory qualitative inquiry aligned with my constructivist ontology and interpretivist epistemology (Franklin & Ayentimi, 2025). The IIQI proved useful in applied and professional contexts (Tisdell et al., 2025), especially for my research aim of informing teachers' knowledge and practices in place-responsive pedagogy and collaborative lesson planning, rather than developing theory. It provided a manageable yet rigorous approach to understanding teachers' interpretations of their own teaching and learning practices (Waller et al., 2016). Instead of attempting to deconstruct or disassemble the entire data set, I dedicated significant time to reading, analysing, and writing about my understanding of the data and the analytical process (St Pierre, 2024).

Research design

Research site

The target public high school is situated in the central, affluent residential area of Ho Chi Minh City (HCMC). The school met national standards for a high-quality institution, featuring well-equipped smart classrooms, a spacious, green school ground, and a sports complex. Located near a public park with extensive urban green space, the school offered ideal surroundings for outdoor learning and recreation. I chose this school because it is among the most prestigious in HCMC, with a long-standing reputation for stability and trustworthiness. The highly competitive, selective admission process for students underscores its excellence. The school is renowned for academic rigour, great alumni, and high-achieving teachers. Academic excellence is promoted through a rigorous curriculum designed to prepare students for higher education and vocational training while maintaining high expectations for teaching and learning outcomes. School leaders cultivate a healthy and supportive environment where students feel safe, respected, and inspired. Additionally, the school offers a wide array of extracurricular activities, from arts to sports, to help students develop a variety of talents. A faculty dean from a renowned university in Ho Chi Minh City was appointed to assist the researcher in obtaining approval and access to teacher participants.

Participant-teachers

Thanks to a local research advisor approved by the research committee, I built rapport with the school management board. On behalf of the board, the deputy principal granted me access to the teaching staff and assisted in distributing the research information sheet to their teachers. Two weeks later, nine teachers agreed to participate, signing consent forms that were provided to me prior to the pre-workshop interviews. These teachers were selected for their experience, each with more than ten years' practice, and for their high performance. They taught various specialist subjects and served as form teachers responsible for a class group. The relationship between the participant-teachers and myself was professional, with no conflicts of interest. Over five months, from July to November 2024, the participant-teachers actively generated data through four research components: nine face-to-face pre-

workshop interviews, five professional development workshops, three written group reflections, and nine online post-workshop interviews. Given the multiple data modalities, 18 interviews were deemed appropriate for this research project (Braun et al., 2024). My teachers' insights suggested that the research achieved sufficient informational power, aligned with its aims, was sample-specific, drew on established theories, recounted dialogue quality, and employed analysis strategies (Malterud et al., 2016). To ensure transparency, rigor, and contextual understanding, for the most part I identify the teachers in this research as my or the participant-teachers.

Data generation tools

Pre-workshop interviews

I conducted nine in-person, pre-workshop semi-structured interviews with the participant-teachers during the first week of July 2024 at the selected school where they worked. These interviews were conducted a week before the workshops were facilitated. The length of the interviews varied among the participants, ranging from 30 minutes to an hour. These pre-workshop interviews aimed to assess the teachers' existing knowledge and current practices in outdoor learning (if any), as well as their lesson-planning practices and methods for facilitating learning with their students. The pre-workshop interview questions are available in the Appendix 3.

In-service teacher professional development (ITPD) workshops

I facilitated five workshops in the second week of July 2024. The participant-teachers spent ten hours in the workshops, two hours per workshop. The workshops were held on the school grounds and in the park near the school. The primary aim of the workshops was to familiarise the teachers with place-responsive pedagogy (Wattchow & Brown, 2011) through participation in workshop activities. The workshops also enabled these teachers to collaborate on lesson planning for Vietnamese compulsory experiential learning and career education activities for high school students (Ministry of Education and Training, 2018) through place-responsive pedagogy. The third objective of the workshops was to nurture a practice of reflection among my teacher participants. The workshop agenda (Appendix 18) and handouts (Appendix 19) are included in the thesis.

Group reflections

Two group reflections were held in person after workshops three and four to gain feedback on the participant-teachers' learning. The third group reflection was conducted online via Google Docs to obtain further insights. This material aimed to revisit the teachers' understanding of place-responsive pedagogy and to explore their intention to engage in collaborative lesson planning and place-responsive outdoor learning following participation in the workshops. The prompt questions for the participant-teacher reflections are in the Appendix 4.

Post-workshop interviews

During November 2024, I conducted nine post-implementation online interviews with my participant-teachers. Four interviews were conducted via Microsoft Teams, and another five via email to accommodate each teacher participants' convenience. The interviews were to investigate whether there was a shift in a) the participant-teachers' understandings and practices of outdoor learning, b) their lesson planning practices, c) the learning outcomes of their outdoor learning practices, d) the affordances and constraints of their outdoor learning practices, and e) the possibilities of integrating outdoor learning into their school schedule. The post-implementation interview questions are provided in Appendix 3.

Data analysis method

Reflexive thematic analysis

Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2022) was the primary method for data analysis in this research. The analytical method enabled me to explore meaning in context, allow the unexpected to occur, remain open to multiple ways of seeing, and observe how my teacher participants created meaning through their language use as they conveyed their outdoor learning practices to their students (University of Auckland, n.d.). Given the open process, no fixed codebook or coding frame were employed in the coding procedure. Instead, my ongoing data engagement and interpretation led to the changes and evolution of the codes (Braun & Clarke, 2023a). The RTA encouraged me to remain open

to debate while thoroughly engaging with the data and being mindful of its context. My research utilised the RTA process of coding and developing themes to generate a set of themes as its output. I conceptualised themes through a non-linear analytic work cycle for data analysis (Braun & Clarke, 2022).

The flexibility of RTA was illustrated in my research across six non-linear analytic phases, from data familiarisation to systematic data coding, generating initial themes, developing and reviewing themes, refining, defining, and naming themes, and writing up findings (Braun & Clarke, 2022). My epistemological stance provided the foundation for my research, maximising my flexibility in conducting thematic analysis (Hole, 2024). The research's theoretical framework and code lists do not restrict the RTA method. The flexibility of RTA enabled me to make decisions about the research themes, prioritising an inductive approach to coding and identifying latent-level themes. I was open to an iterative process, moving back and forth through the analytic phases to omit overlapping items and to capture meaningful data interpretation (Campbell et al., 2021). As the researcher, I embraced the flexibility of RTA, which allowed me to stay true to my authentic subjectivity in data interpretation, given my ontological and epistemological stances (Braun & Clarke, 2024c).

The RTA research method also embraced my subjectivity and treated it as a vital resource for exploring and understanding my analytic engagement and meaning-making with the data through rigorous reflexivity (Braun & Clarke, 2023a). To enhance the coherence and reflexivity of my thematic analysis reporting, I adhered to the Reflexive Thematic Analysis Reporting Guidelines (RTARG) developed by Braun and Clarke. This approach enabled me to craft a thoughtful, informed, and conceptually and methodologically coherent RTA in my thesis (Braun & Clarke, 2024b).

Reflexivity

I positioned reflexivity at the heart of my RTA practices (Morriss, 2024). I embraced my subjectivity throughout the research process and enhanced my purposive, meaningful analytic memos for reflexivity as a researcher (Braun & Clarke, 2022). These analytic memos were essential for communicating the

meaning-making process of my research data to readers (Braun & Clarke, 2023a). I continually reflected on my role as a researcher in knowledge construction, my choices, my emotional and critical responses to my data, and how my experiences shaped my knowledge and identity, informing my choices and the writing of my thesis (Braun & Clarke, 2024a). I utilised analytic memo writing as a valuable tool in my research (Olmos-Vega et al., 2023). My analytic memos (Saldaña, 2016) were a sustainable, ongoing practice throughout my data generation and analysis.

By employing a hybrid method for memo writing, I seamlessly transitioned between outward and inward directions to capture my evolving understanding of my participant-teachers' perspectives and experiences, employing my interpretative lens to build knowledge (Mihas, 2024). Centrifugal analysis enabled me to move outward from the core data to examine how my teachers' views were shaped by educational policy, cultural values around nature, and institutional pressures. Conversely, centripetal analysis enabled me to distil my participant-teachers' fundamental beliefs about the value and barriers of outdoor learning and collaborative lesson planning within their professional practices as I moved inward toward the core meaning of the data. Such practice enabled me to think, write, observe, and reflect on my data generation and interpretation, as well as on how my teacher participants viewed place-responsive pedagogy, their collaborative lesson planning, and the realities of their outdoor learning practices with students. I documented extensive analytic memos (Appendices 11-17) to support rigorous reflection throughout my research. I also shared these memos to communicate my train of thought and study progress with my supervisors. Practising reflexivity enhanced the quality, rigour, and transparency of my qualitative research (Braun et al., 2024). Regular consultations with my supervisors during data analysis substantially improved my analytical skills.

Reflexive thematic analysis in action

Familiarising with the data

I remained open and curious, spending quality time with my data (Braun et al., 2024) to develop a deep familiarity by asking questions and critically engaging with the data (Braun & Clarke, 2022). The data familiarisation involved three simultaneous iterative processes: transcription, translation, and analytic

memo writing. To create a solid foundation for the later analysis phases (Braun & Clarke, 2024a), I decided to transcribe and then translate the entire data myself, which included nine pre-workshop interviews, the workshop output, which was the co-designed lesson plans for the experiential learning and career education curriculum, seven post-workshop reflections, and nine post-implementation interviews. The more I listened to the audio recordings, read and reread the transcripts and translation, and wrote analytical memos as I examined the data, the more confident I was in the depth of my knowledge of the data and in my engagement with it (Braun & Clarke, 2024a).

To transcribe the recordings, I listened to them as I typed. I then listened to my transcriptions twice to verify their consistency. The nine pre-workshop interview transcriptions were emailed to my participant-teachers' for their member reflections. However, the participants were not particularly keen on this process, so I omitted it from the post-implementation online interviews. Through transcribing and translating the data myself, I realised how much I embraced my mother tongue, Vietnamese.

Each transcript then underwent the same transcription and translation process. I read each transcript in full before translating it from Vietnamese into English. My background in English Language Teaching proved advantageous during the translation process. To reduce unnecessary distractions and maintain coherence, I omitted irrelevant text from the transcripts. I held two face-to-face meetings with a professional translator to assess the accuracy of my translations and to edit them before uploading them to NVivo for data analysis.

Writing the analytic memo during this initial phase (Appendix 13) coincided with my own transcription and translation. This practice helped me keep track of my analytical thoughts and engage more rigorously with the data. It was how I actively read and immersed myself in my data. As a curious and passionate qualitative researcher, I interpreted the values expressed in my teacher participants' stories as part of the larger story of their teaching community and their country as a whole, of which I was a part.

Systematic data coding

To overcome my initial anxiety about starting this task, I began with small, simple steps, coding one datum at a time and building from there (Saldaña, 2016). I actively engaged with my generated data via an organic, evolving, open coding process broadly framed by the research questions (Braun & Clarke, 2022). I applied the coding practice points recommended by Braun and Clarke during this process (Braun & Clarke, 2022). Instead of coding line by line, I coded the data segments relevant to my research questions. In addition to organising codes into categories aligned with the research questions, thereby situating my data within existing theories and concepts (Braun et al., 2024), I primarily adopted an inductive approach to coding, which kept my research open and exploratory (Waller et al., 2016).

My insights were developed through a slow, steady analytical engagement. Aside from consulting with my supervisors, I was the sole coder for my research, which is generally considered acceptable in RTA (Braun & Clarke, 2022). I began inductively labelling and organising data items into meaningful groups, allowing my philosophical stance to inform my qualitative analysis. I was also adaptable with coding across semantic and latent approaches. I coded semantically to capture explicitly stated ideas in the data, and latently to explore underlying implicit concepts (Braun & Clarke, 2022). I coded each data item in three rounds, using a different order for each component's data to refresh my perspective. I stopped coding when the codes alone summarised the richness, diversity, and contradictions (if any) of meanings in the data (Braun & Clarke, 2022). As a result of inductive coding, I produced a list of codes (Appendix 9) that portrayed me as an open-minded, data-driven, and reflexive qualitative researcher (Saldaña, 2025). The analytic memo for this phase is available in Appendix 14.

Generating initial themes

I developed themes from the code labels through a meaning-making process (Braun & Clarke, 2023b). It was a creative, experimental, and wondrous qualitative process of generating themes from the data. I conducted a thematic analysis of the qualitative data through in-depth engagement to make sense of it (Wolgemuth, Guyotte, et al., 2024). In detail, I combined clusters of codes that shared meaning to create potential themes (Braun & Clarke, 2022). I mapped a coherent structure for these themes using NVivo's

code labels (Braun et al., 2024) to capture my thoughts and bring my analytic structure to life. These ideas were not fixed. I then refined them until they properly captured the result of my research (Braun et al., 2024). I also took time to step back from my rigid intuition and continued to explore the insights from my data (Wolgemuth, Marn, et al., 2024). Nurturing my curiosity toward data has significantly advanced my data analysis skills. The analytic memo for this phase is available in Appendix 15.

Developing and reviewing themes

I analysed the complete dataset to develop themes (Braun et al., 2024). I reread the collated, coded data for each candidate theme to confirm that there was sufficient evidence to support the theme. Subsequently, I reviewed the themes in the broader context of the dataset to ensure that the revised themes addressed my research questions and reflected my interpretation of the data (Tjernberg et al., 2025). The analytic memo for this phase is available in Appendix 16.

Refining, defining and naming themes

I worked on collapsing overlapping themes during this process (Braun & Clarke, 2022). I then wrote a definition for each theme to clarify its meaning and narrative within the overall analysis, and to create a roadmap for writing up my research findings (Braun et al., 2024). I named themes to capture their essence as I began to attune to my analysis and develop a sound understanding of my data (Braun & Clarke, 2022). Each generated theme contributed to a complete analytical story (Braun & Clarke, 2024b). The output of this analytic process was a robust thematic map of my data (Braun et al., 2024), resulting from my interpretive engagement with the data (Braun & Clarke, 2024a). Using NVivo R1, I created a final thematic map (Appendix 10) that described the scope of each theme and its relationships with other themes (Braun et al., 2024). The analytic memo for this phase is available in Appendix 17.

Writing up the results

I deliberately used an active voice and wrote in the first person to embrace my authenticity and reflexivity (Braun & Clarke, 2023a). I shaped my qualitative analysis around rich, complex, and multifaceted overarching themes, supported by vivid and compelling data extracts (Braun & Clarke,

2023a). The quotations were primarily used to illustrate the participant-teachers' voices aligned with specific themes rather than to convey the overall analytical narrative (Tjernberg et al., 2025). I interpreted and constructed these themes through a process of meaning-making within the data, thereby creating a solid foundation for meaning-unified stories to be shared by me as the primary researcher (Braun & Clarke, 2023b). This approach helped me develop a compelling argument that addressed the research questions as a thoughtful and knowledgeable RTA practitioner (Braun & Clarke, 2024a). I presented longer narratives from the most articulate teachers, balanced with valuable shorter excerpts from other participants (Braun et al., 2024). I crafted an overall analytical story across themes to discuss the implications of evidence-based research and future directions (Braun & Clarke, 2024b). The writing process involved extensive editing and consultation with my supervisors to ensure I conveyed a clear, persuasive account of my data (Braun & Clarke, 2022).

Utilising NVivo R1 for data management and analysis

I utilised NVivo R1 (Lumivero, 2025), a computer-assisted qualitative data analysis software programme, as a data management and analysis tool during my thesis project (Kuckartz, 2014). I used it to import research data in PDF format, including interview transcripts, reflections, and analytic memos. Within NVivo R1, I developed codes for RTA. I updated the list of codes, which were then exported as a document, and consulted with my supervisors throughout the six phases of RTA.

I also used word-based analysis techniques, such as word frequency (Appendix 20) and text searches (Appendix 21), to explore potential codes and themes. I used the hierarchy chart functions to create visualisations for the thematic progression generated from the data (Appendix 22). I also used the diagram functions to explore the project maps (Appendix 23).

Compared with traditional manual approaches, NVivo R1 provided a more powerful and flexible tool explore the data (Opie & Brown, 2019). It was convenient to move back and forth across the six stages

of reflexive thematic analysis, to develop coding from descriptive to more substantive and theoretical codes, and to access code lists during project development (Beekhuyzen & Bazeley, 2025).

Declaration of using AI tools ethically

I used Grammarly (Grammarly, 2025), an AI-assisted editing tool, to improve spelling, grammar, and sentence structure during manuscript preparation. After using this tool, I carefully reviewed and edited the text and take full responsibility for the final content.

Trustworthiness

The precision and reliability of my qualitative research were grounded in trustworthiness (Gray, 2022), which was developed through the four suggested pillars of credibility, transferability, dependability, and confirmability (Ahmed, 2024). To establish credibility, I maintained a consistent research design across four data-generation components and sustained prolonged engagement with the teacher participants throughout this process. As a researcher, I repeatedly reviewed the data to familiarise myself with it. To enhance the transferability of my research, I provided a comprehensive description of the participant recruitment strategy, the tools I used to generate data, and the data analysis phases. The outcomes of my research not only benefited Southeast Asia but also contributed to the global body of knowledge. To build a solid foundation for my research, I created a data matrix (Appendix 2) for my doctoral thesis and maintained a systematic record of the data. To establish confirmability, I discussed the original Vietnamese transcripts with my participant-teachers as they wished and consulted the English translation with a professional translator. I also practised reflexivity through continuous analytic memo writing and sought useful advice from my supervisors throughout the data collection and analysis. Such practice highlighted my sincerity during this process (Tracy, 2010). Ultimately, my data analysis was interpreted as representing me as a primary researcher and was validated through my supervisors' lens (Creswell & Poth, 2025). Foremost, I advocated for transparency and methodological coherence in reporting RTA (Braun & Clarke, 2024b) within my research practice.

Summary

This qualitative study adopted an inductive interpretive approach to explore the professional experiences of nine Vietnamese public high school teachers at a renowned school in Ho Chi Minh City. Five professional development workshops on place-responsive outdoor learning took place in familiar settings, either on the school campus or in a nearby park. Before the workshops, nine semi-structured interviews were conducted in person at the school. After the workshops, nine online interviews were conducted. Additionally, three group reflection sessions with my participant-teachers were held face-to-face or online. Data were imported into NVivo R1 for management and thematic analysis. To ensure the trustworthiness of the findings, the researcher's reflexivity was a key strategy. The next chapter presents the results for four research questions in chronological order.

Chapter 4: Results

This chapter uses a temporal narrative structure that contrasts the period before and after the professional development workshops to illustrate the evolution of the participant-teachers' perspectives over time. The results are analysed through an interpretivist lens, emphasising how meaning was co-constructed through dialogue, reflection, and participants' professional experiences.

As shown in the data matrix (Appendix 2), the pre-workshop interviews supplied data for Research Question 1 (RQ) and RQ2. Group reflection 1 provided data for RQ2 and RQ3. Group reflection 2 supplied data for RQ3, RQ4, and RQ5. Group reflection 3 provided data for RQ1, RQ4, and RQ5. The post-workshop interviews yielded data for all five RQs. The following themes were generated from the data matrix of nine face-to-face pre-workshop interviews, three group reflections after the workshops, and nine online post-workshop interviews.

RQ1. What were the Vietnamese public high school teachers' understandings of the potential contribution of outdoor learning at the commencement of the study and after participating in the workshops? What changes occurred as a result of participation?

This question explored participants' prior knowledge and practices in outdoor learning before and after professional development workshops. I developed three themes from my participant-teachers' responses: pedagogical shift, effects on wellbeing, and a sense of belonging through affective learning. Each theme was supported by several subthemes that highlighted different dimensions of my teachers' responses. The pedagogical shift evolved from fostering attentional skills to embracing sensory and embodied learning, and enhancing environmental awareness and stewardship. The effects on wellbeing progressed from contributing to physical activities to developing social skills, improving mental wellbeing, and uplifting physical wellbeing. These subthemes illustrate how they interconnect to form a broader theme. Each theme and subtheme is detailed below, with support from participant responses.

Theme 1: Pedagogical shift

Before the workshops

Most participant-teachers' in this research project considered outdoor learning to be a valuable, authentic experience that takes place in an external environment separate from their indoor classroom.

> *Outdoor learning goes beyond just playing outside; it involves linking specific knowledge to real-world situations. This approach enables us to apply textbook content in genuine outdoor environments. It is not limited to learning within four walls. (T3: Pre-workshop interview)*

They especially believed in the beneficial effects of outdoor environments on student learning, appreciating their novelty and adaptability.

> *Outdoor learning offers vivid visual and sensory experiences, authentic, extensive opportunities, and expansive environments beyond school rules. (T6: Pre-workshop interview)*

When considering appropriate locations for outdoor learning, most of the participant-teachers concentrated on their school grounds and nearby accessible open green spaces, such as local parks and historical sites, due to their proximity and the ease of low-risk management. However, their main motivation for opting for outdoor learning was to utilise it as a neutral learning environment, rather than for its unique characteristics. They appeared to perceive it merely as a blank canvas, essentially a venue or a learning space, rather than a place for learning. Instead of engaging in learning in, about, and with a place, they tended to focus on learning in a new space.

> *Instead of traditional classrooms, we study outdoors, on the school grounds or in the park. (T1: Pre-workshop interview)*

> *It could be a school playground, local park, or historical site. These outdoor environments are spacious and unrestricted by school rules. (T6: Pre-workshop interview)*

For example, in the experiential learning session described above, Teacher 9 engaged their students in interdisciplinary learning through craftwork, economics, and business studies while using the school grounds as a neutral outdoor environment for the lesson.

> *I conducted outdoor learning sessions on the school grounds, where students showcased handmade items such as hair bands, earrings, and bracelets they created at home, and delivered presentations about them. This activity relates to products, money, and markets. (T9: Pre-workshop interview)*

Some teachers mentioned that they adjusted their teaching methods, when outdoors, to cater for enriched learning.

> *Outdoor learning offers a meaningful and enriching experience for students, fostering a sense of simplicity for both teachers and students involved. (T8: Pre-workshop interview)*
>
> *Students find it easier to understand the lesson through outdoor, context-based learning. (T9: Pre-workshop interview)*

Some teachers also believed that outdoor learning could enrich students' sensory experiences, especially in enhancing their observation skills.

> *When learning outdoors, the eyes are the most important sensory organ, followed by the ears. A discerning individual has keen vision and excels at observation. (T4: Pre-workshop interview)*
>
> *They can practise responding better by using various sensory organs such as their eyes, noses, ears, hands, and feet. (T5: Pre-workshop interview)*

They felt that outdoor learning could create new and exciting learning opportunities that far surpass what indoor learning can provide.

> *To foster diversity in education, teachers should adapt methods. Learning only from books or videos is limiting. Outdoor learning offers real-life experiences, like visiting the zoo to see tigers, which is more impactful and exciting than watching TV. Outdoor learning is much more exhilarating. (T6: Pre-workshop interview)*

While recognising the benefits of learning outside the classroom, some found it challenging to carry out project-based activities outdoors due to the relatively short timeframes (45-90 mins).

> *I believe outdoor learning is essential because indoor lessons can become dull. Outdoor sessions, especially in subjects like physics, are innovative and beneficial. However, some project-based learning can take weeks or months, and students need to work independently to develop their own projects. (T7: Pre-workshop interview)*

Most of their outdoor sessions with students are scheduled field trips in diverse environments designed to enhance learning. All of my participant-teachers agreed that accessible urban green space and landscapes are essential, emphasising outdoor sites as valuable learning settings.

> *Learning isn't confined to a classroom; it also happens in open spaces. Our school, situated near a park, offers a green outdoor area for student activities. (T2: Pre-workshop interview)*

Most participant-teachers felt confident supervising their homeroom classes during experiential learning activities, which ranged from brief local factory visits to full-day historic tours.

> *I went on a field trip with my specialised group to a nearby power station, where we explored a transformer station with an instructor. I didn't allow students to go off-site alone. The trip lasted less than an hour and was travelled by bus. (T1: Pre-workshop interview)*

Many participant-teachers believed that day trips offered valuable opportunities for interdisciplinary learning, ranging from social sciences to natural sciences.

> *We had one opportunity to organise an outdoor trip to Cu Lao Cham (Cham Islands) in Ben Tre Province, Mekong Delta. Students visited small islands, wetlands, and mangrove forests, learning about geography, biology, and local farming, including rice paddies and orchards. They swam and fished in designated areas. The day trip lasted from morning to afternoon, depending on the school's budget. (T3: Pre-workshop interview)*

> *I took my students on a field trip to the Cu Chi tunnels site along with other classes. We gathered at school before boarding a bus to the site, where staff guided the students. They first visited the central tunnel, learning about its construction and its use during the Vietnam War. The trip aimed to teach students about Vietnamese history, especially wartime history, but also biology, as the tunnel lies beneath a forest with a diverse ecosystem. Students gained insights into history and local flora and fauna. (T6: Pre-workshop interview)*

One participant-teacher mentioned their extensive experience on outdoor field trips with their students through the Communist Youth Association.

> *While a member of the Communist Youth Association, I organised visits to historical sites and field trips, during which students wrote reports reflecting their learning. They learned from instructors, engaged in activities, enjoyed local cuisine, watched films, took photos, and made videos. I supervised these trips and gained insights myself. Such excursions offer valuable learning experiences; although students might not retain all target knowledge, authentic experiences enrich learning and aid memory. (T8: Pre-workshop interview)*

In particular, some teachers regarded multi-day trips to remote areas as valuable opportunities to build trust and relationships between educators and students, highlighting the importance of fostering strong connections among teachers and learners.

> *I loved the trip; it helped me understand my students better, including their personalities, social groups, and comfort levels. This deeper connection made me more effective in guiding them. Building these relationships requires time and effort, but it leads to mutual respect, trust, and increased engagement from students. (T7: Pre-workshop interview)*

What drew my attention was their overnight sightseeing tours organised as part of their school's extracurricular activities. Considering the cost of these trips, not all students could afford to participate.

> *I visited Da Lat with my students on a field trip for experiential learning, mainly for sightseeing. We spent three days and two nights with about thirty or forty students participating, while others stayed at home. The trip took place after the first semester assessments. Students visited historical sites and learned about the country's history. (T7: Pre-workshop interview)*

Interestingly, some participant-teachers valued delegating classroom instruction to on-site instructors, gaining new insights and learning alongside their students. They seemed comfortable with this arrangement as part of their school tradition.

> *We outsourced these trips to external travel companies, which occurred annually. (T2: Pre-workshop interview)*

> *We can also engage with the on-site instructors and learn alongside our students. This knowledge is not found in textbooks. (T6: Pre-workshop interview)*

In the pre-workshop interviews, participant-teachers reflected on field trips they had undertaken before participating in the PROL workshops, describing these experiences as meaningful and authentic. These excursions had provided opportunities for the teachers to temporarily reposition themselves as learners, experiencing and re-experiencing learning alongside their students. Reflecting on these experiences, the teachers considered the possibilities of learning through direct engagement with place. As discussed earlier, participant-teachers also associated outdoor learning with the development of attentional capacities; this understanding is explored further below.

Subtheme: Fostering attentional skills

Teacher 4 emphasised the importance of diverse settings to foster mindful observation, thinking, and reasoning skills.

> *Students can enhance their observation skills by learning in open environments and practising viewing from different angles to improve decision-making. (T4: Pre-workshop interview)*

Whereas Teacher 6 and Teacher 3 observed their students' development in memory and spatial awareness through outdoor activities. They also believe that field trips can enhance students' interest in specific subjects.

> *They recalled about 70% of their learning during the trip. When asked about the Cu Chi tunnels, they discussed sections, depth, and location. They also remembered the local fauna and flora. (T6: Pre-workshop interview)*

> *Some reported that the trip was meaningful, enhancing their geographical knowledge and nurturing their passion for the subject. (T3: Pre-workshop interview)*

Prior to engaging in the workshops, participants understood experiential learning as extending beyond the classroom and involving opportunities for students to learn through experiences in outdoor environments. However, their accounts suggested that they continued to conceptualise these environments primarily as settings or contexts in which educational activities could take place, rather than as constitutive elements of the learning experience. Outdoor spaces were therefore often understood in relation to their capacity to support students' engagement with particular subject content, rather than as places with their own social, cultural, and environmental qualities that could inform what and how students learned.

After the workshops

Subtheme: Embracing sensory and embodied learning

As a result of learning from the workshops, the PROL activities conducted by some participant-teachers after the workshops differed from those discussed during pre-workshop interviews, especially regarding their schools and local environments. Their conversations began to include activity types such as storytelling, sensory learning, environmental stewardship, and reflection. Many participant-teachers believed that PROL could engage multiple senses through direct interaction with nature, emphasising its health and mindfulness benefits via sensory and embodied practices.

> *During the workshops, I practised sensory activities to stay present and connect with nature. I interviewed local park users to learn about their engagement with the local environment. Sensory activities taught me to be present in a place. I also connected with living and non-living entities, opened my heart and mind for communication, appreciated my neighbourhood, and valued my environment. (Group reflection 1)*

> *Both teachers and students have opportunities to engage with nature through all their senses, which promotes their spiritual and emotional wellbeing. […] Students will have opportunities to practise active learning through sensory activities and reflection. (Group reflection 3)*

The workshop profoundly influenced Teacher 9 and Teacher 2, inspiring them to design sensory and embodied learning activities for their students during outdoor sessions.

> *There is more space for students to move, explore, observe, and converse with their peers outdoors. They will engage in authentic outdoor learning, using all their senses, such as sitting quietly, closing their eyes, and listening to the sounds around them. These activities can promote mindfulness, a calmer pace of life compared to the city hustle, and help students develop concentration and deeper learning through sensory experiences. (T9: Post-workshop interview)*

> *When students learn outdoors, they will encounter an environment that enables them to engage with different concepts through a variety of sensory activities. (T2: Post-workshop interview)*

Some teachers began to recognise the value of using place-based stories and narratives in their outdoor learning sessions.

> *Place-based narratives compellingly connect students to their environments, fostering deeper engagement. (T9: Post-workshop interview)*

Teacher 9 understood the weaving of narratives about local places as a meaningful way of connecting students with their surrounding environment. In this account, local stories were positioned as resources through which students could make sense of place and relate their learning to their everyday environments, enriching the meaning they might construct from their educational experiences.

Subtheme: Enhancing environmental awareness and stewardship

Through PROL, many of the participant-teachers acknowledged the advantages of outdoor learning, including its ability to enhance environmental awareness and foster stewardship among students.

> *PROL enhances students' environmental literacy, allowing them to make informed choices and take responsible actions on environmental issues. They understand the impact they have on ecosystems and discover ways to protect their community's environment. They learn to act as nature ambassadors. (Group reflection 3)*

Their understanding of outdoor learning advanced from superficial empathy to actively fostering students' stewardship through a place-responsive approach.

> *My students can classify waste and identify recyclable items. They understand the importance of protecting local and natural environments. Global issues should be tackled locally. They learn to care for their surroundings and community. (T8: Post-workshop interview)*

> *I can invite students to help clean the school grounds and care for the environment by watering trees, collecting litter, and recycling. These activities can foster their connection to nature and environmental responsibility. (T9: Post-workshop interview)*

From their understanding, they began inviting students to apply the principles of PROL through practical activities to revitalise their school grounds.

> *In relation to the theme of environmental education, my students have excelled at cleaning the school grounds, sorting the rubbish, recycling it, and watering the trees and plants. (T9: Post-workshop interview)*

Through these activities, both participant-teachers and their students develop a committed, reciprocal relationship with their school and local environment, actively contributing to their community with goodwill.

> *They aspired to improve and regenerate these surroundings. They planted climbing flowers in front of their classroom to express their affection for the space. (T2: Post-workshop interview)*

> *They felt connected to their living and natural environments. They learned how to maintain the tidiness of public spaces. (T6: Post-workshop interview)*

They were pleased to see students actively engaging with the outdoor environment, observing it, contemplating improvements, and expressing their experiences through creative representations.

> *Recently, I was delighted to observe my students exploring the school grounds and discussing with their friends how they would like to rejuvenate this outdoor space. They then sketched their plans on pieces of paper. This week, students will reflect on their ideas within their teams. The following week, they will present their designs to the entire class. (T2: Post-workshop interview)*

Some participant-teachers have also started or plan to encourage their students to reflect, aiming to strengthen their learning and engagement while gathering formative feedback to inform teachers'

improvement. Once considered a luxury in Vietnamese school settings, this practice now resonates with the participant-teachers and motivates them to invite their students to adopt it.

> *I will encourage students to share feedback after outdoor sessions to improve my PROL practices. I will guide reflection, create more opportunities for reflection, and use activities to address themes of experiential learning and career education. I will implement reflection, facilitate outdoor learning to connect students with locals and nature, and promote sensory skills and imagination to foster interconnection through reflection. (Group reflection 2)*

They acknowledged the profound significance of incorporating outdoor learning environments into the curriculum, as these settings play a crucial role in shaping both content and teaching methods. By appreciating the value of nearby outdoor places within urban areas and recognising their educational potential, they began to integrate these outdoor places as vital partners in lesson planning. This approach has fostered interdisciplinary learning about, within, and through the environment, highlighting the immense value of the workshops in facilitating this transformative educational experience.

> *My perspective has shifted. Outdoor learning is not limited to classrooms; it also includes open-air environments such as school grounds, parks, cinemas, and museums, extending into broader places. Attending outdoor learning workshops last summer broadened my view, and my colleagues and I now plan to incorporate this approach into my teaching. […] Integrating outdoor learning into experiential learning, career education, and other subjects is vital for achieving new curriculum outcomes, emphasising students' holistic development and creativity through interdisciplinary practices. (T9: Post-workshop interview)*

Notably, after participating in the workshops, they recognised the pedagogical potential of nearby and familiar places as a vital component of learning. These locations were not viewed as neutral settings or merely a backdrop for learning, but rather as providers of meaningful resources and materials that facilitate learning through engagement with them.

> *After workshops, my perspective on outdoor learning shifted. It's not just about listening outside; it's about participating in real activities in places students visit frequently, like school grounds, parks, and neighbourhoods. (T3: Post-workshop interview)*

> *My view on outdoor learning shifted after attending workshops. I realised it's an innovative and powerful way to increase student engagement through authentic experiences. (T4: Post-workshop interview)*

Some participant-teachers valued the open outdoor spaces outside their classrooms, recognising their potential as self-directed learning environments when adequately resourced and contextualised. They started collaborating to organise outdoor field trips, transforming the focus from mere sightseeing to investigations in natural and social sciences, as well as outdoor environmental education.

> *Outdoor learning is a purposeful education that occurs in the natural environment beyond the four walls of a classroom, with endless possibilities. (T4: Post-workshop interview)*

> *Outdoor learning allows students to connect with nature in peaceful, authentic settings such as school grounds, parks, and neighbourhoods, participating in real, hands-on activities. (T6: Post-workshop interview)*

Their discussions emphasised adaptability, inclusivity, and interdisciplinary approaches, guided by insights from recent workshops.

> *Based on the workshop's collaborative lesson plans, we organised a day trip to the Can Gio mangrove biosphere reserve for our students. This trip concentrated on an interdisciplinary learning theme across three target subjects: biology, history, and geography. (T3: Post-workshop interview)*

Teacher 8, who attempted to implement PROL in their teaching, observed that remote locations are now less favoured, replaced by nearby natural areas that improve local outdoor learning for various students.

> *After workshops, my view on outdoor learning has broadened. It can take place at both small and large scales, whether under the school canopy or at the local park, without requiring remote locations. (T8: Post-workshop interview)*

The participant-teachers suggested an emerging reorientation in how they understood the pedagogical possibilities of PROL. Before the workshops, the outdoors was often described as a neutral backdrop or as an alternative setting for learning, with school field trips typically associated with sites that required specialised expertise or external contractors. Following their engagement with the workshops, however, participants increasingly articulated possibilities for working with more immediate and familiar places through sensory and embodied experiences connected to real-life contexts. Their discussions also increasingly foregrounded environmental awareness and stewardship, suggesting that the significance of PROL was being understood not simply in terms of where learning took place, but in relation to how teachers and students could attend to, interpret, and engage with the places around them.

Theme 2: Effects on wellbeing

Before the workshops

Subtheme: Contribution to physical activities

Many participant-teachers regarded outdoor learning as an active and healthy approach through outdoor activities. They highlighted that outdoor learning mainly involved student movement, encouraging an active and healthy lifestyle, as illustrated by Teacher 5.

> *Outdoor learning involves physical activity in a supportive environment. Nowadays, students sit for too long, risking poor posture, low mood, depression, and fatigue. Outdoor learning encourages students to be more active. (T5: Pre-workshop interview)*

Teacher 4 even emphasised the Health and Physical Education (HPE), and Military Education as primary subjects to be conducted in the outdoors.

> *I believe outdoor learning is limited to subjects like Health, Physical Education, and Military Education, with traditional indoor classrooms being the only environment for other specialised subjects. A key benefit of outdoor learning is increased physical activity, which makes students more engaged. (T4: Pre-workshop interview)*

Similarly, Teacher 2 recognised the advantages of kinaesthetic and experiential learning in HPE.

> *Practising flash mobs in the park offers students a chance to exercise with friends which contributes to their learning. (T2: Pre-workshop interview)*

The participant-teachers strongly associated physical activities, including dancing, sports, exercise, and military education, with students' wellbeing. They perceived these activities as meaningful opportunities for students' broader learning, positioning physical engagement and learning as interconnected dimensions of students' educational experiences.

After the workshops

Subtheme: Growth of social skills

Many participant-teachers believed that outdoor learning environments positively influence key aspects of students' social skills development. After attending the workshops, their belief in the potential for developing social skills through outdoor learning strengthened. Most confirmed that PROL enhanced student collaboration, teamwork, and communication skills through shared experiences in nature.

> *It* [PROL] *nurtures students' social skills by encouraging peer collaboration in outdoor activities. Students develop positive thinking and happiness through nature experiences and can practise mindfulness, critical thinking, and reflection. Outdoor participation fosters greater reflection. (Group reflection 3)*

> *The students improved their teamwork skills, stayed engaged, and applied their learning in real life. They were friendly, worked well with classmates, and took initiative in learning. PROL connects students with nature, encourages engagement, and develops communication skills. My students showed joy and enthusiasm, achieved good learning outcomes, and valued growth in teamwork. (T6: Post-workshop interview)*

PROL offered the participant-teachers and students opportunities for creative thinking, exploration, and play, which are essential for social skills development.

> *PROL boosts creativity by encouraging inventive teaching and flexible lesson planning. It allows experimentation with new ideas and interactions with the environment, fostering novelty and enhancing creativity for both teachers and students. (Group reflection 3)*

The participant teachers also highlighted the importance of fostering students' learning autonomy and curiosity through PROL.

> *They* [the students] *were creative and open to new knowledge. These PROL sessions positively impacted their holistic development regarding learning skills, learning attitudes, and physical health. (T4: Post-workshop interview)*

> *PROL had a significant impact on my students. They were enthusiastic, engaged, and self-directed in learning and preparing for future career opportunities. (T3: Post-workshop interview)*

The participant-teachers constructed PROL as offering meaningful possibilities for supporting students' social development through collaborative and experiential engagement. Their accounts reflected an emerging understanding of place-responsive pedagogy as a way of enriching experiential learning and career education by connecting students' learning with the social, cultural, and environmental contexts of their everyday lives.

Subtheme: Benefits mental wellbeing

After they had taken part in the workshops, the participant teachers' belief in the positive effects of PROL on their students' mental health appeared to strengthen. They believed that PROL could help students reduce stress, improve concentration, boost their mood, and foster a sense of agency in their learning.

> *PROL had a significant impact on my students, making them enthusiastic, engaged, and self-directed in preparing for future careers. They enjoy playful outdoor activities that keep them healthy and happy while also helping them gain practical knowledge. (T3: Post-workshop interview)*

Some teachers noted that their students' enjoyment of PROL might stem from the excitement, fun, and freedom it provides. The more they engaged in PROL, the greater the benefit to their general wellbeing.

> *Their stress decreased as they learned outside, making learning more enjoyable. My students felt less stressed than indoors, and these activities also fostered positivity. (T4: Post-workshop interview)*
>
> *Exploring outdoors stimulates students, helps reduce stress, encourages laughter and conversations with peers, and allows self-expression. I saw my students become more confident and relaxed during these activities. (T9: Post-workshop interview)*

Many participant-teachers valued PROL's support, which positively impacted both students and teachers themselves by aiding in workload management, professional development, and overall wellbeing.

> *PROL boosts my mental wellbeing, reducing stress and anxiety when teaching outdoors. Being in nature relaxes me and alleviates workload pressure. I focus better outside and feel more positive, excited, and refreshed due to the landscape and fresh air. PROL fosters creativity, helping me experiment with teaching ideas and stay flexible. It also improves my physical health through increased activity, reducing sedentary risks. I reflect on these experiences, noticing mental, emotional, and physical growth, motivating lesson development and implementation. PROL is an innovative, beneficial approach that enhances my teaching quality and overall life, positively influencing my professional performance. (Group reflection 3)*

Some participant-teachers began to reflect on their resilience and adaptability when integrating PROL into their teaching practices. They realised the benefits of PROL in developing coping skills to manage changing environments and overcome obstacles, aspects they had not previously mentioned.

> *I concentrate better in open areas. PROL also improves my emotional wellbeing, enhancing my positive thinking. I feel more excited and enthusiastic while teaching outside. This feeling arises from the beautiful outdoor landscape and the fresh air. I feel refreshed and optimistic when outdoors. (Group reflection 3)*

Notably, Teacher 8 shared that PROL significantly impacted their mental health. Previously, this teacher expressed strong discomfort with outdoor learning, citing allergies and other issues, which made it difficult for them to participate in such activities. However, after engaging in the workshops, their interpretation of outdoor learning has notably changed. They have come to realise that PROL is not only beneficial for their students but also provides them [T8] with advantages through this innovative and meaningful pedagogical approach.

> *The significant impact of participating in five PROL workshops and conducting my own PROL sessions with my students was that I became significantly more positive and experienced reduced stress. (T8: Post-workshop interview)*

An understanding of mental-wellbeing emerged during the workshops that had not been articulated in the pre-workshop interviews. The participant-teachers described feelings of enjoyment, connection, and renewed energy in relation to their enthusiastic engagement in the workshop activities. I interpreted

these accounts as suggesting that the workshops were experienced not only as opportunities for developing pedagogical understandings but also as spaces for personal and professional renewal.

Subtheme: Uplifts physical wellbeing

After attending the workshops, their belief in the benefits of PROL for health and physical development has increased, focusing on improving physical health, developing motor skills, and fighting obesity.

> *PROL boosts my physical wellbeing through outdoor activities, reducing the risks associated with a sedentary lifestyle. Sunlight stimulates vitamin D production, aiding bone health and immunity. It exemplifies holistic development, emphasising active, healthy living through outdoor learning, which can enhance muscle growth and immune function and reduce the risk of chronic diseases such as diabetes, obesity, and heart problems. We aim for a more active, healthy, creative, and social learning style, with students connecting with nature near the school for active, healthy education. (Group reflection 3)*

Teacher 3 stated that a strong mind should accompany a healthy body to support their learning journey. They believed that PROL could help students achieve this goal.

> *My students are interested in engaging in PROL. These sessions help them stay healthy and happy while acquiring essential knowledge relevant to real life. (T3: Post-workshop interview)*

Teacher 4 supported Teacher 3's view, highlighting the advantages of PROL for students' physical health as part of their holistic development.

> *These PROL sessions positively impacted my students' overall development, including learning skills, attitudes, and physical health. (T4: Post-workshop interview)*

Prior to the workshops, most participant-teachers appeared to construct the value of outdoor learning primarily around physical activity and physical wellbeing. Their subsequent reflections retained this understanding but also broadened it to encompass mental and social dimensions of wellbeing. I interpreted this pattern as an emerging reorientation in how participants made sense of the purposes of place-responsive outdoor learning, moving beyond physical activity towards a more holistic understanding of students' social, emotional, and learning experiences. Social skills, in particular, featured prominently in their reflections on what students might develop through collaborative engagement with place.

Theme 3: A sense of belonging through affective learning

Before the workshops

Some participant-teachers noted that outdoor learning positively influences students' emotional development. They observed that a comfortable environment encourages sharing, which outdoor settings naturally promote. They believed that increased sharing could strengthen bonds and empathy among students.

> *Outdoor learning enables students to express themselves more effectively. (T5: Pre-workshop interview)*

> *They* [the students] *felt more open-minded, relaxed, and comfortable sharing thoughts with teachers and friends. In class, most stayed quiet and only answered when asked. Outside, especially in new places away from home, they interacted more and learned about their surroundings. (T7: Pre-workshop interview)*

Teacher 2 was convinced that outdoor learning fostered better relationships between teachers and students, enhanced camaraderie among students, and deepened their bond with nature.

> *Students today are less connected than earlier generations. Expressing compassion is vital. Outdoor learning benefits include comfort, excitement, and nature-connectedness, allowing students to bond with peers, teachers, and their environment. Whether on school grounds or elsewhere, outdoor learning enhances human and nature connections. (T2: Pre-workshop interview)*

The participant-teachers understood outdoor learning as creating opportunities for teachers and students to develop relationships of care, trust, and mutual respect with one another and with the natural environment. These accounts positioned the outdoors not simply as a setting for educational activities, but as a relational space through which connections among people, learning, and the more-than-human environment could be experienced and interpreted.

After the workshops

Many participant-teachers confirmed that PROL potentially contributed to strengthening relationships among those involved in this learning approach. As the participant teachers thoughtfully planned their outdoor learning sessions, they not only achieved the learning outcomes but also earned trust and respect from their students.

> *PROL boosts teacher-student and peer relationships through outdoor interactions, fostering bonds, tailored activities, and better understanding, resulting in positive learning outcomes. (Group reflection 3)*

The participant teachers believed that PROL could foster connection and attachment to the local environment and community. The bonds with local places were viewed as important as relationships with people and non-human entities, creating a meaningful network that could enhance the students sense of belonging.

> *I also recognise the importance of fostering connections and a sense of belonging between students and their local environment. Students with mental health or physical constraints would greatly benefit from PROL, as it enables them to engage with the local and natural environment. (T8_Post-workshop interview)*

> *PROL helps me better understand my local environment. I feel more connected to my neighbourhood and learn to appreciate the small things around me. I learn to act as a nature ambassador. (Group reflection 3)*

As they fostered their students' empathy and compassion for their local environment, the students began taking actions to give back to their community.

> *Through PROL, we can engage with our neighbourhood and familiar places such as local parks and hometowns. (Group reflection 3)*

> *By participating in PROL, my students developed a greater love and care for their school and neighbourhood. (T2: Post-workshop interview)*

> *They felt connected to their living and natural environments. (T6: Post-workshop interview)*

The participant-teachers constructed PROL as creating opportunities for students to develop more meaningful relationships with their local environments, particularly through experiences that connected learning with familiar places and everyday contexts. They associated these relationships with students' sense of belonging and engagement with their surroundings. From this perspective, authenticity was understood not simply as taking learning outdoors, but as enabling students to encounter, interpret, and make meaning from the particular social, cultural, and environmental qualities of their local places.

Summary

The participant-teachers' accounts suggested an emerging reorientation in how they understood the pedagogical possibilities of place-responsive outdoor learning following the workshops. Prior to the workshops, the outdoors was often conceptualised as a neutral or alternative context for learning, with outdoor activities and field trips commonly associated with specialised sites or the involvement of external expertise. Physical activity and physical wellbeing also featured prominently in participants' initial understandings of the value of outdoor learning. Following their engagement with the workshops,

however, the participant-teachers increasingly articulated possibilities for learning through sensory and embodied engagement with familiar places, alongside greater attention to environmental awareness and stewardship.

This reorientation also appeared in the participant-teachers' broader understandings of wellbeing. Rather than discussing outdoor learning primarily in terms of physical activity, their reflections encompassed physical, mental, and social dimensions of students' experiences, with social skills emerging particularly strongly in their accounts. They also constructed PROL as offering opportunities for students to develop more meaningful relationships with their local environments, connecting these relationships with belonging and ways of engaging with surrounding places. These accounts can be interpreted through Tuan's (1990) concept of topophilia, which foregrounds affective relationships between people and places, and Relph's (1976) discussion of place and the development of a sense of place. From this perspective, students' relationships with local environments may extend beyond familiarity with physical surroundings to encompass emotional connections, belonging, and meaningful engagement. This interpretation also resonates with Wattchow and Brown's (2011) place-responsive approach, which invites educators to attend to the particular qualities and meanings of places rather than treating outdoor environments merely as settings for predetermined activities. Meaningful outdoor learning, therefore, was understood not simply as moving educational activities outside the classroom, but as creating opportunities for students to encounter, interpret, and make meaning through their relationships with the social, cultural, and environmental qualities of place.

My attention will now turn to the second research question underpinning the thesis where the focus shifts to the participant teachers' perspectives on collaborative lesson planning with their colleagues.

RQ2. What was the teachers' experience of their collaborative lesson planning with their colleagues, and how might this learning inform future teacher collaboration in lesson planning?

An aim of this inquiry was to delve into the participants' perspectives on collaborative lesson planning (CLP). During the workshops, teachers had the chance to collaborate in groups of three to design PROL lessons with their peers. The CLP process was flexible and adjustable, directed by the teachers themselves, allowing them to select their preferred collaborators. As teachers experienced the advantages of PROL during the workshops, they developed a shared interest in jointly planning PROL lessons. Each team independently decided on their preferred method for discussing and creating a lesson plan, using the four signposts of place-responsive pedagogy to guide their planning for a specific topic within the experiential learning and career education curriculum. Within each team, every teacher was treated equally and shared responsibility for the outcomes. This approach recognised the participant-teachers' existing knowledge and expertise, their autonomy and self-efficacy, and their comprehension of PROL following the workshops. I developed two themes from my participant-teachers' responses: the tension between fostering individual contribution and collective responsibility; and CLP as a professional development initiative. Before the workshops, the tension between fostering individual contribution and collective responsibility was expanded through two subthemes: the participant-teachers' comfort with independent lesson planning and their avoidance of professional disagreements. After the workshops, CLP as a professional development initiative was reinforced with the subtheme that CLP boosted the participant-teachers' confidence. These themes and subthemes are elaborated below, with supporting evidence from the participants.

Before the workshops

Theme 1: The tension between individual contribution and collective responsibility

Subtheme: Teachers felt comfortable with independent lesson planning.

Before the workshops, many teachers doubted CLP's effectiveness and preferred to plan lessons independently, as part of their school culture. Teacher 1 found this convenient for their busy schedule, allowing them to create personalised lesson plans. They contributed to lesson plans and the test bank

within their subject group, but they didn't co-design plans; they only reviewed shared resources during meetings.

> *I shared my lesson plans and learned from colleagues. Then, I adapted those plans for my students' learning styles. Targeted lessons will be given to teachers to plan individually, then submitted to the subject head. The plans will be uploaded into a standard resource. We haven't yet done collaborative planning. The review process was inefficient; staff did not regularly review plans. Within my group, we respected each other's plans and trusted colleagues. I haven't received negative feedback. I occasionally used colleagues' ideas, but prefer my own. (T1: Pre-workshop interview)*

Notably, Teacher 7 revealed that the lesson plans shared on the common resources might differ from those they actually used in their own classes. This flexibility could potentially give them a sense of agency in their teaching practices.

> *Lesson plans are demonstrations of what happens in a lesson, and teachers can adapt them to their students' needs. While sharing the same basic concept, we tailor it to our classes. In special subject meetings, we discuss challenges in delivering these plans. (T7: Pre-workshop interview)*

Teacher 5 admitted that collaboration between subjects was uncommon, despite maintaining good collegial relationships with their colleagues. This claim was quite typical within their teaching community.

> *I mainly communicate with teachers in my subject area, supporting each other like family. When a teacher was in the hospital, we covered their duties, like teaching and marking, to fulfil our team responsibilities. (T5: Pre-workshop interview)*

According to Teacher 7, CLP was not on their schedule because of a lack of time, even though they were quite willing to discuss it with their colleagues.

> *Each teacher was responsible for specific lessons, especially when introducing a new textbook. We assigned and uploaded lessons for review since co-designing was impractical due to time limits. I feel comfortable consulting colleagues when needed, as I'm easy-going. Teachers have many responsibilities, and conflicting schedules often prevent joint planning. During the semester, we mainly focus on marking and supervising trips, leaving little time for holidays. (T7: Pre-workshop interview)*

Teacher 7 also proposed that school breaks and weekly staff meetings could serve as a good time for CLP.

> *We come together during the mid-term break, and when not teaching, we discuss planning and management in the staff room. Weekly staff meetings with principals also provide opportunities for collaboration. (T7: Pre-workshop interview)*

Conversely, Teacher 8 found it inconvenient and somewhat unsettling to implement CLP in their professional practice. They appeared to avoid colleagues who challenged their philosophical and pedagogical approach in order to protect their professional integrity.

> *Two words: troublesome. I have a big ego, and every teacher has their own philosophy. As a perfectionist, I aim for excellence, making it hard to work with those who differ. I can't force them. When co-designing, I need to adjust expectations, which may affect quality. (T8: Pre-workshop interview)*

Whereas Teacher 3 believed that CLP could help create a shared repository for easy access to essential materials and resources.

> *I developed a lesson plan on a specific topic, which the team leader shared with the staff. We faced issues like a lack of visual aids and superficial content, so we added more resources. We often cling to our perspectives, but the ego can distort understanding. It's vital to consider alternative views genuinely, accept being wrong, and learn to adapt for growth. (T3: Pre-workshop interview)*

It appeared that each participant-teacher's approach to lesson planning differed from that of their colleagues, whether in their specialised subjects or experiential learning activities. Some participant-teachers appreciated the practical advantages of using open-access or paid lesson plans from online resources, considering their busy workloads. Consequently, there was limited collaboration in these instances.

> *Uhm, not yet. I did it myself. There are many free online lesson plans available for download, and teachers can buy plans. I shared the test bank with colleagues to agree on assessment requirements. Each teacher created questions for a specific section, and we compiled them into a shared test bank. (T8: Pre-workshop interview)*

> *I've never been involved in collaborative lesson planning. Usually, we download lesson plans from online resources to share with the subject group. I kept one copy for double-checking and shared another with the team. We share them on a standard resource, and teachers adapt them for their context. Many options are available online, which I download and customise for my class. (T2: Pre-workshop interview)*

Their collegial conduct when working with fellow teachers appeared to reinforce their current practice of lesson planning and resource sharing. For them, it was particularly helpful in resolving conflicts.

> *I always listen first, humbly hearing others before speaking. I absorb what I need to do. (T4: Pre-workshop interview)*

> *I will talk to them to understand their situation, focusing on their positive outputs first and complimenting them before addressing issues to keep the conversation open. Focusing on negatives can lead to conflict; no one is perfect. We should view the bigger picture before examining details. (T4: Pre-workshop interview)*

Teacher 6 revealed their preference for collaborating with fellow teachers with whom they have already built a strong relationship and trust over the years.

> *Initially, we decided who would handle each task and selected partners for collaboration. Each group was responsible for specific lessons, with teachers focusing on particular sessions. At my school, I chose trusted colleagues to collaborate with, which made planning easy. Our close relationships allowed open, honest discussions and quick consensus, resulting in a smooth process. (T6: Pre-workshop interview)*

It seemed that the new subjects in the 2018 GEP motivated them to collaborate because the challenging learning content required adopting effective teaching methods and strategies. However, they still preferred the comfort of independently planning their assigned lessons and shared their work with the entire specialised subject group for feedback.

> *Experiential learning and career education are new fields. Teachers share resources like questions and lesson plans. I discuss lesson ideas, but haven't collaborated on plans yet. (T9: Pre-workshop interview)*

When discussing their expectations for collaborative lesson planning, some participant-teachers indicated they had high expectations for their colleagues in this type of cooperation. By utilising each team member's unique skills and strengths, they could enhance the overall effectiveness of their lesson plans.

> *I am excited to learn a range of ideas from my colleagues. (T1: Pre-workshop interview)*

> *I believe it will be enjoyable, and I can learn from my colleagues. I hope we will discuss lesson planning. Before I implemented project-based learning, I often sought advice from my colleagues. (T7: Pre-workshop interview)*

> *I hope teachers are enthusiastic, positive, and hardworking. They should avoid superficiality and bias. Enthusiasm must pair with a strong work ethic, fostering genuine effort towards excellence. Also, staying open-minded in using textbooks and authentic learning resources is crucial. (T3: Pre-workshop interview)*

Some of the participant-teachers believed it was essential to share a mutual goal when collaborating on lesson planning. Furthermore, active participation in the process would make it more productive and attainable for those involved.

> *I had high expectations for developing an effective lesson plan. Discussing with colleagues was enlightening; we generated ideas and considered their practicality. The teaching staff must share the same goal, collaborate, and adapt plans to their circumstances. I expect everyone to be enthusiastic and contribute ideas to create a shared learning resource. I will also do my best and share what I know willingly. (T9: Pre-workshop interview)*

Teacher 7 shared the same idea as Teacher 9 that effective team members should be goal-oriented and work towards creating a shared resource that can be used afterwards.

> *My colleagues are friendly and supportive. When someone raised a specific issue within the specialised subject group, everyone contributed suggestions. […] There is also a team focused on experiential learning and career education. We shared the PowerPoint slides and together developed the detailed lesson plans. (T7: Pre-workshop interview)*

Most participant-teachers expressed confidence in their ability to independently plan lessons in ways that accommodated the demands of their busy professional schedules. At the same time, they recognised possibilities for collaborative lesson planning when engaging with less familiar areas of practice, such as experiential learning and career education. Their accounts suggested that collaboration was understood not as a replacement for individual professional autonomy, but as a way of drawing on colleagues' perspectives, knowledge, and experiences when interpreting and developing new pedagogical possibilities.

Subtheme: Avoiding professional disagreements

Teacher 1 was concerned about the quality of the shared lesson plans, given their inconsistency and lack of systematic review. They might also risk rushing through this process because of their trust and respect for their colleagues, a common practice in Vietnamese culture.

> *The reviewing process was inefficient. The teaching staff did not regularly review lesson plans during this meeting. I am uncertain about other subject groups; I can only speak for my specialist subject groups. In my subject group, we tended to respect our colleagues' lesson plans. We trusted one another. I have not received any negative feedback from other teachers. (T1: Pre-workshop interview)*

Whereas Teacher 3 advocated open-mindedness towards colleagues' critiques and diverse perspectives regarding evaluation and improvement.

> *We often hold onto our perspectives on a given issue. However, our egos are not always accurate. It is essential to consider alternative viewpoints genuinely. It is acceptable to be mistaken and to subsequently learn to adjust our perspectives to align with what is appropriate. Valuable lessons are learned, and improvements are made. (T3: Pre-workshop interview)*

When assessing their colleagues' lesson plans, Teacher 6 was tactful in avoiding any personal targeting or conflicts among fellow teachers.

> *When persuading my fellow teachers on a particular issue, for example, there were sections that should be taught one way rather than another. I needed to consider how to express it effectively. It must be reasonable to help them agree with me. (T6: Pre-workshop interview)*

Prior to the workshops, the participant-teachers described collaborative lesson planning as relatively infrequent. Although they reported sharing and reviewing teaching resources with colleagues, they distinguished this practice from more substantive forms of collaborative planning and professional dialogue. Their accounts suggested that opportunities to question, challenge, or critically discuss pedagogical ideas with colleagues were limited, partly because maintaining harmonious professional relationships was valued and open disagreement could be perceived as potentially conflictual. I interpreted this pattern as indicating that collegial interaction was present, but that it did not necessarily involve the forms of critical dialogue through which the participant-teachers might collectively examine and reconstruct their pedagogical understandings.

After the workshops

Theme 2: Collaborative lesson planning as a professional development initiative

Although my participant-teachers were limited by their school's culture of operating lesson plans within specialised subjects through sharing and reviewing processes, most appeared optimistic about working towards a refreshed approach to CLP in their schools after participating in the workshops.

> *I want to continue collaborating with my colleagues to develop more effective lessons for our students.[…] The plan should include details on the learning venue, duration, learning activities, weather contingency plan, and safety measures. (T3: Post-workshop interview)*

> *I continued collaborating with my colleagues to plan lessons. We discussed facilitating PROL for our students and brainstormed risk prevention and management for excursions to remote areas such as historical sites, national parks, etc. (T4: Post-workshop interview)*

While some found it somewhat overwhelming, others were eager to continue this process with their colleagues to develop further plans for measuring students' learning outcomes, allowing time for feedback and reflection to enhance future lessons.

> *As teachers, we need to collaborate on planning PROL sessions, conduct these sessions together, and share ideas within our community of practice. Such collaboration could enhance teachers' confidence in facilitating PROL with their students. Initially, we may face physical, time constraints, and boredom, but I am convinced that confidence will develop over time and with experience. (T2: Post-workshop interview)*

Teacher 3 aimed to collaborate with other teachers to develop a comprehensive plan for PROL sessions, focusing on what, when, and where to conduct them, as well as on safety and risk management. Their approach to PROL would be customised to their students' learning styles and personal backgrounds.

> *I want to continue collaborating with my colleagues to plan more effective lessons for our students. I aim to facilitate PROL that aligns with each lesson's learning outcomes while also fostering students' patriotism and their connection with people and the local environment. I want to improve my facilitation skills and increase my flexibility in teaching practices. Additionally, I wish to deepen my understanding of the PROL pedagogical approach. (T3: Post-workshop interview)*

Many participant-teachers eagerly used collaborative lesson plans from the PROL workshops and co-facilitated them with colleagues. They highlighted the importance of support from colleagues or teaching assistants, which they considered essential for developing a Community of Practice (CoP) within their schools and for maintaining these practices over time.

> *I will work with teachers I collaborated with during workshops to introduce PROL with my students. We will use collaborative lesson plans from the workshops on our school ground or the nearby park this year. I need my colleagues' help to ensure the success of these PROL sessions. (Group reflection 3)*

The participants' accounts positioned collaborative lesson planning as a potentially meaningful form of professional learning. They described collaboration as creating a supportive space in which teachers could share ideas, examine pedagogical possibilities, and develop their understandings through engagement with colleagues. I interpreted these accounts as suggesting that collaborative lesson planning could provide a basis for developing a local Community of Practice (CoP), through which professional learning might be sustained and reconstituted within the school community and potentially extended across other professional settings.

Subtheme: Boosting teachers' confidence

Most teachers were generally pleased with the harmony and effort they put into the CLP process. They preferred to work with their workshop partners and aimed to use their team's strengths more effectively through positive interdependence. They also valued honesty over politeness when using CLP for professional development.

> *My team worked well together with a positive attitude, sharing a common mindset, being flexible, and ensuring everyone's voice was heard. We were responsible, considerate, and contributed to lesson plans and workshops. We generated shared ideas for developing lessons and I wish to continue working with them to deliver these to my students. We created a great collegial atmosphere during group work. However, I wish my teammates had shared their thoughts and ideas more sincerely. (Group reflection 1)*

They also mentioned that involvement in CLP boosted their confidence and perseverance when working with colleagues on lesson planning, and that they felt they became responsible team players.

> *I also had the opportunity to participate in PROL lesson planning with fellow teachers, where I practised being more confident and perseverant while developing a strong work ethic (Group reflection 1)*
>
> *I learnt how to prepare lesson plans for PROL sessions, work well with teammates, and improve myself by recognising my teammates' strengths. (Group reflection 1)*

Teacher 4 observed that a healthy group dynamic depends on communication, trust, leadership, and conflict resolution. They appreciated the opportunity to engage in CLP with their fellow teachers during the workshops and afterwards.

> *During lesson planning, we [teachers] shared opinions, discussed ideas, and developed a collective plan that addressed everyone's needs. To improve, we should listen to colleagues' opinions, respect them, and create a joint plan rather than insisting on our own ideas. Consulting other experienced teachers outside the workshops could also help. (T4: Post-workshop interview)*

Teacher 3 indicated that it was essential to reach a consensus on the learning objectives of each lesson plan and to align them with the curriculum standards to ensure consistency and coherence. The collaborative lesson plans were expected to be comprehensive, covering learning objectives, instructional steps, and necessary resources. They believed that the approved lesson plans shared among the staff provided a standard framework, allowing teachers the flexibility to adapt these plans within their actual teaching and learning contexts.

> *We must submit our PROL lesson plans to school principals for approval. In week 1, we discuss these plans with the principal; in week 2, we seek advice from the subject group; in week 3, we plan with students; in week 4, students work on projects; in week 5, students report on their learning and receive feedback. (T3: Post-workshop interview)*

Teacher 4 also recognised that the active participation and contributions of each member played a crucial role in the CLP's success. The collegial relationship among teachers in this school was a plus in this research project. They infused this spirit into their engagement during the workshops, enabling them to collaboratively plan lessons. Some of them managed to sustain CLP beyond the workshops.

> *During lesson planning, we [teachers] shared opinions and discussed ideas, fostering collaboration. We created a joint plan satisfying everyone, which I then incorporated into my teaching. I was impressed by the group's spirit. (T4: Post-workshop interview)*

Many participant-teachers were pleased that the CLP during the workshops provided them with opportunities to develop their own lesson plans. They enthusiastically brainstormed not only their detail plans for PROL sessions but also funding and resources to support their students. It was inspiring to witness their clear goals and positive attitude towards PROL.

> *We collaborated on lesson plans, developed steps for different learning contexts, and discussed a master plan for PROL, including a proposed budget. We proposed renovating the school field and stadium to enhance outdoor learning opportunities. My team worked harmoniously, contributing ideas to achieve workshop goals, completing worksheets and lesson plans on time. We collaborated effectively, maintaining a positive attitude, and contributed responsibly to the development of shared lesson plans. (Group reflection 1)*

Most participant-teachers responded very positively to the CLP during the workshops. They were eager to spend more time on CLP with their colleagues at their school, recognising the positive impact of this collaborative process on both their professional and social lives.

> *Our team was enthusiastic, independent, and respectful. I built on others' ideas, and teammates actively collaborated, consistently generating new concepts. We fostered a positive atmosphere during group work, working harmoniously towards a common goal. Teammates took responsibility, listened, shared thoughts, and contributed to lesson planning with enthusiasm. We uphold high standards, collaborating effectively with flexibility and ensuring everyone's voice is heard. The interaction was excellent, resulting in outstanding lesson plan content. I look forward to continuing this collaboration. (Group reflection 1)*

Teacher 2 asserted that CLP could indeed cultivate a sense of shared responsibility, ensuring that each teacher's efforts benefit not only themselves but also the whole group.

> *I was impressed by how well we worked as a team. Each teammate contributed their ideas, and together we developed a standard plan. (T2: Post-workshop interview)*

Considering the hectic pace of urban life where the participant-teachers live, Teacher 1 saw CLP as a rare chance to foster team spirit and a sense of belonging, especially when CLP took place in nearby nature.

> *A key moment in the workshops was exchanging lesson-planning ideas with colleagues. Collaborating in outdoor environments, such as the nearby park, was delightful and engaging. I felt relaxed and connected working in such a rare urban green space. (T1: Post-workshop interview)*

However, after the research project finished, they found it difficult to find a suitable time to collaborate with their colleagues on such tasks. The real issue was allocating a similar block of time for CLP within a specific group of interest was beyond their scope of work.

> *We stopped collaborating on lesson planning. While it benefits from collective input, creating shared lesson plans for everyone is time-consuming. (T1: Post-workshop interview)*

> *I was impressed by our teamwork. […] Unfortunately, the other two teammates did not assist in implementing outdoor learning plans and stuck to a traditional approach in their practices. (T2: Post-workshop interview)*

Teacher 8 also reaffirmed their limitation in cooperating with fellow teachers due to a lack of overlapping spare time to work together on lesson planning.

> *During the workshops, I collaborated with two teachers. Afterwards, I only planned with one, with whom I had worked before. Our main obstacle was different schedules, making it hard to find time to work together. (T8: Post-workshop interview)*

Aside from that, they valued positive team dynamics during the workshops and expressed a desire for more collaborative opportunities.

> *All I have learned comes from the workshops, including PROL and collaborative lesson plans with colleagues. I wish I had more time to practise these with other teachers. (Group reflection 2)*

Teacher 8 was among those who dedicated effort to scheduling CLP with their teaching partner. They noticed that the first two months of a semester seemed feasible for arranging CLP with other teachers.

> *My colleague, with whom I often collaborated, is currently busy with duties from the school principals. We taught different subjects and had different schedules, so we had to find time to continue lesson planning. We did our best to collaborate in the first two months of this semester when there were fewer activities. (T8: Post-workshop interview)*

Many participant-teachers were eager to incorporate PROL into their teaching methods. They agreed that positive, supportive team dynamics promote effective collaboration and idea sharing among teachers.

> *I learnt how to conduct learning sessions outside the classroom. I practised teamwork skills and learned how to combine teammates' ideas into a cohesive collaborative lesson plan. I also developed and integrated sensory activities into outdoor lesson plans. Finally, I learnt how to work effectively with my teammates. (Group reflection 1)*

> *I plan to work with other teachers to organise a PROL session with students at the start of semester 2, either in the school park or the countryside. I need colleagues' help to facilitate this. (Group reflection 3)*

Teacher 8 further elaborated on the suggestions of Teachers 2 and 9, emphasising the significance of collaborating with colleagues from diverse specialisms to make PROL feasible for their expertise.

> *At the national level, the Ministry of Education and the Department of Education should make PROL a compulsory aspect of the general education curriculum and require teachers to collaborate within their subject specialist groups or through interdisciplinary cooperation. (T8: Post-workshop interview)*

Following the workshops, most participant-teachers emphasised the value of collaboration among educators from different subject areas as a means of developing a stronger sense of community and shared professional learning. Their accounts positioned cross-disciplinary collaboration as an opportunity to exchange perspectives, negotiate pedagogical possibilities, and draw on colleagues' experiences when considering how PROL might be enacted with their students. They also associated

this collaborative process with developing greater confidence in interpreting and adapting PROL to their own teaching contexts.

Summary

Before the workshops, participant-teachers described collaborative lesson planning (CLP) as relatively infrequent. Although they commonly shared and reviewed teaching resources with colleagues, they distinguished this practice from more substantive forms of collaborative planning and professional dialogue. Their accounts suggested that opportunities to question or challenge colleagues' pedagogical ideas were limited, partly because maintaining harmonious professional relationships was valued and open disagreement could be perceived as potentially conflictual. At the same time, most participants expressed confidence in independently planning lessons that accommodated the demands of their professional schedules. They nevertheless recognised the value of collaboration when engaging with less familiar areas of practice, such as experiential learning and career education.

Following the workshops, most participant-teachers articulated CLP as a potentially meaningful form of professional learning. They described collaborative planning as creating a supportive space in which teachers could exchange ideas, develop pedagogical understandings, and learn from one another's experiences. Participants particularly emphasised collaboration among teachers from different subject areas, positioning cross-disciplinary interaction as an opportunity to negotiate diverse perspectives and explore how PROL might be interpreted and adapted across subjects. They also associated this collaborative process with developing greater confidence in considering PROL within their own teaching contexts.

I interpreted these accounts as suggesting that CLP was understood not simply as a practical strategy for producing lesson plans, but as a potential site for ongoing professional learning and collective meaning-making. This interpretation resonates with Wenger's (1998) social theory of learning, which conceptualises learning as participation in social practices through which shared understandings and professional identities are continually negotiated and developed. From this perspective, collaborative

lesson planning could provide opportunities for teachers to exchange experiences, negotiate interpretations of PROL, and develop shared understandings of place-responsive pedagogy through their professional interactions. In this sense, participants' accounts pointed towards the possibility of developing a local Community of Practice (CoP), through which understandings of PROL could be continually negotiated, reconstituted, and supported within the school community and potentially across wider professional networks.

My focus will now shift to the third research question that forms the basis of this thesis, examining the new knowledge, skills, and attitudes that the participant-teachers have acquired through the workshops.

RQ3. What knowledge, skills, and attitudes have the teachers gained after participating in the place-responsive outdoor learning workshops?

The question aimed to gather feedback from the participant-teachers on their experiences with the PROL workshops. I developed two themes drawn from the participant-teachers' responses: new pedagogical content; and workshops as a catalyst for cultivating new attitudes. Two subthemes developed from the theme of new pedagogical content: the importance of reflection and the inclusion of creative activities, which the participant-teachers found particularly intriguing. Emotional connection to their local places was another subtheme highlighted a significant impact of the workshops as a catalyst for cultivating new attitudes. These themes and subthemes are discussed below, supported by participants' responses.

Theme 1: New pedagogical content

Many of the participant-teachers emphasised the knowledge and skills they gained from the professional development workshops in this research. As a consequence, they aimed to incorporate PROL principles into their teaching to enhance students' engagement and connection with the local environment.

> *I learned from the four PROL activities, which articulated the four signposts of place-responsive pedagogy: being present, storytelling, outdoor apprenticing, and representing place experiences. (Group reflection 1)*

> *I learned about PROL through hands-on activities, experiential learning, and engaging my senses. I connected with nature and people near my school. I learned new concepts, teaching*

> *methods, and how to apply them. PROL is a flexible, communicative, and responsive approach. (Group reflection 1)*

These professional development workshops served as an introduction to PROL. Teacher 4 shared that PROL principles helped guide them in planning engaging, meaningful lessons that aligned with the learning objectives and their local environment.

> *The four signposts of PROL help me develop purposeful lesson plans aligned with outdoor learning outcomes. These plans focus on experiential learning and connecting to nature. (T4: Post-workshop interview)*

There seemed to be a range of subject areas that the participant-teachers could cover in their outdoor learning sessions, from specialised subjects to experiential learning and career education.

> *I will incorporate PROL into my teaching next semester to encourage students to explore their environment, neighbourhood, and local areas. PROL helps develop skills like communication and connection, and it aligns with experiential learning. I plan to integrate it into maths, experiential learning, career education, and homeroom sessions. (Group reflection 2)*

They greatly valued sensory learning and reflection in fostering students' connection with nature and their sense of belonging to the local environment. From there, they were eager to integrate PROL into their professional practices.

> *I will guide my students in reflecting after outdoor sessions and create more opportunities for practice. I will facilitate outdoor activities to help them connect with local people and nature, promoting sensory skills and imagination to foster a sense of interconnection. I will incorporate PROL into my teaching next semester to encourage exploration of the environment, neighbourhood, and local areas. My goal is to create an innovative learning environment that fosters passion for meaningful experiences. (Group reflection 2)*

To make PROL feasible and accessible for their students, as other participant-teachers did, Teacher 1 preferred to conduct these sessions on the school grounds or in the local park near the school.

> *Given the benefits of PROL, I will incorporate it into my teaching. I may start with PROL sessions on the school grounds before moving to a nearby park. (T1: Post-workshop interview)*

To foster their students' sustainable habits through PROL, many participant-teachers focused on environmental education and sustainability to make learning more meaningful and engaging.

> *Environmental education activities can take place annually at school grounds, lakes, beaches, or in the forests. Students can join clean-ups, plant native trees, create climate change awareness posters, and take action to protect the environment. (Group reflection 3)*

The participant-teachers' responses to the new pedagogical content highlighted the significance they attributed to reflection and creative activities within the workshops. Their accounts suggested that these

activities provided opportunities to engage with, make sense of, and further develop their emerging understandings of PROL, as discussed below.

Subtheme: The importance of reflection

The importance of reflection came to the fore as the participant teachers aimed to guide their students in reflecting on their own learning, provide feedback for teachers, and to enhance the PROL experience.

> *I will guide my students in reflecting on their experiences after each PROL session. (Group reflection 2)*
>
> *I will also encourage my students to share their feedback after each PROL session to refine my PROL practices. (Group reflection 2)*

The PROL activities they participated in during the workshops especially reflection sessions provided them with useful examples to work with their students.

> *I will utilise the demonstration activities and reflections in the workshops to address the specific target learning themes of experiential learning and career education. (Group reflection 2)*
>
> *I will implement reflection with my students through PROL, encouraging connections with local people and nature. I will promote sensory skills and imagination, helping students foster a deeper connection with the environment through reflection. (Group reflection 2)*

As a result of attending the workshops, the participant-teachers seemed mindful of what they needed to consider when preparing for their PROL sessions.

> *I will adapt PROL sessions by setting time limits for specific tasks, creating a learning agenda, and familiarising myself with the learning place. (Group reflection 2)*

Especially, Teacher 2 who endeavoured to reflect in writing on their own professional practice to improve themselves and to give back to their community.

> *I wanted more time to reflect on my experience. I do not yet have a standard lesson plan, and I still improvise a lot in PROL. I wanted to document my practices to share with other teachers. I should start with my teaching journal and improve from there. (T2: Post-workshop interview)*

Following the workshops, most participant-teachers expressed greater appreciation for reflection as part of the learning process and articulated intentions to incorporate reflective opportunities into their teaching. Their accounts suggested that reflection was increasingly understood as a means through which students could make sense of their experiences and develop their own understandings.

Subtheme: The inclusion of creative activities

Interestingly, many participant-teachers found the inclusion of creative activities, such as storytelling, writing a poem, exploring a new sustainability concept, and reflexivity, to be unexpected and added a unique and enriching dimension to the workshops.

> *I learned how to warm up a learning session through storytelling and use PROL signposts to guide my lesson plans. (Group reflection 1)*
>
> *I also learned to write a poem, explored the seven Leave No Trace principles, and practised reflection. (Group reflection 1)*

They discovered that such learning opportunities, which allowed them to be mindful and responsive to the local people, culture, and places, were invaluable, as echoed by Teacher 9 below.

> *To showcase their local experiences, my students can research their history and culture, creating art like drawings or posters. They can also interview peers about their school or club connections. These activities enhance creativity. Integrating PROL into experiential learning, career education, and other subjects is vital for meeting the new curriculum's outcomes, focusing on students' holistic development and creativity through interdisciplinary learning. (T9: Post-workshop interview)*

Many participant-teachers expressed strong interest in incorporating creative activities into their teaching practices. Their accounts suggested that they perceived creative activities as offering new possibilities for engaging students and enriching classroom learning. Alongside their expressed intentions to incorporate reflection, this interest indicated an emerging willingness to explore and adapt pedagogical ideas encountered through the workshops within their own teaching contexts.

Theme 2: Workshops as a catalyst for cultivating new attitudes

Many participant-teachers appreciated the benefits gained from the workshops. Teacher 9 highlighted the inspirational and transformative effects on their professional and personal development.

> *Currently, I have grasped the introduction of a place-responsive outdoor learning approach. As for my attitude towards PROL, having participated in the workshops, I am more positive, responsible, hardworking, and compassionate. I have become a better version of myself. My students will benefit immensely from PROL. Teachers must be positive and confident when conducting PROL with their students. They cannot do so if they are negative, shy, or unenthusiastic about outdoor learning, given their responsibilities for student safety. (T9: Post-workshop interview)*

Teacher 2 reflected on their workshop experience, noting that city life has eroded their appreciation for being present in the outdoor environment, which they often took for granted. They also emphasised the

need to take the initiative and adopt a new pedagogical approach [PROL] with courage and a proactive attitude.

> *After attending those workshops, we realised that we had been too consumed by our professional and personal commitments and had forgotten to truly live, venture out, and enjoy the outdoors. If we, as teachers, want to facilitate PROL, we must overcome our anxieties and stop dwelling on barriers like time constraints. (T2: Post-workshop interview)*

Teacher 3 reinforced Teacher 2's opinion regarding their level of proactivity in knowledge inquiry and teaching skill development.

> *We must take the initiative in PROL, deepen our understanding, and develop facilitation skills for it. (T3: Post-workshop interview)*

Notably, Teacher 9 expressed their enthusiasm during a collective brainstorming session with their teaching community and recognised the influence of group reflection on their pursuit of excellence in professional practice.

> *I thoroughly enjoyed working with my colleague on lesson planning. We shared ideas extensively and learned from each other as we brainstormed creative ideas for our PROL sessions. We also reflected on our practices and made improvements accordingly. I wish to continue collaborating with my colleagues on lesson planning for PROL sessions. (T9: Post-workshop interview)*

Overall, they seemed willing to adapt their teaching methods based on their PROL workshop experiences.

> *I have learned to be adaptable in my implementation and to incorporate interdisciplinary learning content within PROL sessions. (Group reflection 2)*

Additionally, Teacher 4 believed that adopting PROL into their professional practices would, in turn, influence the entire school community to increase the uptake of this pedagogical approach for the overall benefit of the school.

> *I have always wanted to adopt an innovative learning approach in my teaching practices to help students learn in real-life contexts. Such innovative teaching and learning method [PROL] would enhance student engagement, enrich teachers' creativity, and develop their teaching abilities and outdoor learning management skills. Such innovative practice will impress the school principals, students, and the parent support group. (T4: Post-workshop interview)*

The participant-teachers also recognised the need for further professional development, particularly in planning and implementing PROL. They requested more training courses, resources, and expert support to enhance their competence in PROL practice.

> *I wish to learn more about planning PROL sessions. More professional development courses for teachers facilitated by experts in the field are needed. (Group reflection 2)*

Regarding the workshops last summer, many participant-teachers responded very positively and expressed their hope for more opportunities to participate in PROL training workshops similar to those previously organised.

> *The Ministry of Education should organise PROL workshops as part of the compulsory annual teacher training. PROL workshops last summer pointed out that many teachers had forgotten the enjoyment of outdoor learning due to other commitments. School and the Ministry should develop more outdoor learning opportunities and reduce those available passive indoor training sessions. I wish to participate in PROL training to enhance my skills, confidence, and knowledge for conducting PROL sessions. (T2: Post-workshop interview)*

The importance of those in-service teacher professional development workshops was that they positively influenced some teachers to adopt the PROL pedagogical approach into their teaching practices and to strive to persuade their principals and colleagues to join them on that journey.

> *My colleague and I aimed to run two PROL sessions in the first semester for three reasons: to thank you for your workshops on place-responsive outdoor learning which inspired us and increased our confidence; to apply new practices learned last summer in PROL and collaborative lesson planning; and to improve my attitude, making me a more positive, responsible, hardworking, and compassionate teacher. (T9: Post-workshop interview)*

Teacher 6 aimed to lead by example by organising their PROL session monthly and motivating colleagues to maintain this practice with them.

> *I plan to conduct a PROL session with my students once a month. If it is experienced as useful, I will invite other teachers to participate in this innovative pedagogical approach. (T6: Post-workshop interview)*

Another notable aspect of participants' reflections following the workshops was the emotional and relational significance they attributed to their connections with local places.

Subtheme: Emotional connection to their local places

Many of the participant-teachers were open to adopting PROL, recognising the value in enhancing their students' learning experiences. Developing a stronger emotional connection to their local and natural environment was highlighted as a key factor in the effectiveness of PROL.

> *I learned to develop, organise, and deliver PROL lessons, connect with living and non-living elements, communicate with other teachers, appreciate my neighbourhood, and value my living environment. (Group reflection 1)*

As Teacher 9 reaffirmed, there are possibilities to develop students' emotional connection to their local places through place-based storytelling, as the participant-teachers had experienced during the workshops.

> *The strength of place-based narratives lies in the compelling stories that connect students to the places they inhabit, live in, and study. Students are more engaged with the narratives of their local areas, and thus, we could advocate for their connection to such places more effectively. (T9: Post-workshop interview)*

Through their engagement with PROL in contexts relevant to their everyday professional settings, participant-teachers articulated emerging understandings of place-responsive pedagogy and its possibilities for teaching. Their reflections highlighted the value they attributed to learning through local places, as well as to collaborative lesson planning as a means of exchanging perspectives and developing pedagogical understandings with colleagues. They also expressed interest in further professional learning opportunities, which they associated with sustaining and developing PROL within their school-based Community of Practice (CoP).

Summary

Following the workshops, many participant-teachers expressed enthusiasm about incorporating new pedagogical ideas into their teaching, particularly creative activities and reflection. Their accounts suggested an emerging reorientation in how they understood the possibilities of outdoor learning, with greater appreciation for place-responsive pedagogy and collaborative lesson planning. They also expressed interest in continuing to develop their knowledge and pedagogical understandings through future professional learning opportunities.

My focus will now shift to the fourth research question, which underpins this thesis. This question explores the participant-teachers' experiences with PROL, particularly its affordances and constraints.

RQ4. What were the affordances or constraints experienced by Vietnamese public high school teachers in the implementation of place-responsive outdoor learning?

This question aimed to explore the participant-teachers' insights into the affordances and constraints they encountered when implementing their own versions of place-responsive outdoor learning (PROL). I developed four themes from the responses of the participant-teachers: teachers' level of proactivity;

the significance of school-wide support for success; institutional constraints; teachers' apprehensions regarding safety and risk management in the context of outdoor learning. The first two themes centred on affordances, while the last two focused on constraints. Two subthemes were developed to represent the nuances of the participant-teachers' level of proactivity: teachers' preparedness and confidence, and safety and risk management. Student engagement as a motivator for teachers was another subtheme. Engagement was a significant element that encouraged teachers to be proactive in the school-wide support they needed. Under the institutional constraints, two subthemes were developed including time constraints and they asked for more funding to support outdoor learning. These subthemes clarified the challenges they underwent. Each theme and subtheme are discussed in detail below, with illustrative quotations provided.

Theme 1: Participant-teachers' level of proactivity

Subtheme: Participant-teachers' preparedness and confidence

The participant-teachers discussed ways to empower other local teachers to take the initiative in tailoring learning content. Four months after the workshops, six out of the nine participant-teachers had implemented their own version of PROL. Whereas some still viewed PROL as an aspiration. Although all recognised the potential of PROL for their students' holistic development, several issues hindered their progress, mainly due to heavy workloads. Teacher 9 expressed concern about the feasibility of PROL, citing the demanding workload they and their colleagues face in implementing the 2018 curriculum.

> *I believe PROL benefits students, so I want more opportunities for it. Teachers should lead these sessions, and my colleague and I aim to do it more often, if workload allows. We're adapting to the 2018 curriculum. I can't promise, but I plan to participate more if I can manage my current workload. (T9: Post-workshop interview)*

Teacher 5 and Teacher 7 recommended enhancing flexibility in adapting learning content and organising their PROL sessions. PROL is more likely to happen if they can decide what to teach, how to prepare, and when and where to do it.

> *Teachers should have the flexibility to select content and timing for organising PROL with their students. (T5: Post-workshop interview)*

> *Across the country, we should reduce the extensive theoretical instruction in the curriculum and increase authentic learning. (T7: Post-workshop interview)*

Teacher 4 proposed a collaboration among teachers responsible for the same student cohorts to share planning and facilitate PROL activities.

> *The principal should empower teachers to develop PROL plans aligned with learning outcomes and students' capabilities. (T4: Post-workshop interview)*

Teacher 3 suggested modifying lessons to make PROL feasible while personalising the learning content to resonate with students.

> *I aim to develop PROL lesson plans that strike a balance between simplicity and complexity, prevent boredom or unsuitable challenges, and take learners' needs and circumstances into account. (T3: Post-workshop interview)*

Teacher 8 expanded on Teacher 3's ideas about tailoring the syllabi and emphasising PROL within the school's timetable. Their homeroom sessions were occasionally replaced by school events, leaving them feeling disappointed. They wished to have more control over the condition and realisation of their teaching practices.

> *I can include PROL in the current experiential learning themes, though some are unsuitable for outdoor learning, like responsibilities at school, family obligations, and adapting to change with confidence. My students can role-play or make videos for these themes, but outdoor learning isn't right for them. I haven't practised reflection with students due to a lack of time. I haven't had homeroom sessions because those whole school seminars have taken precedence. The remaining sessions are to focus on experiential learning. I even had to skip 15 minutes of biology class to speak with my homeroom students. My homeroom sessions were cancelled, which I found disappointing. (T8: Post-workshop interview)*

Given their enthusiasm for collaborating with colleagues to make PROL possible at their school, some participant-teachers were thrilled to work on a plan to set up a CoP that could begin with an initial annual PROL proposal for school approval, followed by detailed planning for each learning session and reflections and reactions.

> *I will collaborate with other teachers to seek approval from the school leader to implement PROL for students on school grounds or other outdoor places. In the first semester, I will work with colleagues to organise a suitable PROL session at the school or nearby park. During this, I will lead some activities that I learned from the workshops, teaming up with my workshop partners to deliver PROL using those collaborative lesson plans. (Group reflection 3)*

Teacher 1 and Teacher 2 were eager to promote PROL among their colleagues. They believed they could set an example and were seeking ways to motivate fellow teachers to adopt this pedagogical approach.

> *The best I can do is lead by example, so I will first conduct PROL sessions with my students. When other classes find them interesting, they will follow suit. (T1: Post-workshop interview)*

> *First, I will lead PROL sessions, invite feedback, and compare my teaching to others to inspire adaptation. If students prefer PROL, teachers must adjust. I will listen, learn, and improve, using the four signposts of PROL. Though I don't expect others to join initially, I hope they will eventually improve. (T2: Post-workshop interview)*

Teacher 6 and Teacher 7 were willing to invite colleagues to observe their PROL sessions. They believed that through observation and providing feedback, they and their colleagues could learn from each other and improve accordingly.

> *I will organise a PROL session with my students and invite my colleagues to observe. I will show them that conducting a PROL session is not that difficult. My students have enjoyed this novel learning approach. (T6: Post-workshop interview)*

> *I would like to introduce PROL to my colleagues. I plan to organise some PROL sessions to allow my colleagues to observe and learn from one another, thereby enhancing the uptake of PROL within our school. (T7: Post-workshop interview)*

Others preferred mentoring peers through practical activities, such as collaborative lesson planning and co-teaching PROL sessions, as in the case of Teacher 4 and Teacher 5.

> *Teachers who are unfamiliar with this pedagogical approach may find it difficult. As an experienced teacher, I will encourage colleagues to incorporate PROL by sharing benefits and suggesting tailored activities. We will also discuss challenges and solutions. (T4: Post-workshop interview)*

> *I want to share my experiences of facilitating PROL sessions with my colleagues. If they are interested in PROL, I would be happy to assist them run their sessions. (T5: Post-workshop interview)*

Teacher 9 believed they could implement place-responsive pedagogy across various core subjects in the current Vietnamese public high school curriculum, including Literacy, Mathematics, Social Sciences, Natural Sciences, Information Technology, Languages, Arts, Health and Physical Education, and Experiential Learning, and Career Education.

> *I will share my PROL experiences and invite colleagues to collaborate with me. In Viet Nam, interdisciplinary learning is trending, enabling teachers from different subjects to collaborate on lesson planning and delivery. (T9: Post-workshop interview)*

Initially, many participant-teachers hesitated to conduct PROL. As they gained knowledge and experience of PROL through the workshops, they began to show interest in this pedagogical approach. However, they still sought further professional learning in this area to improve the knowledge and skills needed to facilitate PROL with their students, as Teacher 7 stated below.

> *I would like to participate more in teacher training courses that focus on experiential learning through a place-responsive outdoor learning approach. (T7: Post-workshop interview)*

Notably, Teacher 2 expressed dissatisfaction with the current format of the professional development for the 2018 GEP they had participated in so far, which is delivered via an online learning platform funded by the MOET. They admitted to attending these online training modules solely to fulfil attendance requirements and did not gain substantial knowledge from them. They appeared to favour on-site training workshops.

> *The MOET should organise PROL workshops as part of annual teacher training, as Vietnamese teachers lack experiential learning opportunities. Our school and MOET should create more outdoor opportunities instead of lengthy, passive indoor lectures. I watched these modules online but learned nothing, and I believe colleagues feel the same. (T2: Post-workshop interview)*

Teacher 8 shared the same views on the online training currently available to them and expressed a wish to attend in-person and small-group workshops.

> *We need more professional development courses from the Department of Education, ideally organised for each subject group to address challenging themes. For PROL, training within these groups would better promote the approach among teachers. Whole-school lectures are likely ineffective because teachers may disengage or get distracted. PROL training should be in small groups to enhance the learning experience. (T8_ Post-workshop interview)*

Teacher 1 proposed integrating PROL workshops into the mandatory annual professional development programme to enhance teachers' confidence in facilitating PROL. Whereas Teacher 5 advised that educators responsible for delivering experiential and career education curricula should attend these workshops to improve their teaching skills as they progress in their PROL sessions with students.

> *Nationwide, annual in-service teacher training workshops should focus on PROL. I need to deepen my understanding of this pedagogical approach and improve my outdoor facilitation skills, particularly in managing students, organising activities, and evaluating learner efficacy. (T1: Post-workshop interview)*

> *It would be great if those teaching experiential and career education this year took PROL workshops to experience and learn how to implement PROL with their students. (T5: Post-workshop interview)*

Apart from acquiring PROL knowledge and skills through appropriate professional development workshops, Teacher 6 found a way to enhance their confidence through collaborative lesson planning with colleagues and co-teaching PROL sessions. By working together, they believed they could foster a strong community of practice to share lessons learnt and offer timely support to each other.

> *I lack confidence in facilitating PROL independently and prefer collaborating with other teachers on lesson planning and conducting these learning sessions. Once we develop a comprehensive plan, I can create additional lessons based on that model. (T6: Post-workshop interview)*

Another issue impacting the participant-teachers' readiness for PROL was the availability of teaching resources. Many participants expressed a need for a PROL teacher's manual, a PROL resource bank with lesson plans and activity worksheets, and tutorial videos demonstrating PROL in practice.

> *I wish to gain access to a teaching manual with PROL activities and observe a real PROL session with students. My knowledge mainly comes from workshops, including PROL activities and collaborative lesson plans. (Group reflection 2)*

> *Developing purposeful PROL lesson plans is essential. We need a shared resource for teachers to use flexibly, tailored to their students' needs. (T3: Post-workshop interview)*

> *I seek demonstration video clips of PROL sessions from Viet Nam and around the world to learn best practices. Since meetings and brainstorming are often difficult due to busy schedules and diverse teaching styles, training resources with such video clips would be highly valuable. (T8: Post-workshop interview)*

Besides teaching resources and ITPD, some participant-teachers have suggested that recognition should be provided for their efforts in supporting PROL. Currently, their contributions to incorporating PROL into their teaching are not regarded as equivalent to other assigned duties. External factors, such as work-life balance, a harmonious co-teaching timetable, incentives, and sufficient funding for school activities, could boost teachers' motivation and engagement with PROL.

> *We must allocate suitable timeframes, funding, incentives, and policies to encourage teachers to adopt and sustain PROL in their teaching practices. (T7: Post-workshop interview)*

> *We must recognise teachers' contributions to PROL. Our highly qualified teachers often earn more elsewhere and won't volunteer for outdoor sessions without compensation. These sessions should count as working hours. (T8: Post-workshop interview)*

> *This includes funding for teacher incentives to incorporate PROL into their teaching practices. (T9: Post-workshop interview)*

By anticipating potential challenges, considering possible responses, and taking initiative in relation to the enactment of PROL, many participant-teachers articulated a proactive approach to negotiating and sustaining place-responsive practices within their school community. I interpreted these accounts as reflecting teacher agency as a situated and relational process, through which the participant-teachers sought to work within and around the conditions shaping their professional practice.

Subtheme: Safety and risk management

Teacher 5 preferred conducting their PROL sessions on the school grounds and suggested dividing students into small groups and assigning a team leader to each group to mitigate the risks of outdoor management.

> *I prefer PROL on the school ground, as it avoids complications outside the school setting. Parents often prioritise their children's safety over learning opportunities. I could assign four team leaders to oversee their teammates to address this issue. (T5: Post-workshop interview)*

Teacher 9 expressed the same concern as Teacher 5 and recommended creating an outdoor learning protocol to guide outdoor activities. This protocol should include rules for students and risk management in outdoor settings.

> *Furthermore, hyperactive students can complicate outdoor learning activities. Managing risks outside the classroom demands teamwork among students, teachers, and school principals. An outdoor learning protocol is essential to ensure students understand what is allowed and what is forbidden outside the classroom. (T9: Post-workshop interview)*

To reduce the messiness of outdoor learning, Teacher 2 suggested giving students a heads-up before going outside. They would go in small groups and look after each other as they venture outside the school.

> *I teach students risk prevention by encouraging mutual care, protection, gratitude, and listening. Outdoors, they work in small teams to ensure everyone's safety. I supervise, guide team organisation, and emphasise listening skills: when one speaks, others listen. (T2: Post-workshop interview)*

Most of the participant-teachers believed it was essential to create a comprehensive safety and risk management code of conduct involving the entire school community, including administrators, teachers, students, and caregivers. The code must be accessible to everyone so they know how to respond to emergencies or unexpected situations.

> *Extreme weather, such as high temperatures or heavy rain, can pose challenges. Forecasts and plans help mitigate risks. Safety concerns, such as accidents, injuries, insect bites, and health issues, are important when outdoors. Address these by discussing safety protocols with students and parents beforehand. (Group reflection 3)*

Participant-teachers' proactive approach was evident in how they described preparing for PROL, anticipating safety and risk considerations, and exercising professional judgement during its enactment. Their accounts suggested that taking ownership of how PROL was interpreted and adapted to their local circumstances was associated with a stronger sense of agency, competence, and purpose.

Theme 2: The significance of school-wide support for success

Teacher 9 explained that it is critical to seek support and encouragement from school leaders and administrators, as they act as gatekeepers and decision-makers for implementing innovative pedagogy at their school level. The school principal is the key person to help realise their outdoor learning plans.

> *We must get the principal's approval before outdoor learning sessions. We need to submit our plan promptly as the principal encourages timely submissions to accommodate school events. Without approval, outdoor learning isn't possible. The principals also provided outdoor equipment based on our plans. To boost teachers' confidence, we need full school support principals. (T9: Post-workshop interview)*

While Teacher 2 mentioned that the school principal values responsible and enthusiastic teachers who can advise on innovative approaches and strategic planning for developing the school's annual plan. Teacher 2 was pleased to share that the professional development workshops about PROL they attended last year had a positive influence on the school principal's decisions regarding the adoption of PROL at their school.

> *The positivity includes support from school principals. After you* [the researcher] *led the PROL workshops, the board of principals encouraged teachers to increase outdoor learning. I explained the lesson plan last week, and he supported implementing it, praising my idea. After the workshops, they saw PROL as a potential breakthrough for improving pedagogical practices and are now encouraging teachers to adopt it frequently. (T2: Post-workshop interview)*

Another aspect that Teacher 9 was pleased to share was that their fellow teachers were also eager to collaborate on planning, facilitating, and monitoring PROL sessions.

> *A colleague and I enjoyed excellent collaboration, from brainstorming to implementing lesson plans for our students. Enthusiastic, we dedicated much time at school to planning. […] We also had assistant teachers to help manage students, ensuring they did not interfere with other indoor classes while studying outside the classroom. (T9: Post-workshop interview)*

In addition, some participant-teachers appreciated the vital support from parents in terms of time, donations, and providing consents for their children to participate in PROL. Their contributions, including financial donations and resources, were highly valued and made a meaningful impact on their school community.

> *The positivity I have experienced thus far includes my students' engagement and collaboration, support from parents, and, most importantly, the backing of the school principals. (T2: Post-workshop interview)*

> *We also sought support from parent support group when needed, like managing transportation for field trips. (T4: Post-workshop interview)*

Notably, Teacher 3 emphasised that involving the entire school community in strategic planning for PROL, particularly by empowering students to brainstorm activities they find engaging, can foster students' ownership of their learning and enhance their curiosity and creativity.

> *Schools should involve principals, staff, students, and parents in discussions about logistics such as timing, venue, and transportation. They should also address student management, risk prevention, management skills, and contingency plans for outdoor learning. Collaboration among principals, teachers, and students should be improved, with students helping choose extracurricular activities that suit their interests. Promoting students' autonomy, curiosity, and creativity is crucial. (T3: Post-workshop interview)*

Within their accounts of whole-school support, participant-teachers frequently described student engagement as an important source of motivation for their engagement with PROL, as explored in the following subtheme.

Subtheme: Student engagement as a motivator for the participant-teachers

Furthermore, Teacher 4 and Teacher 9 mentioned that the enthusiasm of their students was a significant motivator for them to continue their work and dedication in offering PROL experiences.

> *My students were excited and engaged in outdoor learning activities. They were enthusiastic about PROL sessions. I prepared my lesson plan well and discussed it and the learning objectives with students, including what they could do during the session. They also prepared their equipment for smooth, practical learning experience. (T4: Post-workshop interview)*

> *Our students are delightful and joyful; their enthusiasm and participation during these sessions have motivated us to develop more PROL opportunities. (T9: Post-workshop interview)*

Interestingly, Teacher 2 believed that their students preferred to have other classes join them in PROL sessions, as it is more enjoyable to learn with new friends during these activities.

> *I believe that collaboration among classes and the school's flexibility are key factors in enhancing the uptake of PROL. My students would enjoy PROL even more if they could study alongside students from other classes, as they love learning with new friends. (T2: Post-workshop interview)*

The participant-teachers' accounts highlighted the significance they attributed to whole-school support in creating conditions for the enactment of place-responsive pedagogy. Their responses suggested that PROL was understood not simply as an individual teacher's practice, but as a practice shaped by relationships, shared understandings, and support across the wider school community.

Theme 3: Institutional constraints

Subtheme: Time constraints

An aspect that the participant-teachers discussed were obstacles within the curriculum that could limit PROL opportunities. They found neither a flexible timetable nor suitable learning content without sacrificing some parts of the obligatory target learning within a specific syllabus.

> *I have not identified a suitable time to incorporate PROL into my teaching schedule. I have yet to discover an appropriate topic for outdoor instruction. (T1: Post-workshop interview)*

> *Due to the overcrowded curriculum, locating a suitable time for PROL is also problematic. (T3: Post-workshop interview)*

> *Time constraints can pose challenges to PROL, requiring flexibility and a comprehensive plan to ensure meaningful outcomes. (Group reflection 3)*

Teacher 5 wished they could modify the syllabus to better support PROL, if permitted.

> *For instance, they could organise a two-session block for experiential learning to make PROL more manageable. Teachers can exchange sessions with colleagues if only one session block is available. One session is certainly not enough to effectively conduct PROL. The experiential learning and career education curriculum can be taught outside the traditional classroom setting. (T5: Post-workshop interview)*

Specifically, Teacher 8 pointed out restrictions in school policies and administrative demands that confine their way of outdoor learning to specific formats. For example, besides annual trips to historical sites or remote locations, the most common outdoor activities involve whole-school, theme-based lectures held on the school grounds, where hundreds or even thousands of students sit and listen to an expert discussing a particular topic from the national curriculum. The school principal was likely to focus on these whole-school events, as they seemed to be within their comfort zone.

> *Some outdoor activities for homeroom classes were cancelled due to overlaps with whole-school events like seminars and career education, which are organised by the Department of Education. These events drain students' energy and exhaust everyone involved, including teachers. It has been quite tiring and stressful. (T8: Post-workshop interview)*

Additionally, the participant-teachers felt that their school leaders aimed to tick off a list of annual events to meet the national requirement for fostering pride rather than support new initiatives such as PROL.

> *I struggle to persuade colleagues to join PROL due to numerous school events, seminars, and activities. Unlike other schools that organise fewer extracurriculars, our school aims for the Order of Labour Medal, leading to many social events and competitions. As a result, the school is busy and hurried, leaving little time for reflection or mindfulness, as our focus remains on achieving awards, medals, and honours. (T8: Post-workshop interview)*

Another point raised by teachers was their large class sizes, with each containing over 40 students. Many teachers felt uncomfortable conducting PROL with such crowded groups.

> *Managing students outdoors is more challenging than in classrooms, needing small groups, clear instructions, and careful observation. I expected challenges with PROL, like overcrowded classes of over 40 students and distractions outside. (Group reflection 3)*

To address this issue, Teacher 5 suggested a more thoughtfully planned and flexible timetable, featuring a two-session block lasting 90 minutes, dedicated to PROL each week could be worthwhile.

> *Principal should support PROL by organising a two-session experiential and career education block to make it manageable, allowing teachers to swap sessions if needed, as a single session is ineffective. (T5: Post-workshop interview)*

Teacher 7 also recommended providing blanket approval for an annual PROL plan instead of requiring the school principal's approval for each spontaneous outdoor session.

> *We need to organise PROL sessions across the school at appropriate times to promote and sustain outdoor learning in teaching practices. Teachers will not need to seek approval for each outdoor learning session. (T7: Post-workshop interview)*

Alongside time constraints, funding was another recurring concern raised in participant-teachers' accounts of the practical considerations surrounding PROL.

Subtheme: Call for more funding to support place-responsive outdoor learning

Another concern raised by participant-teachers was the lack of suitable outdoor learning spaces, as well as the necessary resources and sustainable systems to support these activities.

> *The school ground is not yet fully appropriate for PROL. (Group reflection 3)*

In contrast, Teacher 4 preferred to conduct their PROL sessions on the school grounds in response to the available resources although concerned about the potential to disrupt other indoor classes.

> *The best choice was PROL in the nearby due to cost and management considerations. However, if conducted on school grounds, outdoor noise could disrupt indoor classes. (T4: Post-workshop interview)*

Whereas Teacher 5 suggested holding their lessons in other dedicated outdoor learning areas to avoid interfering with simultaneous indoor classes.

> *To prevent disruption of indoor lessons, an open, dedicated outdoor learning area should be designated for such experiential learning. While valuable, implementing this can be challenging due to poor infrastructure and limited resources. (T5: Pre-workshop interview)*

Some participant-teachers continue to advocate for increased funding specifically dedicated to PROL at both the school and national levels, believing that additional resources could create more inclusive and enriching PROL experiences for students. Although PROL offers a low-cost, sustainable solution by utilising local outdoor environments, additional funding could further enhance these initiatives. Such funding could help improve the quality of outdoor learning spaces at their school and ease the cost of day trips for those children whose families were facing financial hardship.

> *The Ministry of Education can offer support nationwide by funding the revitalisation of school grounds and providing suitable outdoor learning equipment. (T3: Post-workshop interview)*

> *Nationwide funding support could help schools improve their organisation of outdoor learning day trips for students to regional reserves, historical sites, and other local destinations. (T4: Post-workshop interview)*

Across participant-teachers' accounts, institutional constraints emerged as a recurring concern in relation to the enactment of PROL. They identified time, teaching workload, and adequate funding as important conditions shaping the possibilities they perceived for engaging with and sustaining PROL within their school contexts. Their reflections suggested that their capacity to enact PROL was understood in relation not only to their individual commitment, but also to the organisational conditions surrounding their professional practice.

Theme 4: Apprehensions regarding safety and risk management in the context of place-responsive outdoor learning

Concerns about outdoor implementation persisted due to several issues caused by the lack of boundaries in open spaces. The participant-teachers discussed that the appropriate teacher-student ratio will vary depending on the nature and risk level of PROL. For low-risk PROL in urban green areas with high school students, they proposed a common ratio between 1:10 and 1:15. They felt it was critical for the school to introduce a clear policy on PROL ratios to ensure students' safety.

> *I am not keen on PROL in the nearby park due to safety concerns. With over 40 students per class, I need 3-5 staff to supervise smaller groups. (T8: Post-workshop interview)*

Environmental factors, such as unpredictable weather, were raised because these factors present significant challenges for incorporating PROL into daily teaching schedules. The participant-teachers were genuinely concerned about the high temperatures and heavy rainfall in Ho Chi Minh City and

consistently expressed concerns about weather contingencies that could delay or cancel their outdoor learning sessions. Furthermore, it was challenging to reschedule outdoor learning due to their busy workloads.

> *I'm worried about the weather in HCMC because of the hot, humid dry season and the heavy rains during the wet season. Extreme weather, such as high temperatures or heavy rain, can delay or cancel PROL. (Group reflection 3)*

Other participant-teachers expressed concerns about city noise and large class sizes, which may impact on students' concentration during PROL compared to traditional classrooms. They suggested that developing a standardised management plan for PROL could alleviate teachers' worries about health, safety, and environmental issues that could otherwise impede PROL.

> *Urban noise might distract students, but effective lesson plans and classroom management can minimise this. Managing students outdoors requires more effort, including small groups, precise tasks, and vigilance. Time constraints on PROL demand flexibility and detailed planning for success. (Group reflection 3)*

> *Other safety concerns include road accidents and city chaos. (Group reflection 3)*

In this respect, Teacher 4 and Teacher 6 aimed to enhance their skills in risk prevention, outdoor learning communication, and management, which were essential for building their confidence.

> *I must equip myself with adequate knowledge of risk prevention and management, including accidents, students getting lost, insect bites and stings, and other potential hazards. I also need to develop skills in outdoor management, communication, and emergency response. (T4: Post-workshop interview)*

> *The school could organise more PROL workshops for teachers as part of their professional development, encouraging them to apply what they have learned. I wish to enhance my knowledge of this pedagogical approach by learning about its benefits, challenges, and how to manage students effectively outdoors and reduce distractions. (T6: Post-workshop interview)*

Concerns about risks associated with weather conditions, large groups of students, and other safety considerations featured in the participant-teachers' accounts of PROL. These concerns were accompanied by requests for greater guidance and institutional support in navigating safety and risk management within their local contexts. Their responses suggested that their willingness to engage with PROL was closely connected to how they understood and could negotiate the practical and safety conditions of outdoor learning.

Summary

The participant-teachers' proactivity was reflected in how they described creating opportunities for students to engage in PROL, drawing on their preparedness, confidence, and attention to safety and risk management. Their accounts also highlighted the significance they attributed to whole-school support, with student engagement featuring particularly prominently in their reflections on the possibilities for PROL.

At the same time, the participant-teachers identified a range of institutional and practical conditions that shaped how they understood the possibilities for enacting and sustaining PROL. These included limited alignment in co-teaching schedules, curriculum demands, heavy workloads, potential tensions in workload distribution between school leaders and teachers, limited funding for developing outdoor learning environments, and ongoing concerns about safety and risk management. Rather than describing these conditions simply as barriers to be overcome, the participant-teachers' accounts suggested that the enactment of PROL involved ongoing negotiation between their professional aspirations and the organisational circumstances in which they worked.

They also articulated a strong sense of responsibility for creating meaningful outdoor learning opportunities and expressed a need for strategic organisational support to navigate these conditions. I interpreted these accounts as illustrating teacher agency as situated and relational: the participant-teachers demonstrated initiative in working within their circumstances, while also recognising that sustained PROL depended on wider institutional arrangements and collective forms of support.

In the following chapter, I will critically reflect on the results chapter, and situate these findings within existing research perspectives.

Chapter 5: Discussion

In this chapter, I discuss the research results through the lens of theory of place (Casey, 2009; Massey, 1994; Relph, 1976; Tuan, 1990), pedagogy of place (Gruenewald, 2008; Wattchow & Brown, 2011), embodied and experiential learning (Dewey, 1938, 1916/2012; Merleau-Ponty, 2012), sociocultural and professional practice theory (Lave & Wenger, 1991; Schön, 1994; Vygotsky, 1978; Wenger, 1998).

Teachers' perspectives on outdoor learning

Theme 1: Pedagogical shift

Prior to the introduction of workshops, the potential of outdoor learning was often underestimated as it was primarily linked to physical activity, lacked curriculum integration, and was contingent upon location and weather conditions, typically occurring in neutral outdoor settings. While some participant-teachers experienced increased empathy through shared joy when learning occurred outdoors, most of them relied on common sense and improvisation to handle unforeseen issues. This casual, quick, and physically focused approach often limited meaningful outdoor learning experiences for students. They seemed to lack attentiveness to local surroundings due to their busy lifestyles. In addition, they appeared unable to differentiate between a learning place and a learning space. The learning space transforms into a learning place when teachers and students become more familiar with where their learning happens and imbue the place with significance (Tuan, 1979). Places are emerging and evolving as learners ascribe values through engagement when they learn in, about and with place. Such interaction will foster their attachment and connection to places.

The participant-teachers who participated in the PROL workshops had an opportunity to be exposed to a new dimension of nurturing relationships with familiar places such as their school or a nearby community park. They realised that nurturing their relationships with familiar places could help them better understand their place within local history, culture and power structures. This fostered ethical action, care and responsibility towards their familiar places. These findings suggested that learning connected to local places influences teachers' and students' identity, agency and responsibility towards

social justice and environmental sustainability (Gruenewald, 2003a). The participant-teachers' own relationships with place, where their professional practices occur, in turn influence their teaching, learning design, and pedagogical decisions (Stevenson & Smith, 2017).

When the teachers in this research decided to integrate place-responsive pedagogy into their professional practices, they influenced their students' existential and empathetic connection to these familiar places (Relph, 1976). For example, mindful ecological connection was fostered through a slow, intentional walk in the local park, place-based art and creativity, participation in local conservation or cleanup groups, and seeking out opportunities to learn the history of their area from long-term residents or community elders. These practices helped the students transition from a passive observer to an active, caring participant in their environment. According to Massey (1994) through genuine engagement students can develop deep and unselfconscious belonging and understanding of their local environments that may extend to considering their position in global networks. Through place-responsive pedagogy, the Vietnamese teachers and students will have their take on defining their places through authentic and purposeful everyday experiences (Massey, 1994). The 'place' will become their primary ground of existence through teaching and learning experiences that are integrated with their significant places (Casey, 2009).

In my research, it was evident that prior to the workshops, the participant-teachers had frequently engaged in learning in the outdoors through day trips to historic sites or museums, but these had been guided by on-site instructors instead of outdoor learning. These outings were often influenced by propaganda, aiming to cultivate patriotism and align the perspectives of Vietnamese youth with the government's motto: independence, freedom, and happiness (National Assembly of Vietnam, 2013). Many participant-teachers considered these school excursions their main learning outdoors opportunities. While most claimed these excursions offered interdisciplinary, real-world learning, the outcomes often seemed less important than their sense of recreation and relationship-building. These trips relied on external contractors, which could potentially restrict authentic and curriculum-based learning. What intrigued me was the participant-teachers' appreciation of these field trips as meaningful

opportunities to learn alongside their students, gaining knowledge not found in textbooks. Reflecting on their supervisory roles during these field trips, I wondered whether their focus on building relationships with students was due to being relieved of typical classroom responsibilities such as lesson planning, teaching, and grading. Instead, they seemed content with their role as observers, closely monitoring students and simply being present. I wondered if my participant-teachers and on-site instructors could collaborate on lesson planning before the field trip, along with further discussions for future excursions, it might enhance the quality of students' learning experiences (Behrendt & Franklin, 2014).

Beside day trips to local historic sites or museums, many participant-teachers shared their approach to learning outdoors, which included several day trips to well-known tourist attractions as part of an annual school tradition. However, the cost of these excursions meant that not every student could afford to participate. There were students missing out and I wondered how they could be included. It was perplexing to me, how this practice persisted over the years, given its contradiction to the principles of equality and inclusivity in learning opportunities for all students (United Nations Department of Economic and Social Affairs (UN DESA), 2025).

Following the workshops, my participant-teachers' understanding, abilities, and perspectives on outdoor learning transformed from a superficial level to a more profound, place-responsive approach that aligns with their local environment. They started to view outdoor learning as more authentic, linking classroom lessons to real-world issues, which boosts relevance and engagement. This change in perspective came after participating in the workshops. They also began to consider their urban environment as an active resource with its own narratives, where open spaces, greenery, and vibrancy can support genuine educational experiences. The outdoors now transformed from a passive setting to a co-creator of learning experiences. These findings support the arguments of Stevenson and Smith (2017) in emphasising teachers' professional learning and theorising processes, positioning place-responsive pedagogy as dynamic, reflective, context-sensitive, and treating place as a central source for curriculum, knowledge, and ethical responsibility. I observed a notable shift in my participant teachers'

approaches to outdoor learning as they began to incorporate PROL principles into their teaching practices. During this time of workshop engagement, they experienced excitement and relaxation, acquired new knowledge and mindfulness, and cultivated a deeper sense of place-connectedness, all of which enhanced their overall wellbeing. The participant-teachers also came to appreciate the significance of reflection, a concept previously unfamiliar to them, for improving their teaching methods.

As a result of participating in the workshops, they appeared to understand the principles of PROL and were hopeful about their initial efforts with this approach. By implementing PROL practices, the participant-teachers moved beyond viewing outdoor learning solely as a tool for developing students' attentional skills. Instead, they focused on PROL as a means to embrace sensory and embodied learning, while fostering environmental awareness and stewardship. They prioritised apprenticeships in local outdoor environments, underscoring the importance of hands-on, community-based ecological education. For them, nature was not a distant wilderness but a familiar urban green space nearby, close to their hearts and deserving of protection. These findings aligned with existing studies (Baryosef-Paz & Gan, 2026; Boeve-de Pauw & Van Petegem, 2018; Gray & Pigott, 2026; Wattchow & Brown, 2011) indicated how pro-environmental behaviours could be effectively nurtured through flexible, relational, and sustainable PROL pedagogical practices. These findings also provided additional empirical evidence supporting the sustainability and long-term behaviour change associated with effective PROL practices, as recently reported by Mahmud and Sainorudin (2025).

An aspect of concern was that while most teachers in my study were influenced by sensory and embodied experiences during workshops, some struggled to incorporate this pedagogical approach into their teaching methods. This indicated a disparity between some participant-teachers' beliefs and practices regarding sensory and embodied learning due to their crowded curriculum and the constant need for innovation. This result corroborated the findings of Prince et al. (2026) and Špernjak et al. (2026), who asserted that outdoor learning was appreciated but inconsistently integrated into the curriculum. However, teachers' beliefs could lay the groundwork for integrating outdoor learning

experiences into their teaching. Outdoor learning truly flourished when it was grounded in teacher agency (Nagamine, 2025; Ward, 2026), supported by collaboration, and maintained through meaningful, long-term investment in teacher education, school leadership, and daily teaching conditions as well as alignment across policy (Terzidis & Borloz, 2026). However, Vietnamese teacher agency is deeply shaped by sociocultural values including adaptability, flexibility, and collectivist orientations. These values influenced how Vietnamese teachers interpreted change and enacted agency in practice (Tran & Li, 2025). However, through the interaction of individual action, collective effort, and structural support my research shows that place-responsive outdoor learning can evolve into a resilient and enriching component of daily teaching and learning in the Vietnamese public school system.

Theme 2: Effects on wellbeing

The participant-teachers' positive outlook on outdoor learning was significantly reinforced by their participation in the professional development workshops on PROL. Following the workshops they regarded outdoor learning as indispensable to innovative education, convinced that it can enhance social skills, mental health, and physical wellbeing for both teachers and students. These findings reframed the benefits of outdoor teaching in compulsory schooling reported by Faskunger et al. (2018). Given PROL's profound impact on the holistic wellbeing of both my participant-teachers and their students as reported, this understanding may motivate them to increase the frequency of PROL with their colleagues and students. These measures will increase the uptake of PROL which in turn will enhance their overall wellbeing and benefit the entire school community. My study reconceptualised wellbeing as a fundamental pedagogical condition that influenced teachers' ability to innovate, rather than merely an additional benefit of outdoor learning. In contrast to prevailing outcome-focused models, wellbeing in this research arises from embodied, relational engagement with the environment, indicating that the design of place-responsive pedagogical activities can serve as a form of professional development.

The evidence showed that most teachers acknowledged the benefits of PROL as a cohesive pedagogy that positively impacts students' wellbeing by fostering social skills, enhancing mental and physical

wellbeing. The effects of outdoor learning on the mental wellbeing of both teachers and students were significant. This finding bolstered Frances et al. (2025) argument that outdoor learning can provide concurrent advantages for both teachers and students. I suspected a link between their quality of life, mental wellbeing, and professional effectiveness. This is an important finding since mental health is a stigma in Vietnamese culture and society due to a lack of mental health literacy (Le, 2026). This addressed what current literature might overlook about the delivery of ITPD via place-responsive pedagogy to support the emotional needs of the teaching workforce.

Theme 3: A sense of belonging through affective learning

After being involved in the workshops, most participant-teachers began to value nature, sensory and embodied learning, and mindfulness in their everyday taken-for-granted landscape. Their enhanced sense of belonging and connection to their environment through affective learning was evident in their responses to the post-workshop interviews. They perceived it as creating meaningful experiences that fostered a sense of belonging through connections with people and local places. Some participant-teachers noticed that outdoor learning positively influenced their students' emotional development. They observed that a comfortable environment encourages sharing, which outdoor settings naturally promoted. They believed that increased sharing could strengthen bonds and empathy among their students. Some were convinced that outdoor learning fostered better relationships between teachers and students, enhanced camaraderie among students, and deepened their bond with nature. Their familiar places now served as an affective educator that required attention, care, and engagement (Casey, 2009). My participant-teachers realised that their students come to understand their places not just through contemplation, but also by experiencing them emotionally (Tuan, 1990).

Many teachers reported that both themselves and their students experienced a sense of belonging through affective learning as they participated in PROL. The more they interacted with their significant places the more they achieved a progressive sense of place (Massey, 1994). When my participant-teachers provided opportunities for their students to apprentice themselves to their outdoor learning places, they helped their students develop a long-term learning relationship with these places. This

enabled them to gain a deeper understanding of the places and to begin responding with care. By integrating place-responsive pedagogy (Wattchow & Brown, 2011) into their professional practices, my participant-teachers fostered their students' existential and empathetic connection to their local places (Relph, 1976). This place attachment varied in depth and intensity depending on the time and effort invested in nurturing their relationship with significant places. Consequently, PROL served as an affective pedagogy, allowing teachers to reinhabit places they had previously overlooked.

The results empirically supported Beery's (2025) key conceptual insight that landscape pedagogy can promote relational thinking, transcending the human-nature divide. Learners are encouraged to view themselves as integral parts of interconnected social-ecological systems, rather than mere observers or managers of nature. This approach aims to cultivate emotional connection, care, and a sense of belonging in one's environment, along with a responsive relationship that acknowledges the responsibilities and actions arising from that belonging. The participant-teachers' integration of place-responsive pedagogy (Wattchow & Brown, 2011) into their experiential learning and career education can be understood as the pedagogical enactment of landscape pedagogy's relational understanding of place, belonging, and responsibility.

Teachers' perspectives on collaborative lesson planning

Theme 1: The tension between individual contribution and collective responsibility

In my research, the tension between individual contribution and collective responsibility was evident. The participant-teachers' cultural perspectives are deeply influenced by Confucian and collectivist values, which emphasise hierarchy, communal responsibility, obedience to social norms, and social harmony, characteristics typical of traditional Vietnamese communities. Historically, these norms have served as mechanisms to maintain stability and cohesion, often limiting individual autonomy when it threatens collective order (Nguyen & Tran, 2025).

Before the workshops, all of the participant-teachers were used to independently planning their assigned lessons and then collaborating within their specialised subject group to review the lesson plans shared on the common resource bank. When evaluating their colleagues' lesson plans, they were generally tactful to avoid personal targeting or conflicts among fellow teachers. Following the workshops, most participant-teachers recognised the benefits of collaborative lesson planning (CLP) but were reluctant to dedicate time for it with colleagues, especially in interdisciplinary subjects. This hesitation stemmed from various factors, including mismatched teaching schedules, personal working styles, teaching philosophies, and subject areas. Their enthusiasm for CLP differed depending on the content, preferred collaborators, and their comfort levels with scheduling sessions.

Furthermore, organising CLP often required the participant-teachers to manage their own time, highlighting the necessity for effective school leadership and workload management, along with designated time slots. Some participant-teachers returned to independent lesson planning, illustrating the difficulty of incorporating CLP into their routines. While the majority of the participant-teachers indicated a wish for additional time to persist with CLP alongside their colleagues, only a few continued this practice post-workshops, even though they had a comprehensive grasp of their roles and contributions during the process. Some opted to work independently to preserve their unique perspectives. This scenario vividly illustrated the Vietnamese teachers' ambivalence and reflected CLP literature (Guo et al., 2025) by demonstrating how cultural perspectives were profoundly shaped by Confucian and collectivist values, which in turn underscored my participant-teachers' hesitance towards ongoing CLP. This cultural resistance to innovation fosters the ambivalence identified by (Guo et al., 2025) who noted that emotional regulation challenges, such as frustration or anxiety during disagreements, were among the difficulties in implementing CLP. Sustaining engagement in CLP requires significant effort to integrate it into the Vietnamese school culture.

Theme 2: Collaborative lesson planning as a professional development initiative

Following the workshops, many participant-teachers identified the potential advantages of CLP for their professional growth while also recognising the effort required to implement it alongside their colleagues. The team dynamics and collaboration among my participant-teachers were greatly influenced by their genuine professional relationships, work ethics, and dedicated time blocks for CLP. They appeared open-minded and eager to engage more actively in CLP with their research based colleagues if they could find the time. With all participants identifying as experienced, having over ten years in their careers, they expressed effective teamwork management in their unique ways, which could help prevent conflicts from escalating in professional settings. Their perspectives underscored the significance of effective teamwork, individual roles, and a culture of continuous evaluation and enhancement to achieve excellence. The participant-teachers who were engaged in CLP during the workshops as well as those who continued CLP with their colleagues can serve as positive role models and inspire their peers to consistently refine their practices through ongoing evaluation. Additionally, emotional, relational, and instructional skills are developed in tandem.

From my participant-teachers' perspectives after attending the workshops, CLP enhanced their pedagogical skills in lesson design and curriculum alignment, nurtured their interpersonal and collaborative abilities, and encouraged the development of teacher agency early in their career. These findings supported the perspective that CLP served not only as preparatory work but also as an ongoing learning process for teachers (Mendoza et al., 2022). It reinforced the argument of Nagamine (2025) and Lin et al. (2025) that CLP extends beyond being just a planning technique. Meaningful collaboration depended significantly on informal communication, trust, and existing working relationships, rather than solely on formal structures. Collaboration developed gradually and was influenced by the school culture, leadership backing, and the professional identities of the participant-teachers. Being collaborative served as a pedagogical environment where teacher agency was exercised, evaluated, and honed in anticipation of actual classroom duties.

Additionally, the majority of my participant-teachers highlighted the significance of collaboration among educators from various subjects to enhance their professional practice. Their confidence in implementing PROL increased when they jointly planned these lessons. Similarly, Liu (2023) found that teachers who are more engaged in CLP tend to feel more confident in their teaching abilities. Collaborative lesson planning has potential as a professional development initiative to educate teachers in a safe and supportive learning environment. The results are consistent with the findings of Neville et al. (2023) who emphasised the importance of teacher collaboration, flexible curriculum design, and reflective practice, revealing that cross-disciplinary outdoor learning can overcome common obstacles like curriculum constraints, confidence, and time. As Alloway (2013) research found; CLP can operate at an effective, ongoing form of professional development embedded in sustained, practice-based collaboration through shared dialogue, negotiation, and collective sense-making, rather than through formal instruction. Sustaining CLP at school level has the potential for the development of a local CoP to help sustain PROL within and beyond the school community.

Knowledge, skills, and attitudes the teachers gained after participating in the place-responsive outdoor learning workshops

Theme 1: New pedagogical content

After participating in the workshops, all participant-teachers viewed PROL as a creative, sensory, embodied and reflective learning opportunity. They engaged with the four principles of place-responsive pedagogy and professional collaboration. They saw outdoor learning not just as a change of setting but as a pedagogical shift that honours the stories of local places and communities, fosters a sense of belonging and connection to the places they inhabit, and enables experiential and interdisciplinary learning to develop meaningfully. My participant-teachers' reflections became more valuable when they were connected to real-life learning and teaching experiences, thereby supporting their ongoing professional development rather than just enhancing their immediate performance (Schön, 1994). Nevertheless, in actual schools burdened by workload pressures, accountability demands, and performative cultures, deep reflection is not always attainable (Liu et al., 2025).

Many of the participant-teachers emphasised their need for strategic professional development to ensure they were prepared to incorporate PROL into different parts of the current curriculum. To build confidence in facilitating PROL, some participant-teachers proposed including outdoor learning in the annual professional development programme. Through collaboration with peers, my participant-teachers expanded their pedagogical strategies, adopting outdoor learning as a collective, interdisciplinary, and place-responsive practice. The process of co-planning, co-facilitating, and reflecting together strengthened their connection to the place and to their colleagues. This finding concurred with Gutierez (2021), who found that collaboration fostered more profound pedagogical reflection and encouraged a sense of professional interdependence. The participant-teachers' reflections uncovered a pedagogical shift from isolated activities in a neutral outdoor setting to an integrated and responsive approach that values relationships with local places while aligning with a target curriculum. As they reflect on their learning, the participant-teachers are likely to adopt this pedagogical approach, which they perceived as enriching student learning and supporting their professional development. Although many of the participant-teachers' ideas are still in the belief phase, they have the potential to evolve into a robust educational practice that fosters a nurturing environment for place-responsive pedagogy.

In the post-workshop interviews, three out of nine participant-teachers reported that they had not found suitable time, resources, and topics for outdoor learning. Consequently, there has been no outdoor learning so far for their homeroom classes. Among the six participant-teachers who had invested effort in planning and implementing outdoor activities, one collaborated with colleagues from other specialised groups to incorporate outdoor learning into an interdisciplinary field trip to the Can Gio biosphere reserve a local mangrove forest in HCMC. Another was working individually; however, the details of their outdoor learning sessions were not provided, despite confirming that they had conducted them. Two other participant-teachers worked alone and preferred to focus on delivering outdoor learning within their school grounds by planning a regenerative project and reflecting on their responsibilities through their sense of connection and belonging. These two teachers expressed willingness to collaborate in the future. The remaining two participant-teachers were enthusiastic

enough to dedicate time to joint lesson planning and co-facilitate a couple of outdoor learning lessons on the school grounds. Additionally, outdoor learning at school grounds addressed themes such as environmental education and sustainability, as well as personal finance and entrepreneurship. As reported; by encouraging their students to practise skills such as cleaning the school, sorting waste and recycling products, they can learn to appreciate and maintain their outdoor learning environment. As the researcher and the workshop facilitator, with six out of nine participant-teachers deciding to take the initiative on outdoor learning, either at their school grounds or a local park, I feel hopeful and excited about the unfolding future of PROL for these Vietnamese public high school teachers.

The workshops introduced my participant-teachers to the PROL principles and practices, CLP, and reflective practice, which facilitated a deeper understanding of PROL and enabled them to implement these professional practices in their specific subject areas within the 2018 GEP. The promotion of PROL through in-service training effectively captured my participant-teachers' attention and ignited their interest in pursuing further PROL training. The advantages of these workshops could motivate my teachers to broaden their practices beyond the conventional classroom, ultimately enhancing their students' learning outcomes. Although PROL has predominantly been theorised within Western contexts (Wattchow & Brown, 2011), this study illustrated how place-responsive pedagogy is understood, negotiated, and implemented within a collectivist, socialist educational system influenced by curriculum centralisation and performative accountability. My participant-teachers meaningfully cultivated their place-connectedness through embracing PROL. This pedagogical transformation enabled them to harmonise innovation with compliance by aligning place-responsive pedagogy with the experiential learning and career education curriculum outcomes within the Vietnamese 2018 GEP. They also consulted with the school principal to maintain transparency and build collaborative trust within their school community.

Theme 2: Workshops as a catalyst for cultivating new attitudes

Most participant-teachers were enthusiastic about the experiential learning and career education modules introduced in the 2018 GEP. However, they still lacked confidence in their ability to facilitate

this aspect of learning, let alone integrating it into outdoor learning. In their view, online training funded by the Vietnamese government and the flexibility it offered were necessary but not enough for professional support. Although it was mandatory for my participant-teachers to complete the online training modules provided by the Viet Nam MOET, they felt that the online training formats were neither sufficient nor particularly useful for effectively implementing experiential learning and career education in the new curriculum. They expressed a need for face-to-face consultations to address the challenges they have encountered so far. Many participant-teachers expressed dissatisfaction with the current annual in-service teacher training programme provided by MOET. They were eager for more contemporary professional development opportunities that better prepare them to integrate outdoor learning into their subject areas. The PROL workshops were stepping stones toward developing a CoP within their school and beyond through my participant-teachers' continuous collaborating with their other colleagues in lesson planning, implementing, and reflecting on their PROL practices. This approach ensured that ITPD was seamlessly integrated into everyday school routines, rather than being seen as an external supplement for my participant-teachers (Tran, 2025). My teachers confirmed that the PROL though hands-on learning and CLP in the ITPD workshops was effective and expected to transform their learning into their students' learning (Visscher et al., 2025) as they applied what they learned in the workshops into their teaching practices.

Apart from further professional development, many participant-teachers expressed a need for more immediate resources on place-responsive pedagogy. As this pedagogical approach is inherently non-prescriptive, my teachers were encouraged to develop their own lesson plans and resources tailored to their local contexts. Engaging experts deeply embedded in Vietnamese culture and society was crucial in this case to provide appropriate mentoring to support my teachers' professional development in PROL (Nguyen & Tran, 2025). This collaboration with the Viet Nam MOET and local teachers is an example that could support the future design of a strategic professional development programme focused on PROL for both pre-service and in-service teachers. Ultimately, doing this will help set up and maintain a PROL CoP in Viet Nam. This educational strategy emphasised the importance of integrating teacher professional development with curriculum reform in the Association of Southeast

Asian Nations (ASEAN) education systems, particularly in Viet Nam (ASEAN (Association of Southeast Asian Nations), 2022; French et al., 2023).

Reflecting on my participant-teachers' viewpoints of PROL and their professional growth after participating in the PROL workshops, a clear progression emerges from individual practice to collaborative involvement and institutional support. When working interdependently, my participant-teachers embraced outdoor learning as a creative and reflective process. They found value in designing project-based experiences within the school grounds, using these opportunities to reflect on and improve their teaching. This autonomy fostered confidence and enabled them to explore outdoor settings as extensions of the classroom, grounded in place-responsive experiences. In this context, the outdoors is not merely a setting but a living curriculum, a cultural thread, and a shared responsibility among learners, local places, the whole-school community, and beyond, to develop a stronger connection between this future generation of Vietnamese and their places. From there, they will be more likely to take an active role in protecting and developing their places as ethical and empathetic insiders (Relph, 1976).

Looking ahead, my participant-teachers recognised the importance of ongoing ITPD in PROL and CLP. They saw opportunities for growth in creating shared lesson plans and resources, engaging with their local places especially nearby nature, and building a CoP within their school and beyond. Their reflections highlighted a desire to be more present in and connected to the places where they teach, grounded in local knowledge and thoughtful practices. With continued professional development and institutional backing, many participant-teachers believed that they can confidently incorporate PROL across various curriculum areas. The greater their confidence in implementing place-responsive pedagogy, the more effectively they can align their lesson plans with their learning environments to foster a culture of care and enhance their sense of belonging to significant places (Wattchow & Brown, 2011). Such approaches can broaden their holistic engagement, empathy, and responsiveness to their local environments.

The affordances or constraints experienced by the teachers on implementing place-responsive outdoor learning

Theme 1: Teachers' level of proactivity

Most participant-teachers appreciated that their school is situated near a local park, which makes outdoor learning more accessible. This result aligned with Wolsink's (2015) findings that secondary schools located closer to public green spaces organised significantly more outdoor environmental education excursion than schools farther away, regardless of other factors. The participant-teachers were enthusiastic about utilising the available equipment and green spaces at school and in the nearby park for outdoor learning. They also believed that revitalising the school grounds and surrounding environment, including urban green space, would create suitable areas for outdoor activities. Some participant-teachers took proactive steps to address challenges, choosing to use the school grounds as the primary venue for outdoor learning, thereby alleviating logistical issues. Their proactive attitude and behaviour were predictive of higher self-efficacy in implementing pedagogical change in the future (Jörg et al., 2024).

I was particularly impressed by the proactive efforts of some participant-teachers to make outdoor learning accessible to their students utilising the PROL signposts to help navigate their outdoor learning sessions (Wattchow & Brown, 2011). For example, Teacher 8 and Teacher 9 integrated the PROL signpost into their experiential and career education curriculum within the theme of environmental education. This enabled their students to adopt the role of apprentices by listening carefully to the requirements and limitations of the outdoor environments at their school while acting ethically and responsibly to prevent further harm and heal their school ground. Similarly, Teacher 2 and Teacher 5 used the signpost of representing and communicating place experiences to help their students express and share their understanding through creative writing and reflection. I was impressed by some participant-teachers who initially felt very uncomfortable being outdoors. However, four months after the pre-workshop interview, they shared that they now genuinely enjoyed leading outdoor learning sessions with their students. They realised that there was nothing wrong with a slower pace of life and learning, where teachers and students could slow down, practise mindfulness, learn to serve, connect,

and share their sense of nature-connectedness and place-responsiveness with peers and local residents. By incorporating mindfulness practice into outdoor learning sessions, my teachers improved their ability to engage with their surroundings more attentively and reflectively, rather than viewing the environment merely as a backdrop for instruction. This practice enabled them to notice social, ecological, and cultural nuances in their local environment that they had previously missed. As a result, the local environment became an integral part of their teaching and learning design. Mindfulness served not only as a personal wellness practice but also as a valuable pedagogical tool that could significantly support my teachers in their outdoor learning environment (Deringer et al., 2020).

Initiating PROL should begin with leveraging local resources. Some participant-teachers creatively adapted and developed their version of PROL from what was available to them. However, these individual efforts cannot be sustained in isolation. Developing a culture of collective support within their school is essential to identify PROL as a shared responsibility, rather than just an optional activity. The PROL workshops that the participant-teachers took part in were both responsive to their local environment and relevant to their experiential and career education curriculum. They served as an inspiring and practical catalyst for action. As a result, some participant-teachers were developing an action plan with the entire school community to build an outdoor classroom utilising available outdoor space on their school ground. They envisioned their concrete school ground could be transformed into a lush green environment with diverse plants, trees and potentially a sensory garden. This would involve staff and students in its maintenance for sustainable development. Investing effort in establishing such a space will be highly rewarding for teachers and the wider school community. Furthermore, the local treescape and landscape could serve as invaluable co-teachers when implementing PROL with students. In this regard, their outdoor classroom in a familiar natural environment was expected to shape their understanding of what was feasible, significant, and impactful in a learning experience (Jickling et al., 2023).

The participant-teachers I worked with during the workshops were not passive recipients of outdoor learning policy or practice; they had potential to become active agents who frequently initiated, adapted

and led change from the ground up. Many teachers in this study negotiated remarkable initiative and creativity in making outdoor learning a reality given their position and existing resources. Independently, they can design simple, curriculum-integrated outdoor learning sessions, utilise their school ground and local landscape, and apply their professional judgement to create their own version of PROL experiences. Reflecting after each outdoor session allowed my participant-teachers to refine their practice, identify what worked, and build confidence over time. Their enthusiasm undoubtedly inspired their colleagues and advised their school principal and deputy principal to create more opportunities for outdoor learning to be a part of their school culture and practices. Reflective processing of my participant-teachers' professional experiences had the potential to influence their identity values and career trajectories. This reflection extended beyond reviewing activities and was crucial in supporting their identity formation as practitioners of place-responsive pedagogy (Gray & Pigott, 2018).

Taken together, these findings suggested that the participant-teachers' proactive engagement in outdoor learning situations can be boosted by professional development workshops (Jörg et al., 2024). This increased confidence will lead to greater adoption of this pedagogical approach to support students' holistic development. My teachers' personal benefits from outdoor learning inspired them to create more opportunities for their students. Cultivating aspiration and self-motivation, grounded in self-awareness and ongoing professional development proved to be essential in a busy work environment. The engagement and support of the entire school community were a significant asset in making outdoor learning feasible, accessible and sustainable. These efforts integrated meaningful, place-responsive outdoor learning experiences into routine school activities, rather than limiting them to occasional events. The positive, adaptable, and comfortable nature of outdoor environments motivated my participant-teachers to engage more deeply with their local environment and community. I appreciated the efforts of my participant-teachers who have integrated reflection into their outdoor learning sessions as a regular practice. This new normal will significantly enhance the holistic development of both Vietnamese public high school teachers and their students, inspiring a domino effect within their school community and beyond, fostering inclusive participation in outdoor learning for all. I am pleased to

include Viet Nam in the geographical expansion of global engagement in outdoor learning and core research hotspots for education for sustainable development, as highlighted in a comprehensive bibliometric analysis of outdoor education research by Zong et al. (2024).

Theme 2: The significance of school-wide support for success

Most participant-teachers expressed satisfaction with their school environment and the support from the school community, including the school management board, other teachers, caregivers, and students. This sense of engagement fostered an atmosphere of inclusivity and partnership as they began their journey of implementing sustainable outdoor learning within the institution. My participant-teachers were highly motivated to persist with their outdoor teaching practices due to the students' exceptional enthusiasm and engagement (Dring et al., 2020). School leadership support and caregiver involvement are considered helpful in enhancing the uptake of school field trips. Effective communication between schools and caregivers would enable caregivers to fully understand the purposes and benefits of outdoor field trips and to recognise the value of outdoor learning for their children (Learning and Teaching Scotland, 2010).

Several participant-teachers observed that the school principal values responsible and enthusiastic educators who can provide guidance on innovative strategies and strategic planning for the school's annual plan. They were pleased to report that the professional development workshops on PROL they attended in the summer of 2024 positively influenced the principal's decision to implement outdoor learning at their school. This underscored the importance of involving school leadership in the ITPD process and highlighted the necessity of providing systematic leadership training on the significance of place-responsive pedagogy to school principals, just as it is crucial for in-service teachers. Doing so will prepare Vietnamese principals to lead proactive internal improvement for long-term curriculum reform success (Nguyen et al., 2025). This finding aligned with Tran (2025) assertion that subject-head teachers and school leaders are crucial in translating policy into classroom practice, particularly in the context of differentiated instruction.

The journey of PROL should not be a solitary one, as there are clear limits to what my participant-teachers can achieve on their own (Fiszer, 2004). To effectively sustain and expand PROL, many teachers in my study require ongoing, context-specific professional development, access to curriculum-aligned resources, and coordinated school-wide planning. Further education can enhance their confidence in areas such as safety and risk management, interdisciplinary learning design, and help set up PROL as a core educational practice rather than an optional activity. Institutional support through strategic planning, sufficient funding, and worthwhile recognition can transform isolated initiatives into systemic practices, ensuring all students benefit and all teachers feel genuinely supported. Many teachers in my study highlighted the importance of collaborating with colleagues, whether through co-planning excursions, sharing lesson ideas, or debriefing after outdoor sessions. Collaboration allowed for shared responsibility, fostered interdisciplinary connections, and promoted a school culture of collective ownership. Additionally, many participant-teachers recognised that by engaging with the broader school community, further opportunities for resource sharing, supervision, and meaningful real-world engagement for their students could be realised.

Theme 3: Institutional constraints

The challenges faced by the nine teachers in my study implementing PROL in Viet Nam closely mirror those identified in schools in England (Prince et al., 2026), suggesting that barriers such as curriculum pressure, limited time, staff shortages, supervision concerns, lack of confidence or experience, and insufficient institutional support are cross-contextual rather than nationally specific. Nevertheless, even when the nature of the challenge appeared to be globally shared, the strategies to address these challenges must be tailored to each country's culture and society (Waite, 2020). Furthermore, Sutherland and Legge (2016) argued that challenging, effective outdoor learning could be integrated into school practices provided that teachers intentionally reframe pedagogy, value alternative outcomes, and negotiate institutional constraints.

Among those challenges mentioned above, funding for PROL was a persistent concern for these Vietnamese educators. Many participant-teachers reported that securing and maintaining funding for

these activities is an ongoing challenge. Furthermore, their school has been influenced by the trend of virtual, smart, and innovative technology which demands speed and immediacy. As a result, mindful pedagogies for learning may be neglected. Consequently, outdoor learning often falls short in funding and support compared to that of STEM-focused curricula (Chen et al., 2021). The participant-teachers generally believed that sufficient funding could enhance outdoor learning environments and increase the uptake of these meaningful educational experiences. Some participant-teachers suggested that the Vietnamese government should subsidise the cost of outdoor learning to create more opportunities for public school students to participate. This is an intriguing point that warrants further research because PROL was intentionally developed with sustainability in mind, where teachers utilised local resources effectively for teaching and learning with local places, community knowledge, local issues, and everyday materials rather than expensive specialised materials (Wattchow & Brown, 2011). PROL is intended to be a low-cost or no-cost resource. I advised that the Vietnamese teachers should concentrate on utilising familiar outdoor places effectively to enhance learning, thereby achieving socio-emotional, academic, and wellbeing benefits (Mann, Gray, Truong, et al., 2022).

I was attentive when some participant-teachers expressed the need for school recognition for those who actively incorporated outdoor learning into their professional practices to compensate for their time and effort. This could include rewards or career incentives as they mentioned. In certain situations extrinsic motivation may be more practical and equally important as intrinsic motivation. Increased institutional recognition of outdoor teaching and learning could motivate these teachers and strengthen their professional identity, which is closely linked to the natural environment (Fraulo et al., 2025). To implement this suggestion, adjustments to both school and national policies will be necessary to promote the inclusion of outdoor learning in public schools in Viet Nam (World Bank Group, 2025).

Theme 4: Teachers' apprehensions regarding safety and risk management in the context of outdoor learning

Another issue that caught my participant-teachers' attention was their narratives towards safety and risk management. There was a hesitance when it came to this matter. These understandings had heavily

influenced their attitudes toward outdoor teaching and its frequency. Gaining this insight can help school management develop a strategic plan to mitigate hazards, ideally through a collaborative effort involving the entire school community. There was no verified protocol or formal training for risk and safety management in outdoor settings. This lack of preparation has led many participant-teachers to express fears about health and safety management for outdoor activities. Due to such fears, some participant-teachers chose students for experiential learning excursions based on good character, fearing that misbehaving students could trouble the field trip. However, such situational decisions risk undermining principles of equality and inclusivity for Vietnamese students in outdoor learning. If these concerns persist without intervention, such as a comprehensive safety and risk management plan involving all stakeholders, it may develop into unnecessary anxiety among teachers and staff for low-risk outdoor learning experiences. Despite these challenges, some participant-teachers who conducted outdoor learning with their students revealed a commendable understanding of basic safety protocols and risk management. They often relied on their common sense and problem-solving skills. They realised that they could improvise effectively in response to incidents during outdoor learning sessions, showing resilience and dedication. My participant-teachers were encouraged to embrace the uncertainty of outdoor educational situations as learning opportunities and perceive it as the "common third" in which both teachers and students shared collaboratively enquiry-based outdoor learning experiences (Mygind et al., 2019).

Summary

My research enabled participants to engage in a pedagogical shift towards place-responsive outdoor learning. It directed Vietnamese teachers to forge a connection with their taken-for-granted places, fostering a culture of care and stewardship that underpins locally driven sustainable development. This drove them to actively engage, reflect, and create their own version of PROL within their CoP.

Taken together, these results provided new empirical and theoretical insights by demonstrating how PROL operates as a culturally mediated pedagogy that enhances wellbeing within a centralised education system. This extended existing PROL literature by highlighting teacher agency, affect and

curriculum enactment a concept that was evident in the Vietnamese context and potentially applicable to other urbanised and non-Western contexts.

In the concluding chapter, I present the major research findings and contributions. I address the ultimate research question by proposing recommendations for integrating PROL into the Vietnamese public high school curriculum. Furthermore, I reflect on the research limitations and suggest potential directions for future research.

Chapter 6: Conclusion

Major findings

The challenges experienced by the participant-teachers in implementing outdoor learning in Viet Nam resonate with those reported in the United Kingdom (Prince et al., 2026). As discussed in Chapters 4 and 5, these included curriculum pressure, limited time, staff shortages, supervision concerns, limited confidence or experience, limited opportunities for professional development, and insufficient institutional support. Although these challenges were experienced within the particular conditions of a Vietnamese public high school, their recurrence across different educational contexts suggests that they are not simply local constraints. Rather, they may reflect broader tensions between outdoor and place-responsive pedagogies and the organisational structures, curricular expectations, and professional demands of contemporary schooling. This comparison is important because it shifts the discussion beyond a deficit interpretation of the Vietnamese context. The challenges faced by my participants cannot be understood solely as shortcomings of teachers or as consequences of the Vietnamese educational system; they also reflect structural tensions that may emerge when pedagogies grounded in place, experience, and responsiveness encounter systems organised around time, curriculum coverage, accountability, established routines, and insufficient opportunities for sustained professional learning.

At the same time, the accounts of my participant-teachers reveal considerable professional commitment to working through these tensions. Despite the challenges they encountered, many expressed a desire to integrate place-responsive outdoor learning more regularly into the Vietnamese public high school curriculum and to sustain it as part of their professional practice. Their commitment extended beyond individual experimentation. They expressed interest in working collaboratively with research-based colleagues to plan lessons, exchange knowledge and experiences, and develop strategies for extending their pedagogical practice. Several advocated for a local community of practice (CoP) that could provide an ongoing space for teachers to share experiences, critically examine emerging outdoor pedagogies, explore sustainability-oriented learning, adapt PROL across disciplines, and collaborate within their school communities. These accounts suggest that teacher agency in PROL is not adequately understood

as individual capacity alone. It is relational and collective, shaped by the opportunities teachers have to participate, collaborate, experiment, and develop professional knowledge with others.

This has implications for how PROL might be situated within the Vietnamese General Education Programme (GEP). Rather than introducing PROL as an additional programme that competes with existing curriculum demands, it could be understood as one way of enriching curriculum-integrated learning through sustained engagement with the natural, cultural, and social landscapes in which Vietnamese students and teachers live. Such an approach is potentially compatible with the GEP's emphasis on local relevance and the development of learners' competencies (Ministry of Education and Training, 2018). It also resonates with Wattchow and Brown's (2011) pedagogy of place, particularly their emphasis on developing relationships with significant places rather than treating outdoor environments merely as settings for predetermined activities. The possibility I see here is therefore not simply the insertion of an outdoor pedagogy into the existing curriculum, but a reorientation of how curriculum can be interpreted and enacted through local places.

A future possibility is that local PROL CoP could provide an important social infrastructure for this reorientation. Rather than functioning primarily as a mechanism for disseminating a prescribed pedagogy, such a community could enable Vietnamese educators to develop and negotiate PROL collectively, drawing on their own disciplinary knowledge, professional experiences, and knowledge of local places. In this sense, professional development becomes an ongoing process of participation and becoming (Lave & Wenger, 1991; Wenger, 1998), rather than a one-off transfer of pedagogical knowledge. Such an approach may also cultivate a culture of care, collaboration, and stewardship through which Vietnamese teachers can explore how place-responsive practice might contribute to sustainability in ways that are meaningful within their own communities. The development of a local PROL CoP could therefore support the emergence of a distinctly Vietnamese enactment of place-responsive pedagogy rather than the uncritical transfer of an approach developed elsewhere (Nguyen & Pham, 2023).

An important tension emerged, however, between my participant-teachers' expressed appreciation of embodied and reflective approaches and their reported pedagogical enactments. Although the participant-teachers valued these dimensions of PROL and experienced them during the workshops, they did not consistently incorporate them into their teaching practice. I interpret this tension not as evidence of a failure to adopt the pedagogy, but as an indication that experiencing and appreciating embodied and reflective learning does not necessarily translate into its sustained pedagogical enactment. Their understandings and enactments of place-responsive pedagogy were mediated by their existing professional practices and by the institutional conditions within which those practices occurred. This distinction is important. It suggests that developing teachers' awareness of a pedagogy, even when accompanied by direct experience, does not necessarily result in its straightforward or sustained enactment. Teachers interpret and reconstitute new pedagogical possibilities through what they already know, what they are accustomed to doing, what their contexts permit, and what they perceive as educationally and institutionally feasible.

This tension was particularly evident in relation to the four signposts of place-responsive pedagogy identified by Wattchow and Brown (2011). I noticed that most participants appeared more comfortable with signposts three and four, which involve apprenticing to the outdoors and expressing experiences of place through creative representation and connections to sustainability. By contrast, some participants found signposts one and two more challenging, particularly those involving slowing down, cultivating mindful and embodied presence, and attending to local narratives and the histories and significance of place. This difference is theoretically significant. It suggests that not all forms of place responsiveness are equally familiar or accessible within teachers' existing pedagogical repertoires. Practices that involve observable activities, creative production, or explicit sustainability themes may be more readily incorporated into existing curriculum structures, whereas practices requiring teachers and learners to slow down, attend bodily to place, listen to local narratives, and dwell with uncertainty may require a more fundamental reorientation of what counts as teaching and learning.

This observation also led me to reconsider the relationship between teacher agency and place. Drawing on Vygotsky's (1978) concept of the zone of proximal development, the participants' accounts suggest that there were aspects of place-responsive practice they could enact with relative confidence and others for which collaboration, modelling, and support remained important. However, I do not interpret this simply as a gap in teachers' individual competence. Rather, it points towards a relational understanding of professional capability: what teachers can enact is shaped by their interactions with colleagues, students, professional knowledge, institutional expectations, and the particular environments in which learning occurs. It is also shaped by the professional learning opportunities and support available from schools and government, which may enable or constrain teachers' development of place-responsive practice. From this perspective, the teacher is neither the sole source of knowledge nor a passive recipient of what the environment offers.

Instead, place-responsive outdoor learning can be understood as involving a reciprocal relationship between teacher agency and the agency of place. Teachers can organise conditions for engagement, invite observation and inquiry, facilitate reflection and sense-making, attend to cultural and emotional safety, model participation, and support learners to extend their capabilities. Yet teachers cannot fully control the environment, determine what it will afford, anticipate every learner's response, possess all knowledge about a place, or substitute their own explanations for learners' direct encounters with it. The environment, in turn, shapes what becomes available for noticing, questioning, experiencing, and interpreting. This does not mean that place independently "teaches" in a literal sense. Rather, it suggests that educational possibilities emerge relationally through encounters among teachers, learners, communities, material environments, and the histories and meanings associated with particular places.

This interpretation further develops the conceptualisation of place as a "co-teacher" discussed throughout this thesis. This conceptualisation does not imply that places possess intentionality in the same sense as human teachers. Rather, it draws attention to the ways in which the characteristics, affordances, histories, stories, and material conditions of a place participate in shaping educational experience. The teacher's role consequently involves working with these possibilities rather than

attempting to control them. Place-responsive pedagogy therefore requires both pedagogical intentionality and openness to what a particular place may make possible.

Alongside these challenges, participants' accounts also drew attention to the significance of PROL for their sense of wellbeing. Rather than treating wellbeing as a measurable outcome produced by PROL, I interpret these accounts as indicating that meaningful engagement with place, colleagues, and professional learning could become an important source of connection, renewal, and professional meaning for teachers. This finding invites a broader consideration of teacher professional development. If professional learning is understood only as the acquisition of competencies required to meet curriculum or policy expectations, dimensions of teachers' relational, embodied, and affective experience can remain marginal. The accounts in this study instead suggest that professional learning may also be a space in which teachers develop relationships with colleagues, places, pedagogical possibilities, and their own sense of professional purpose.

This has implications for social sustainability. Sustaining education is not only a matter of maintaining programmes or implementing policies; it also depends on the conditions under which teachers can continue to participate meaningfully in their profession. Supporting teachers' ongoing learning, collaboration, wellbeing, and professional agency may therefore contribute to the sustainability of the educational workforce and, in turn, to the possibility of providing equitable learning opportunities for students. This interpretation resonates with recent scholarship highlighting the importance of teacher wellbeing and continuing professional learning (Frances et al., 2025; Guzmán-Martínez et al., 2026; Wang et al., 2026).

The findings consequently lead me to argue for a conception of PROL that extends beyond a pedagogical technique. PROL potentially offers a way of reconsidering relationships among curriculum, place, knowledge, teachers, learners, including how the local environment contributes to educational experience (Jickling et al., 2023). Its significance lies not simply in providing students with opportunities to learn outdoors, but in creating possibilities for education to become more attentive to

the places in which learning is situated. Such a reorientation may cultivate greater mindfulness, belonging, connection, care, and responsiveness to local contexts. However, these possibilities should not be assumed to follow automatically from introducing PROL. They depend upon the professional, institutional, curricular, and policy conditions through which teachers are able to interpret and enact the pedagogy.

For this reason, I argue that supporting PROL in Viet Nam requires more than encouraging individual teachers to adopt an innovative pedagogy. It requires conditions that enable teachers to experiment, collaborate, reflect, and sustain their practice. Policy guidance, professional learning, leadership support, and opportunities for ongoing collegial participation are therefore interconnected rather than separate requirements (Nguyen et al., 2025; World Bank Group, 2023, 2025). Based on the findings of this study, I would advise the Viet Nam Ministry of Education and Training to provide clearer guidance on the rationale and possible approaches for incorporating place-responsive outdoor learning within the existing national curriculum. Longer-term policy support could further create continuity and more equitable opportunities for schools and teachers to develop such practices. Importantly, however, policy should provide enabling conditions rather than prescribe a uniform model. A genuinely place-responsive approach requires sufficient flexibility for teachers and schools to interpret and reconstitute PROL in relation to their own learners, disciplines, communities, and places.

Ultimately, the accounts of my participant-teachers suggest that the possibility of PROL in Vietnamese education lies not in overcoming every constraint before practice can begin, but in creating conditions in which teachers can work creatively and collectively within those constraints. Their experiences illuminate both the persistence of structural barriers and the capacity of teachers to imagine alternative ways of relating curriculum to place. The challenge for educational policy is therefore not simply to ask whether teachers can implement PROL, but what kinds of professional, institutional, and curricular conditions would enable them to develop it as a sustained, locally meaningful practice.

Contributions

The thesis makes a significant theoretical contribution by introducing and critically analysing place-responsive pedagogy, which is implemented through experiential learning and career education within the 2018 General Education Programme. It also addresses the tensions between competency-based aspirations and their practical implementation. The study makes a substantial contribution by supporting the participant-teachers in developing their knowledge, skills and attitudes relevant to implementing place-responsive outdoor learning in Viet Nam, an urbanised, non-Western and centralised educational context that has been underrepresented in the literature.

The study empirically and methodologically illustrates that professional development workshops are effective in enhancing the participant-teachers' knowledge, skills, and confidence. This enables them to effectively adopt and adapt place-responsive outdoor learning and collaborative lesson planning strategies within their unique educational contexts.

The research offers practical suggestions for integrating place-responsive outdoor learning into the curriculum in a more sustainable manner. It underscores the potential of this approach to enhance teachers' connections with their local environments and to cultivate a culture of care and wellbeing.

The contribution extends beyond merely suggesting PROL as an alternative pedagogical approach; it delineates the necessary conditions for its contextual relevance and long-term sustainability within the Vietnamese general education.

Implications

RQ5. How might the learning from this study inform the integration of place-responsive outdoor learning into the Vietnamese public high school curriculum?

In addressing this inquiry, I concentrated on the ambitions of the participant-teachers to integrate PROL into the Vietnamese public high school curriculum, both within their school community and across the nation. The following research implications for different audiences regarding the integration of PROL into the Vietnamese GEP are informed by the participant-teachers' viewpoints and motivations.

Implications for teachers

The participant-teachers are encouraged to:

- Adopt place-responsive outdoor learning (PROL) as a transformative approach to their teaching practices. They are encouraged to increase the emphasis on sensory and embodied learning to promote holistic learning experiences for their students. They are also encouraged to prioritise environmental awareness and stewardship in their teaching.
- Develop a stronger connection with their local significant places. As their understandings of the values of PROL extended beyond physical benefits to mental wellbeing and social skills development, the participant-teachers are expected to move beyond generic outdoor learning activities towards more meaningful and place-responsive outdoor learning experiences.
- Engage in collaborative lesson planning (CLP). The participant-teachers are encouraged to participate actively in CLP, particularly in new and mandated curriculum areas such as experiential learning and career education, to develop their lesson planning skills and benefit from exchanging perspectives with colleagues.
- Address disagreements constructively. Rather than avoiding disagreements to prevent conflict, they are encouraged to engage with differing perspectives constructively to improve the quality of CLP.
- Use CLP as an opportunity for professional learning. They are encouraged to recognise CLP as a space for exchanging ideas, developing pedagogical skills, and supporting professional growth.

- Develop a local PROL community of practice (CoP). The participant-teachers are encouraged to establish and participate in a local PROL CoP to support ongoing learning and collaboration within and beyond their school community.
- Strengthen interdisciplinary collaboration. Working with colleagues across different subject areas may broaden their pedagogical perspectives, strengthen their CoP, and support their confidence in implementing PROL with students.
- Engage in ongoing professional learning. The workshops provided opportunities for the participant-teachers to develop their knowledge, skills, and attitudes relevant to PROL. Their appreciation of creative activities and reflection, alongside their interest in further professional development, suggests the value they placed on continuing to develop their understanding and practice. Further professional learning could build on these foundations.
- Take an active role in developing and adapting PROL. Implementing PROL requires on going engagement with new pedagogical knowledge, skills, and dispositions. The participant-teachers can develop their capacity by experimenting with creative approaches, reflecting critically on their experiences, collaborating with colleagues in lesson planning, and engaging in further professional learning. Rather than being passive recipients of professional development, they can interpret, adapt, and develop the pedagogy in relation to their own teaching contexts.
- Contribute to the strategic development of PROL. The participant-teachers are encouraged to take an active role in identifying implementation challenges and advocating for appropriate school-level management and institutional support to address them.

Implications for schools

- Schools should actively encourage and support the enthusiasm of individual teachers to implement changes at the school level, particularly in PROL initiatives.
- School principals must create a supportive environment for implementing PROL, acknowledging their critical role in effective leadership for the success of PROL.

- School management boards must take a proactive role in endorsing teachers as they develop tailored PROL plans. It is crucial to highlight the significance of support from colleagues and the school community, alongside the dissemination of best practices and resources.
- Schools must value the unique contributions of all teachers, encouraging them to customise learning content and offering flexibility in collaborative lesson planning and co-teaching sessions.
- Schools must empower teachers by permitting them to integrate PROL into their professional practice, as this can significantly enhance their proactivity and confidence in creating PROL opportunities for students.
- It is imperative that the whole school, with a strong emphasis on student engagement, fully supports the implementation of PROL to ensure its effectiveness.
- In order to effectively facilitate PROL, schools must proactively address a range of constraints. These include navigating scheduling conflicts, managing a packed curriculum, and alleviating the burden of heavy workloads. Additionally, schools need to ensure equitable workload distribution to prevent potential conflicts among staff. Inadequate funding remains a significant hurdle that must be overcome, as does the imperative of ensuring safety within the educational environment. By tackling these challenges, schools can create a more conducive atmosphere for promoting PROL.

Implications for educational policymakers

- Policy makers should consider integrating PROL into the existing General Education Programme as a potential strategy to enhance its implementation in public schools. Additionally, increasing the frequency of PROL sessions or dedicating a third semester exclusively to PROL are viable options that warrant consideration.
- Policy makers should also consider implementing initiatives that enable students to develop a comprehensive PROL portfolio and earn a PROL certificate. Such measures would significantly enhance students' university applications, providing them with a competitive edge in the admissions process.

- Policy makers should consider mandating PROL training for Vietnamese public school teachers as an integral part of their annual professional development. This initiative would not only enhance the confidence of educators but also ensure the sustained implementation of PROL practices within the educational system.
- Policy makers should also consider empowering teachers to take the lead in facilitating collaborative lesson planning (CLP) and place-responsive outdoor learning (PROL). This approach, supported by the Department of Education (DOE) and the Ministry of Education and Training (MOET), can ensure the sustainable implementation of PROL initiatives.
- Policy makers are encouraged to create a professional learning community (PROL CoP) on a national scale, employing community-based participatory action research. This initiative aims to foster collaboration, facilitate resource sharing, and support peer mentoring, thereby sustaining the momentum of ongoing efforts.

Limitations

Access and participant recruitment

Gaining access to Vietnamese public schools and teachers was initially challenging because my professional networks were primarily situated within the tertiary education sector. The study therefore relied on a relatively small, purposively selected group of nine teacher participants. While this sample was appropriate for the workshop-based qualitative inquiry, it cannot be considered representative of the broader Vietnamese teaching workforce. Similarly, the empirical data were generated within a single urban public school. Although the school has established academic standing and relatively high teacher qualifications, these characteristics do not necessarily reflect the diversity of public schools across Viet Nam, particularly schools in rural, remote, or less-resourced contexts. The transferability of the findings should therefore be considered in relation to comparable urban public schools rather than the Vietnamese school system as a whole.

Scope of the intervention

Another limitation concerns the context in which the intervention was implemented. The programme was situated within the mandated component of experiential learning and career education within the 2018 General Education Programme rather than being integrated into other core subject areas such as science, geography, or language education. As this is a relatively new curriculum area, the findings primarily bring attention to the potential and challenges of place-responsive outdoor learning within this specific curricular context. They therefore provide limited evidence regarding how the approach might operate when embedded systematically across established subject areas.

Ethical and practical constraints on professional development

The professional development component was also constrained by the ethical parameters governing the study. The amount of contact hours and professional learning time that could be provided to the participant-teachers was less than originally anticipated in the research proposal. This limited duration may have constrained opportunities for the participant-teachers to develop, practise, reflect on, and refine place-responsive outdoor learning. Consequently, the study provides stronger evidence of the teachers' responses to an initial professional learning intervention than of sustained changes in pedagogical practice over time.

Researcher positionality and interpretive scope

Finally, as an inductive interpretive qualitative study, the findings are necessarily shaped by my positionality, methodological choices, and professional experiences. My interpretation was informed by my qualitative research training in Sweden and New Zealand, my teaching experience in Viet Nam and Sweden, and my extensive professional experience in urban Vietnamese educational contexts. My perspectives as a global citizen, including commitments to cultural diversity, peace and non-violence, human rights, gender equality, education for sustainable development, and sustainable lifestyles, also informed how I approached the research questions, interpreted the participants' experiences, and understood the potential of place-responsive pedagogy. Rather than treating these influences as fully eliminable sources of bias, I recognise them as part of the interpretive conditions through which the

research was conducted. The findings should therefore be understood as a situated interpretation rather than an objective or universally generalisable account of place-responsive outdoor learning in Viet Nam.

Recommendations for future research

As I draw my doctoral studies to a close, I find my future research agenda crystallising around a pivotal theme: Reimagining the Vietnamese General Education Programme through the lens of place-responsive pedagogy. This approach aims to cultivate meaningful learning experiences, enhance learners' holistic wellbeing, and contribute to the development of sustainable communities across Viet Nam. My thesis has highlighted the significant potential of place-responsive outdoor learning, while also delineating the essential conditions required for its sustainable implementation. Consequently, I envision several interconnected avenues for future research that will explore these themes further.

To begin with, I intend to share a summary of my doctoral research in Vietnamese with the participant-teachers and the school principal, followed by the Ho Chi Minh City Department of Education and the Viet Nam Ministry of Education and Training. With assistance from my local advisor, I aim to make the research findings accessible to these Vietnamese stakeholders and acknowledge the contributions of those who made the study possible.

The next step is to consolidate and disseminate my doctoral research more widely. I intend to develop three journal manuscripts that incorporate the examiners' feedback and present the findings at a national conference in Viet Nam or, potentially, a regional conference in 2027. This strategy aims to extend the reach of the thesis beyond its original research context and contribute to wider discussions of place-responsive outdoor learning and its integration into the Vietnamese General Education Programme (GEP).

Furthermore, I am keen to explore the realm of Vietnamese teacher education. My proposal involves the creation and assessment of a tertiary-level course focused on place-responsive outdoor learning (PROL) theories and practices, integrated into initial teacher education. Student-teachers would engage

with research and community partners to craft PROL lesson plans tailored to their respective subject areas, while also engaging in critical reflection on their educational experiences. This approach would enable me to thoroughly investigate how Vietnamese student-teachers acquire requisite knowledge, confidence, and professional skills to effectively implement PROL in their teaching.

Furthermore, I aim to create a Vietnamese PROL community of practice by employing community-based participatory action research. This initiative would unite students, caregivers, teachers, and school leaders as co-researchers to investigate how PROL can be tailored to local contexts and sustained within schools and communities. This approach would broaden the scope of my PhD from merely studying implementation to actively facilitating collaborative transformation.

Ultimately, at a strategic policy level, I aspire to collaborate with key stakeholders, such as the Ministry of Education and Training to initiate a longitudinal research initiative. Spanning around ten years, this programme could examine how place-responsive outdoor learning might contribute to the evolution of a more holistic curriculum during a future revitalisation of the Vietnamese GEP. This endeavour would integrate insights from Ho Chi Minh ideology, neocolonialism, environmental psychology, place-responsive pedagogy, teacher professional development theory, and community learning and development theory to move my work toward a much more explicitly Vietnamese theorisation of PROL.

My long-term research agenda encompasses a comprehensive journey from comprehending PROL within the Vietnamese context to equipping Vietnamese educators, fostering communities of practice, and ultimately influencing Vietnamese curriculum and policy. My endeavour extends beyond merely broadening PROL as a pedagogical method; it is to explore how it can be rendered sustainable, locally relevant, and accessible to public-school students throughout Viet Nam.

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Appendices

Appendix 1: Ethics approval letter

Auckland University of Technology Ethics Committee (AUTEC)

22 May 2024

Mike Brown
Faculty of Health and Environmental Sciences

Dear Mike

Re Ethics Application: **24/9 Vietnamese public high school teachers' perspectives on integrating place-responsive outdoor learning into the general education programme**

Thank you for your responses to AUTEC's conditions.

Your ethics application has been approved for three years until 21 May 2027.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC.
2. All public facing documents must have the AUTEC approval number and be of a high standard of spelling and grammar. Dates on the Information Sheet(s) and Consent Form(s) must be consistent.
3. Any amendments to the project must be approved by AUTEC prior to being implemented.
4. A progress report is due annually on the anniversary of the approval date.
5. A final report is due at the expiration of the approval period, or, upon completion of project.
6. Any serious or adverse events must be reported to AUTEC, this includes unforeseen issues that might affect continued ethical acceptability of the project.
7. AUTEC grants ethical approval only. You are responsible for obtaining management permission for access from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

The application number and title need to be referenced on all correspondence related to this project.

All forms are available online http://www.aut.ac.nz/research/researchethics

For any enquiries, please contact ethics@aut.ac.nz
(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: kvs5258@autuni.ac.nz

Auckland University of Technology, D-88, Private Bag 92006, Auckland 1142, New Zealand.
T: +64 9 921 9999 ext. 8316: E: ethics@aut.ac.nz: www.aut.ac.nz/researchethics

Appendix 2: Data matrix

Data components	Data types	Who	When	Where	Why
Pre-workshops	Face-to-face semi-structured interviews	9 public high school teachers	Jul 2024	At the school site	To understand teachers' existing knowledge and practices of outdoor learning and their school culture of lesson planning and their facilitation of outdoor learning with their students
Post-workshops	Group reflection 1	9 public high school teachers	After the third workshop	At the school site	To understand teachers' knowledge of place-responsive outdoor learning (PROL) and their collaborative lesson planning (CLP) as a result of their workshop participation
	Group reflection 2		After the fourth workshop		
	Group reflection 3	8 public high school teachers	Aug 2024 (four weeks after the fifth workshop)	Google Docs	To revisit teachers' understanding of PROL To learn their plans on implementing PROL in the coming semester
	Online semi-structured interviews	9 public high school teachers	Nov 2024 (four months after the workshops)	MS Teams or Gmail	To understand if there is a shift in: a) the teachers' perspectives and practices of PROL; b) the sustainability of their CLP practices; c) learning outcomes of their PROL practices; d) affordances and constraints of their PROL practices; e) possibilities of integrating PROL into

					the Vietnamese public high school curriculum
During data generation process	Analytic memos	The researcher	Jun 2024 – May 2025	MS Word	To think and write and think further about the process of data generation and interpretation, and the way the teacher participants making sense of PROL and their CLP practices with their colleagues

Appendix 3: Pre and post workshop interview questions

Interview 1: Pre-workshops in July 2024

Icebreaker questions

1. Tell me about your teaching career. How long have you been a teacher? Why did you decide to become a teacher?
2. What is your teaching philosophy?
3. What will it be like if you have a day in the outdoors?

Regarding the potential contribution of outdoor learning

4. From your perspective, what is outdoor learning?
5. Provide me with an experience you had with your students learning outside the classroom, if any. Why did you do it this way, and what was the outcome of this?
6. Can you share some positive things about outdoor learning and why they are important to you based on your own experience?
7. Are there any challenges with outdoor learning? How could they be tackled, in your opinion?

Regarding the collaborative lesson planning

8. Have you experienced collaborative lesson planning before? What did you gain from that collaborative process, if any?
9. What is your expectation from being part of a group in the collaborative process?
10. Is there anything else you would like to discuss?

Interview 2: Post-workshops in November 2024

Regarding the potential contribution of outdoor learning

1. So it has been four months since the workshops, what is outdoor learning to you? Has your perspective on outdoor learning changed? What makes you think so?
2. How did the four signposts to a place-responsive pedagogy introduced in the workshops help you navigate and design your place-responsive outdoor learning module?

Regarding the learning outcomes of the place-responsive outdoor learning module

3. How did place-responsive outdoor learning impact the students?
4. To what extent do you think your practice of place-responsive outdoor learning meets the learning outcomes of experiential learning and career education?
5. What else could be done to enhance the learning experiences for students using experiential learning and career education?

Regarding the affordances and constraints experienced by Vietnamese public high school teachers

6. What were some positive things and challenges of integrating place-responsive outdoor learningg into your teaching practices with your students that you have experienced so far? If you did not conduct any outdoor learning sessions with your students, what might be the barriers to implementing PROL with your students?
7. What could be done to enhance the uptake of outdoor learning for Vietnamese public high school students? A. in Your school. B. nationwide.
8. What knowledge, skills, and attitudes would help you feel more confident in leading outdoor learning sessions with your students?

Regarding the collaborative lesson planning

9. What was one highlight from the collaborative lesson planning in the workshops? Have you implemented the collaborative lesson plans in your sessions? What could be done to enhance the process of collaborative lesson planning?
10. Did you continue the collaborative lesson planning with your colleagues after the workshops? Tell me more…

Regarding the possibility of integration of place-responsive outdoor learning into the Vietnamese public high school curriculum

11. After a semester of integrating place-responsive outdoor learning into your teaching practices with your students, would you change anything about that?
12. How would you convince your peer teachers in your school to integrate place-responsive outdoor learning into a particular subject or learning area they are teaching?

Appendix 4: Teachers' group reflection questions

Focus groups 1 & 2: 10-minute reflection after workshops 3 and 4

1. What was new learning for you from the first workshop that you have participated in?
2. Thinking about the dynamic of your collaborative team. What contribution are you making? Are there any areas would you like others to contribute more in?

Focus group 3: 20-minute reflection after workshop 5

1. What would you change in your teaching as a result of the professional development workshops that you have participated in?
2. Have you planned to integrate place-responsive outdoor learning into your own teaching practices for the upcoming semester? Why/ why not?
3. What additional knowledge or support do you need from the facilitator/ your teammates / your school?
4. What else could enhance your experience in the workshops? What (if anything) could be left out?

Appendix 5: Research invitation

An invitation to take part in a doctoral research

Project Title

Vietnamese public high school teachers' perspectives on integrating place-responsive outdoor learning into the general education programme.

Research purpose

My aim is to investigate Vietnamese public high school teachers' understanding of the benefits of outdoor learning, your experiences of co-design lesson planning, and your perspectives on integrating place-responsive outdoor learning into the general education programme. You will be actively involved in the data-generating process as a teacher-collaborator which includes two hours of semi-structured interviews, ten hours of attending workshops, and 50 minutes of focus groups within the workshops. The pre-workshop interview will be about your existing knowledge of outdoor learning and your experience of co-designing lesson planning. The workshops will be about an introduction and demonstration of place-responsive outdoor learning and your own practices of lesson planning to integrate place-responsive outdoor learning into the compulsory learning module experiential learning and career orientation for year 10 students with other teacher participants. There will be four focus groups within the workshops to allow you to reflect on your learning. The post-workshop interview will be about your own teaching practices of the target learning module with your students over a semester. You are encouraged to integrate place-responsive outdoor learning into your own teaching practices if you wish to do so.

You are invited to attend

- 2 individual interviews (2 hours in total)
- 5 workshops (10 hours in total); workshops 2-5 will include a focus group discussion of between 10-20 minutes

Participant criteria

- Have lived and worked as a teacher for a public high school in Ho Chi Minh City
- Have been assigned to teach the experiential learning and career orientation module for year 10 students
- Have an interest in integrating outdoor learning into your teaching practices
- Have an interest in learning design to implement a new way of approaching teaching within the experiential learning and career orientation module

Research benefits

This research will potentially increase our knowledge about place-responsive outdoor learning and at the same time equip you with adequate resources to teach in the outdoors utilising a pedagogy of place. You will have access to the workshop handouts during the workshops. At the end of the co-design workshops, you will have access to about 20 place-responsive outdoor learning activities that all participants have contributed to during the co-design process. The activities can be utilised in your own outdoor teaching practices for the experiential and career orientation module.

There will be no discrimination if you decide not to participate in the research. There will be no advantages or disadvantages for you regardless of your choice of participation or not.

The researcher will benefit from this research as it fulfils part of the requirements for attaining their Doctor of Philosophy (PhD) degree. The researcher will be enacting co-design workshops with Vietnamese teachers. This will better position the researcher to continue carrying out further research with this social group in the future.

To the wider community, through place-responsive outdoor learning, Vietnamese school students will experience a different learning environment which can enrich their well-being, nurture their Vietnamese core values, and build a strong connection between them and the places they choose to inhabit.

Researcher Contact Details

Nhu Thi Yen Nguyen, nhu.nguyen@autuni.ac.nz, (+84) 903 192 144

Approved by the Auckland University of Technology Ethics Committee on *22 May 2024*, AUTEC Reference number *2409*.



Appendix 6: Information sheet for the school principal and principal's permission to access school and staff

AUT
TE WĀNANGA ARONUI O TĀMAKI MAKAU RAU

Research Information Sheet for School Principal

Date Information Sheet Produced:

08 February 2024

Project Title

Vietnamese public high school teachers' perspectives on integrating place-responsive outdoor learning into the general education programme.

An Invitation

Hi. My name is Nhu Thi Yen Nguyen. I am a PhD candidate at the School of Sport and Recreation, Faculty of Health and Environmental Sciences, Auckland University of Technology (AUT), New Zealand. I am currently undertaking a research at AUT in fulfilment of the requirement of the degree of Doctor of Philosophy. My supervisors are Associate Professor Mike Brown and Dr Denise Atkins. This research study aims to understand Vietnamese public high school teachers' perspectives on the potential benefits of outdoor learning, the co-design lesson planning process, and integrating place-responsive outdoor learning into the experiential learning and career orientation module for year 10 students. I am writing this invitation to seek your approval to allow me to conduct my research at your school. Should you grant permission, please provide your signature in the principal's permission form attached below. I would request that your school administrator share the attached research advertisement with your teaching staff. If your school are happy to share this, and if anyone is interested, they can reach me on the email on the research advertisement (nhu.nguyen@autuni.ac.nz) and then I will get back to them with more information.

Research purpose

My aim is to investigate Vietnamese public high school teachers' understanding of the benefits of outdoor learning, their experiences of co-design lesson planning, and their perspectives on integrating place-responsive outdoor learning into the general education programme. They will be actively involved in the data-generating process as a teacher-collaborator which includes two hours of semi-structured interviews and ten hours of attending workshops. The pre-workshop interview will be about their existing knowledge of outdoor learning and their experiences of co-designing lesson planning. The workshops will be about an introduction and demonstration of place-responsive outdoor learning and their own practices of lesson planning to integrate place-responsive outdoor learning into the compulsory learning module experiential learning and career orientation for year 10 students with other teacher participants. There will be four focus groups within the workshops to give them an opportunity to reflect on their learning. The post-workshop interview will be about their own teaching practices of the target learning module with their students over a semester. They are encouraged to integrate place-responsive outdoor learning into their own teaching practices if they wish to do so.

Participant criteria

The participants will:

- have lived in Ho Chi Minh City, Viet Nam; and
- have worked as a permanent teacher at a public high school; and
- be assigned to teach the experiential learning and career orientation module for year 10 students; and
- have an interest in integrating outdoor learning into their teaching practices; and
- have an interest in learning design to implement a new way of approaching teaching within the experiential learning and career orientation module.

Research benefits

This research will enrich your teachers' knowledge about the benefits of place-responsive outdoor learning and at the same time equip them with adequate resources to gain their confidence in conducting teaching in the outdoors utilising a pedagogy of place. At the end of the co-design workshops, they will have access to about 20 place-responsive outdoor learning activities that all participants have contributed to during the co-design process. The activities can be utilised in their outdoor teaching practices for the experiential and career orientation module.

This research will enhance the well-being of teachers and students as a result of meaningful and democratic learning experiences.

Research design

Components	What	Who	When	Where	How
1	Pre-workshop interviews about teachers' existing understanding of outdoor learning and their experiences in co-design lesson planning.	The researcher will interview the teacher participants individually.	01 - 14 July 2024; approximately an hour per interview	A public high school, Ho Chi Minh City, Viet Nam	Face to face
2	5 workshops about the place-responsive outdoor learning and teachers practise on planning lessons for the compulsory module of experiential learning and career orientation for Year 10 utilising the four signposts to a place-responsive pedagogy.	The teachers will participate in the workshops facilitated by the researcher.	15 - 19 July 2024; each workshop last in 2 hours; total time of workshops: 10 hours.	The school ground, the park near school, and the school neighbourhood.	Face to face
3	3 focus groups during the workshops about their learning from the previous workshops at the end 3, 4, and 5.	The teacher participants will reflect in groups of three.	16 - 19 July 2024; ranged between 10 and 20 minutes	The school ground, the park near school. Online	Face to face, happen within the workshop agenda and online
4	Post-workshop interviews about the teachers' own practices of integrating place-responsive outdoor learning into the target learning module after a semester	The researcher will interview the teacher participants individually.	18 - 30 November 2024; approximately an hour per interview	Online	Conference call via Microsoft Teams.

The total time commitment for the teacher participants is approximately 12 hours.

How will my privacy be protected?

The school's name will be omitted or revealed as advised by the school principal in the permission form. What happens in the workshops will remain confidential. The interviews and focus groups will be audio recorded and will be transcribed verbatim (word-for-word) and then translated into English for data analysis. No real names or other identifiable information will be used in the transcriptions to protect your confidentiality. The participant's identity will never be revealed in any publications or presentations arising from this study. Apart from the researcher, and the researcher's supervisors, no one else will have access to this information. All data, including Consent Forms, will be kept secure and separated on AUT One Drive and destroyed six years after the completion of the study.

Researcher Contact Details:

Nhu Thi Yen Nguyen, nhu.nguyen@autuni.ac.nz, (+84) 903 192 144 / (+64) 210 835 3341

Project Supervisors Contact Details:

Associate Professor Mike Brown, mike.brown@aut.ac.nz, (+649) 921 9999 ext 8387.

Dr Denise Atkins, denise.atkins@aut.ac.nz, (+649) 921 9999 ext 7616

Local Advisor Contact Details:

Dr Phan The Hung, hung.pt@vlu.edu.vn, (+84) 908 181 381

The role of the local advisor is to assist the researcher with responding to challenges, problems, and questions that arise in the course of conducting research in Ho Chi Minh City, Viet Nam.

The AUTEC Secretariat Contact Details:

Liz Binns, liz.binns@aut.ac.nz, (+649) 921 9999 ext 6038.

Approved by the Auckland University of Technology Ethics Committee on *22 May 2024,* AUTEC Reference number *2409*.

Principal's permission for the researcher to access school staff and facilities.

Project title: ***Vietnamese public high school teachers' perspectives on integrating place-responsive outdoor learning into the general education programme***

Project Supervisors: ***Associate Professor Mike Brown, Dr Denise Atkins***

Researcher: ***Nhu Thi Yen Nguyen, BA MA***

- ○ I have read and understood the information provided about this research project in the Research Information Sheet dated 08 February 2024.
- ○ I give permission for the researcher to undertake research within the ..... High School.
- ○ I give permission for the researcher to access the staff of the ..... High School.
- ○ I confirm that I do not have any influence on the teachers' choices to take part in this study. Their participation in this study is voluntary and those who wish to not be involved in this study will not be disadvantaged in any way by the school management.
- ○ I wish to reveal the school's name in any publication arising from this research (please tick one): Yes○ No○
- ○ I wish to receive a summary of the research results (please tick one): Yes○ No○

Principal's signature: .....

Principal's name: .....

Principal's Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on *22 May 2024*

AUTEC Reference number *2409*.

Note: The head of the organisation should retain a copy of this form.

Appendix 7: Participant information sheet



Participant Information Sheet

Date Information Sheet Produced:

08 February 2024

Project Title

Vietnamese public high school teachers' perspectives on integrating place-responsive outdoor learning into the general education programme.

An Invitation

Hi. My name is Nhu Thi Yen Nguyen. I am a PhD candidate at the School of Sport and Recreation, Faculty of Health and Environmental Sciences, Auckland University of Technology (AUT), New Zealand. I would like to invite you to participate in a research currently being undertaken at AUT in fulfilment of the requirement of the Degree of Doctor of Philosophy. My supervisors are Associate Professor Mike Brown and Dr Denise Atkins. This research study aims to understand Vietnamese public high school teachers' perspectives on the potential benefits of outdoor learning, the co-design lesson planning process, and integrating place-responsive outdoor learning into the experiential learning and career orientation module for year 10 students. The means of communication during data collection is Vietnamese.

What is the purpose of this research?

My aim is to investigate Vietnamese public high school teachers' understanding of the benefits of outdoor learning, your experiences of co-design lesson planning, and your perspectives on integrating place-responsive outdoor learning into the general education programme. You will be actively involved in the data-generating process as a teacher-collaborator which includes two hours of semi-structured interviews and ten hours of attending workshops. The pre-workshop interview will be about your existing knowledge of outdoor learning and your experience of co-design lesson planning. The workshops will be about an introduction and demonstration of place-responsive outdoor learning and your own practices of lesson planning to integrate place-responsive outdoor learning into the compulsory learning module experiential learning and career orientation for year 10 students with other teacher participants. There will be four focus groups within the workshops to give you an opportunity to reflect on your learning. The post-workshop interview will be about your own teaching practices of the target learning module with your students over a semester. You are encouraged to integrate place-responsive outdoor learning into your own teaching practices if you wish to do so.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate in this research study because the principal of your school has agreed to allow the research project to be conducted at your school. To be eligible to participate, you must be living and working as a teacher at a public high school in Ho Chi Minh City, Viet Nam. You are assigned to teach the experiential learning and career orientation module for year 10 students. You have an interest in learning design with a view to implementing a new way of approaching teaching within the experiential learning and career orientation curriculum.

How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. If you decide to participate, you must complete a Consent Form (attached to the end page of this document). The consent will be completed and sent to the researcher via email at nhu.nguyen@autuni.ac.nz by 01 July 2024. You can withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

If you agree to participate, you will be invited to participate in two interviews, four focus groups, and five workshops. You are encouraged to integrate place-responsive outdoor learning into your own teaching practices with your students after the workshop. The interviews will be a conversation about your understanding of the potential benefits of outdoor learning, your perceptions on co-design lesson planning, and the integration of place-responsive outdoor learning into the general education programme. During the interview, I will be asking you a set of questions and give you plenty of time to provide your responses. The pre-workshop interviews will happen at

school or in a public area that suits you. The post-workshop interview will happen online via Microsoft Team. During the co-design workshops, you will collaborate with your colleagues to co-design curriculum planning for the experiential learning and career orientation for Year 10 Vietnamese public high school students. The co-design workshops will take place at a school ground or a public park. There will be four focus groups (group reflection) about your learning from the workshops. These focus groups will happen at end of workshops 3, 4, and 5. Please remember that I do not know anything about your experiences of outdoor teaching and learning practices, so anything you share is valuable in helping me to understand this. There are no right or wrong answers to my questions. If you do not wish to answer a particular question in the interviews, you will be free to stop at any time without giving a reason. Your interviews and focus groups will be audio recorded, transcribed, and then translated into English for data analysis. You will be offered an opportunity to review the transcripts of your interviews and receive a summary of the research findings. If you wish to review the transcripts of your interviews and/or receive a summary of the research findings, please indicate so in the relevant sections of the Consent Form.

What are the discomforts and risks?

It is not expected that participation in this study will cause any discomfort or risk. However, you may feel stressed or uncomfortable during interviews and co-design workshops as you will be asked to recall your past teaching experiences as well as to share your own ideas of lesson planning with other peer teachers during the workshops. If this were to happen, you would be given additional time and the option of not answering a particular question or discontinuing or withdrawing from any study components. You do not need to give a reason why.

How will these discomforts and risks be alleviated?

The information given by the participants will be treated in a manner of trust and respect. The researcher will ensure all participants have their voices heard during the co-design workshops by echoing their ideas for further discussion. The rights and responsibilities of the participants will be well documented in the consent form.

What are the benefits?

This research will potentially increase our knowledge about place-responsive outdoor learning and at the same time equip you with adequate resources to teach in the outdoors utilising a pedagogy of place. You will have access to the workshop handouts during the workshops. At the end of the co-design workshops, you will have access to about 20 place-responsive outdoor learning activities that all participants have contributed to during the co-design process. The activities can be utilised in your own outdoor teaching practices for the experiential and career orientation module.

There will be no discrimination if you decide not to participate in the research. There will be no advantages or disadvantages for you regardless of your choice of participation or not.

The researcher will benefit from this research as it fulfils part of the requirements for attaining their Doctor of Philosophy (PhD) degree. The researcher will be enacting co-design workshops with Vietnamese teachers. This will better position the researcher to continue carrying out further research with this social group in the future.

To the wider community, through place-responsive outdoor learning, Vietnamese school children will experience a different learning environment which can enrich their well-being, nurture their Vietnamese core values, and build a strong connection between them and the places they choose to inhabit.

How will my privacy be protected?

What happens in the workshops will remain confidential. The interviews and focus groups will be audio recorded and will be transcribed verbatim (word-for-word). No real names or other identifiable information will be used in the transcriptions to protect your confidentiality. Your identity will never be revealed in any publications or presentations arising from this study. Apart from the researcher, and the researcher's supervisors, no one else will have access to your information. All data, including Consent Forms, will be kept secure and separated on AUT premises and destroyed six years after the completion of the study.

What are the costs of participating in this research?

You will participate in two hours of interviews and ten hours of attending workshops. The total participating time is 12 hours. You are encouraged to integrate place-responsive outdoor teaching into your own teaching practices if you wish to do so.

What opportunity do I have to consider this invitation?

You have four weeks to consider this invitation.

Will I receive feedback on the results of this research?

If you would like to receive a summary of the results from this research, please let us know by indicating so in the relevant section of the Consent Form.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisors,
Associate Professor Mike Brown, mike.brown@aut.ac.nz, (+649) 921 9999 ext 8387
Dr Denise Atkins, denise.atkins@aut.ac.nz, (+649) 921 9999 ext 7616
Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Nhu Thi Yen Nguyen, nhu.nguyen@autuni.ac.nz, (+84) 903 192 144 / (+64) 210 835 3341

Project Supervisors Contact Details:

Associate Professor Mike Brown, mike.brown@aut.ac.nz, (+649) 921 9999 ext 8387
Dr Denise Atkins, denise.atkins@aut.ac.nz, (+649) 921 9999 ext 7616

Local Advisor Contact Details:

Dr Phan The Hung, hung.pt@vlu.edu.vn (+84) 908 181 381
The role of the local advisor is to assist the researcher with responding to challenges, problems, and questions that arise in the course of conducting research in Ho Chi Minh City, Viet Nam.

The AUTEC Secretariat Contact Details:

Liz Binns, liz.binns@aut.ac.nz, (+649) 921 9999 ext 6038.

Approved by the Auckland University of Technology Ethics Committee on *22 May 2024,* AUTEC Reference number *2409*.

Appendix 8: Consent form



Participant Consent Form

Project title: ***Vietnamese public high school teachers' perspectives on integrating place-responsive outdoor learning into the general education programme***

Project Supervisors: ***Associate Professor Mike Brown, Dr Denise Atkins***

Researcher: ***Nhu Thi Yen Nguyen, BA MA***

- ○ I have read and understood the information provided about this research project in the Participant Information Sheet dated 08 February 2024.
- ○ I have had an opportunity to ask questions and to have them answered.
- ○ I understand that the language used for data collection is Vietnamese.
- ○ I understand that notes will be taken during the interviews and that the interviews will also be audio-taped, transcribed, and translated into English.
- ○ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way. All identifiable information will be removed to protect my privacy.
- ○ I understand that limited confidentiality may be offered in this study. What happens in the workshop will remain confidential. The participant's identifiable information will be removed from any publications arising from this research.
- ○ I understand that I have the right to refuse to answer any particular questions in the interviews and focus groups.
- ○ I understand that if I withdraw from the study then I will be offered the choice between having any data belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, the removal of my data may not be possible.
- ○ I understand that the data will be stored for six years in the AUT One Drive with password protection.
- ○ I understand that the Consent Form will be stored separately from the data for six years in the AUT One Drive with password protection.
- ○ I agree to take part in two individual interviews.
- ○ I agree to take part in five workshops. I understand that the four focus groups (group reflection) in the workshops will be audio-recorded, transcribed, and translated into English.
- ○ I agree not to share any information happening in the workshops to protect the confidentiality of my fellow participants.
- ○ I agree for the researcher to use my data for any publications arising from this research.
- ○ I wish to receive a transcript of my interview(s) (please tick one): Yes○ No○
- ○ I wish to receive a summary of the research findings (please tick one): Yes○ No○

Participant's signature: .....

Participant's name: .....

Participant's Contact Details (if appropriate):

.....

.....

Date: .....

Approved by the Auckland University of Technology Ethics Committee on *22 May 2024,* AUTEC Reference number *2409*.

Note: The Participant should retain a copy of this form

Appendix 9: List of codes

Name	Description	Files	References
Phase 1 data familiarisation	These are codes the researcher generated during the data familiarisation process	21	757
Affordances in outdoor learning implementation	The school and the local outdoor environments provide opportunities and possibilities for outdoor learning.	15	67
Advocate colleagues about outdoor learning	What the teachers think they can do to encourage their fellow teachers to practise the outdoor learning pedagogical approach.	8	11
Equipment selection	The school provides necessary outdoor learning equipment.	3	3
Parent support groups	Parents offer help to make outdoor learning possible for their children.	4	7
Peer teacher support	Teachers assist each other in planning and facilitating outdoor learning.	4	6
Pre-service teachers	Pre-service teachers can assist with outdoor learning during their internship at the school.	1	1
Risk assessment and management	Conduct a thorough evaluation of potential hazards and develop safety protocols to address them.	2	2
School landscape and location	How the school landscape and its location can enhance the uptake of outdoor learning	3	4
Staff training	Provide professional development opportunities to enhance teachers' knowledge and skills in outdoor learning.	3	3
Students' engagement	Students enjoy and actively participate in outdoor learning.	6	9
Support from the school principals	The school principals' vision and action to encourage teachers to teach outdoors.	9	12
The new curriculum of 2018	This is the newest curriculum reform established in 2018. This year 2025 is the year that a complete updated K12 curriculum has been employed in teaching and learning in Viet Nam.	1	1
The PROL workshops last summer	Teachers found the learning from the PROL workshops motivated them to conduct outdoor learning.	2	5
Weather contingency plans	Teacher prepared backup plans in case of inclement weather.	3	3

Name	Description	Files	References
Anticipated challenges or constraints to implement PROL	Teachers' anticipation of any challenges that they might encounter with place-responsive outdoor learning	19	137
Curriculum constraints	Refer to the various limitations and challenges that can affect the lesson planning, implementation, and effectiveness of the curriculum	14	25
Institutional constraints	School policies and administrative requirements	9	16
Large group	Overcrowded classes make it difficult for teachers to supervise students in open space.	3	4
Limited outdoor space	Inadequate outdoor areas at school or lack of access to suitable natural environments might cause difficulties in implementing outdoor learning.	3	3
Limited school funding for outdoor learning		1	1
Logistical issues	Managing large groups of students outside, especially regarding supervision and ensuring appropriate student behaviours, can be challenging.	12	30
Safety concerns	Worrying about potential hazards in the outdoor environment can deter teachers from taking students outside.	7	15
Teacher preparedness	Teachers may lack the necessary training or support to implement the curriculum effectively.	14	21
Teachers' workload	The various tasks and responsibilities that teachers must manage, often lead to stress and burnout.	5	9
Weather challenges	Inclement weather can significantly disrupt outdoor learning plans, making it difficult to incorporate outdoor activities consistently.	5	13
Further support for teachers	Additional knowledge or support needed	10	73
Acknowledging teachers' effort on outdoor learning practice		3	3

Name	Description	Files	References
Allocating more funding for outdoor learning		5	5
Empower teachers to tailor learning load		5	5
Outdoor learning planning strategies		6	8
Outdoor learning should be featured in the curriculum		3	4
Promoting outdoor learning via social media platform		1	1
Satisfied with their learning in the workshops		2	2
School principals and peer support		7	14
Teacher professional development	Focus on outdoor learning knowledge and facilitation skills. Risk prevention and management skills is also vital to enhance teachers' confidence.	10	25
Teaching resources	Online available handouts, worksheets, and lesson plans	4	6
Integrating outdoor learning into their practices	Their plans on integrating place-responsive outdoor learning into their teaching practices	13	58
A third semester dedicated for just outdoor learning		1	1
Adapting new learning from the workshops into practice	Teachers put into practices what they have learnt from the workshops.	2	3
Changes in planning and facilitation	Teachers made changes in their facilitation	6	7
Developing a culture of reflexive learning and giving feedback		3	7
Discuss with students about risk prevention and management plan		1	1

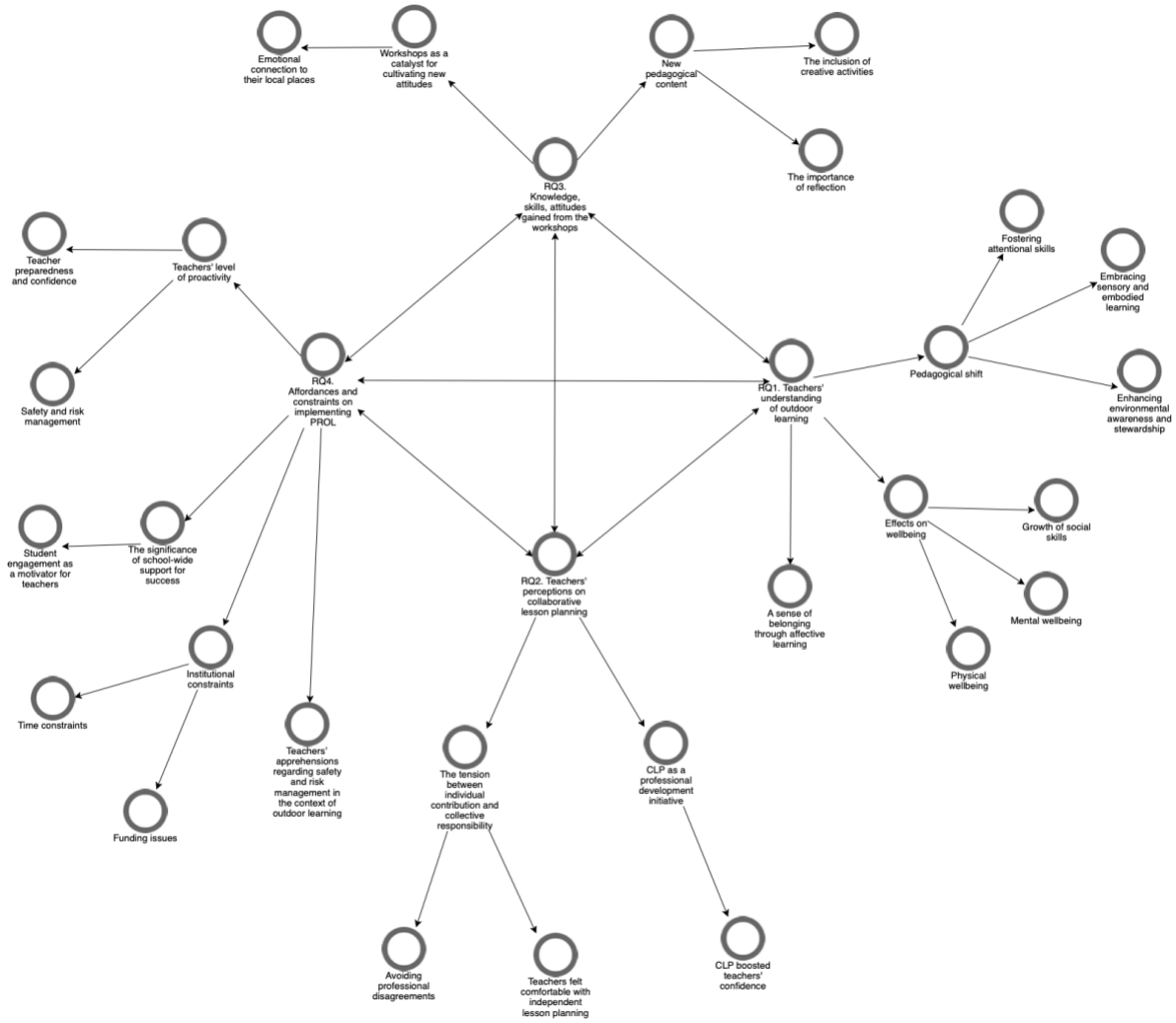
Name	Description	Files	References
Frequency of outdoor learning	Teachers increase the frequency of outdoor learning sessions	2	3
I can do it with support from my colleagues.	Teachers may conduct outdoor learning once they get help from assistant teachers, school administrators, or principals.	2	9
I will do it if the principals agree.		4	6
I wish to accommodate outdoor learning in my schedule		3	4
No, not yet.		2	3
Yes, I do or will do. Given its benefits.	Teachers will integrate outdoor learning in their teaching practices.	9	13
Yes, if the weather is supportive.		1	1
New learning	Knowledge and skills the teachers have obtained from the workshop	5	25
Outdoor learning facilitation		2	6
Place-responsive outdoor learning approach		5	19
Potential contribution of PROL	Teachers' understanding of the potential benefits of place-responsive outdoor learning	18	190
A sense of belonging	Teachers believe outdoor learning can nurture connection and attachment to the natural environment and local community.	6	13
Cognitive development	Teachers believe outdoor learning potentially enhances students' critical thinking, observational skills, and problem-solving abilities.	16	43
Creativity and imagination	Teachers believe that outdoor learning can provide open spaces for creative exploration and play.	7	14
Environmental awareness and stewardship	Teachers believe that outdoor learning can strengthen their understanding of natural ecosystems and promote environmental stewardship.	5	8
Good for teachers as well		4	7

Name	Description	Files	References
Mental wellbeing	The teachers believe that outdoor learning can reduce stress, improve focus, and enhance mood.	7	22
Nurture teachers-students and students-students relationships	Teachers believe that outdoor learning can enrich the relationships between teachers and students and among students themselves.	3	12
Physical health	Teachers believe that outdoor learning can promote physical activity, improve motor skills, and can help combat obesity.	8	19
Resilience and adaptability	Teachers believe outdoor learning can help develop coping skills to navigate changing environments and overcome obstacles.	9	13
Sensory engagement	Teachers believe outdoor learning can stimulate multiple senses through direct interaction with nature.	7	12
Social skills	Teachers believe outdoor learning can foster collaboration, teamwork, and communication skills through shared outdoor experiences.	10	27
Teachers' expectation on the workshops		6	18
Actively contribute ideas for lesson planning		4	4
Everyone will be enthusiastic, positive, and have a strong work ethic as a teacher.		1	1
Hope to learn by examples about outdoor learning facilitation		1	1
Hope to learn different ideas from colleagues		3	4
Teachers' experiences of outdoor learning		12	65
Charity event		1	5
Dancing in the park near school		2	3

Name	Description	Files	References
Experiential learning sessions in the schoolground		4	10
Fieldtrip		7	38
Learn a subject content outside the classroom		3	5
School tour during orientation sessions		1	1
Whole school picnic or buffet party		2	3
Teachers' knowledge of outdoor learning		14	28
Changing the learning environment		3	4
Education outside the classroom		7	9
Learning in different local urban green spaces		3	3
Outdoor learning is authentic learning		2	2
Outdoor learning was all about physical movement	Health and Physical Education Military Education	2	2
Purposeful learning in an open outdoor environment		7	7
Sensory learning in outdoor environment		1	1
Teachers' perspectives on collaborative lesson planning		13	89
A beneficial but time-consuming practice		2	2
A completely different approach to the school culture of lesson planning practice		7	31
A rare opportunity to exchange knowledge		2	2

Name	Description	Files	References
and connect with colleagues			
A sustainable collaborative lesson planning practice beyond the workshops		4	5
An advantageous process where team chemistry is important		2	3
Detail and result oriented when it came to lesson planning		2	5
Good team players in contributing ideas for lesson plans		3	9
More sincere and sophisticated group discussion		1	1
Teachers' perspectives on the workshops	What could be done to enhance teachers' experience in the workshops	1	7
Feeling contented	The teachers were happy with the workshops.	1	2
Learn how to implement outdoor learning sessions	Knowledge and skills the teachers have obtained as a result of workshop participation	1	2
Wish to have access to an outdoor learning manual for teachers		1	1
Wish to have more time in collaborative lesson planning		1	1
Wish to observe a demonstration of outdoor learning with real students		1	1

Appendix 10: Final thematic map



Appendix 11: Research memo of data generation field trip

Week 1 (10-14/6/2024)

- Journal Entry 1: 12:00 18 June 2024

During the first week in HCMC, I was so busy that I couldn't find time for journaling. I arrived here last Tuesday after a long journey from Auckland to HCMC, with a transit in Singapore. Fortunately, all the flights were smooth, and I made it to Vietnam safely. It was extremely hot at this time of year in Viet Nam. My sister picked me up and drove me to my childhood home, where my parents live. I stayed here during my data collection in HCMC. My mom's love language is her cooking, which I absolutely adore. My dad's love language is driving me around the city and acting as my security when I explore unfamiliar places, even though I enjoy riding my scooter and discovering the city on my own. I love the feeling of a summer breeze on my hair, face, hands, and entire body as I ride my scooter over random bridges across the Nhieu Loc Canal, Bach Dang Harbour, and Saigon River on a scorching hot summer day. It has been wonderful to be home again. Everything is so close to my heart, despite the hustle and bustle of this big city. This is my hometown, where most of the milestones in my life occurred.

The day after my arrival, I accompanied a local adviser to visit a potential public high school to seek permission to access their facilities and staff for my data collection. To my surprise and delight, the school's deputy principal, representing the principal, agreed to let me conduct interviews and facilitate workshops with their teachers. Teachers have two weeks to voluntarily register for participation. I am eager to see how many teachers are enthusiastic about being involved in this co-generation of data for this research project. The 38 degrees in HCMC today mirrored the excitement I felt inside. I am thrilled to embark on this professional development journey with the local teachers.

Week 2 (17-21/6/2024)

- Journal Entry 2: 12:30 18 June 2024

This morning, I spent an hour in a local park rehearsing activities with a friend who has expertise in Thai language and culture and works as a professional translator. We began our day with a walk around the park, which was bustling with various visitors. The sky was a beautifully vibrant blue, and the mild heat made our visit particularly pleasant. I noticed a group exercising at the outdoor gym and many people walking and chatting along the footpath. A group of middle-aged women were practising yoga under a pergola, while two young women were joyfully playing badminton nearby. An old man with a serene demeanour was practising martial arts right next to the yoga group. Although it's the start of the summer holiday in the city, there weren't many children in the park, possibly because their parents were still at work. I wondered where the kids might be and what they would be doing during the summer. Some might be sent to the countryside to stay with their grandparents, like I was as a child, while others might join sports or arts clubs in the city if their parents can afford it.

After spending some time observing the park and enjoying our take-away coffee, we found a comfortable spot to sit. I then began facilitating the first place-responsive outdoor learning activity with my friend, focusing on being present in and with the environment. We started by noticing different sounds and colours. My friend appreciated the complete silence, which allowed her to concentrate on a variety of sounds and colours both near and far. She mentioned that closing her eyes brought her contentment and relaxation, a comforting feeling as she was accustomed to the hectic pace of city life. She had nearly forgotten the sensation of stillness. Becoming aware of the co-existence of other living things made her feel alive and in harmony with the nearby nature and others using the park at the same time. We then delved into the power of place-based stories and narratives by discussing her favourite spot in the park. She shared how frequently she visited, what activities she enjoyed there, why she valued coming to this place, and what it meant to her to have access to it every month, despite it being a bit distant from her home. The park is situated in the heart of the city, while she lives on the outskirts, where access to green urban areas is a luxury for her and her family.

This morning, I had a delightful time in the park with my friend. I learned that she enjoys closing her eyes for just one or two minutes, which is perfect for her. It's wonderful to see her embracing her unique way of experiencing the vibrant city, even if it means moving at her own pace to connect with the place she calls home.

- Journal Entry 3: 8:30 19 June 2024

Key points I learnt from The confident teacher: Developing valued habits of mind, body, and pedagogy written by Quigley (2016).

- Teacher Confidence: Authentic confidence in teachers stems from understanding their strengths and weaknesses, seeking challenges for growth, and balancing humility with self-belief.
- Building Confidence: Teachers can cultivate confidence through self-analysis, seeking solutions, celebrating successes, and learning from failures.
- Maintaining Confidence: Managing stress, practising self-care, and embracing a positive mindset are crucial for sustaining confidence and delivering impactful teaching.
- Confident Pedagogy Principles: Exemplary explanation, confident questioning and feedback, feasible modelling and metacognition, and learning memory.
- Building Student Confidence: Focus on developing students' thinking skills and academic achievements, not just "confidence building".
- Classroom Management: Momentary gestures and shorthand instructions convey clarity, consistency, and control, contributing to student success and teacher well-being.

- Journal Entry 4: 9:00 21 June 2024

I have completed developing worksheets for the upcoming workshops, and they are now ready for printing alongside the handouts. The workshop agenda will be sent to the teacher participants after their interviews. I am thrilled that ten teachers have volunteered to participate in my research project.

Yesterday morning, I revisited the local park. The day was already hot and humid when I arrived. I spent the first 15 minutes strolling around, delighted to see more children playing freely. They were running along the footpath, as walking on the grass is generally not permitted in this park, and likely in Vietnam as a whole. Some kids were enjoying the playground, all appearing cheerful and enthusiastic. I also noticed several dancing groups led by seniors, their movements under the tree canopy both lovely and inspiring. Despite their age, their spirits seemed youthful and vibrant. Additionally, I observed a group of university students in the midst of their PE session, which stirred up fond memories of my own outdoor PE classes with university friends. We used to have our sessions in a local park near campus, running a marathon once a week and playing badminton and volleyball. Those were truly memorable times.

Week 3 (24-28/6/2024)

- Journal Entry 5: 15:00 25 June 2024

The local park that I visited, like many others worldwide, has several restrictions, but one particularly stands out: walking, sitting, and picnicking on the lawn areas are prohibited. Consequently, visitors cannot get close to the giant trees, which are typically located on the lawns. The footpath is designated for walking or exercising, while the pergolas accommodate gatherings of fewer than 20 people. Stone and wooden benches can comfortably seat up to three individuals. For activities such as teachers needing to sit, relax, and work on worksheets, they can choose to gather at the pergolas, use the benches, or bring their own sitting mats or folding chairs along the footpath's edge, ensuring they do not obstruct strollers or disturb the lawn. However, availability of pergolas and benches may be limited due to the park's popularity with the public.

The logistics for interviews and workshops have been finalised, and I am ready to start interviewing teachers next week, followed by facilitating place-responsive outdoor learning with them the week after. With ten teachers volunteering to participate, I plan for them to collaborate in five pairs during the lesson planning process. For group reflection, teachers will express their learning through creative work, such as images (sketching/doodling) and/or texts (poems/word clouds), rather than recording their discussions. This approach provides teachers with greater flexibility in their reflection and reduces the pressure of being recorded while sharing their thoughts with partners. I am eager to observe teachers' engagement in these reflective activities.

- Journal Entry 6: 12:00 28 June 2024

Here is what I learnt from Space and place: The perspective of experience written by Tuan (1979).

- Space and Future Time: Space is associated with temporality, change, and movement, often linked to future goals and the desire to transcend its limitations.
- Place and Permanence: Place represents permanence and stillness, existing independently of human presence or events.
- Relationship between Space, Body, and Social Interaction: The text explores the connection between body language, personal relationships, spatial values, and distance.
- Distance and Intimacy: Distance can either diminish or enhance intimacy in relationships, influencing emotional connection and accessibility.
- Familiarity and Home: Familiarity, rooted in the past, provides a sense of home and security, while the future represents new possibilities and goals.
- Planned Intimacy: While intimate relationships can be nurtured, the depth of human connection and the feeling of "homeness" with another person cannot be fully planned or controlled.
- Planned Encounters: Intimate places like home, church, and local café where I am attached to significant others, objects, or services.
- Space and Place as Human Needs: Space represents adventure and freedom, while place provides shelter and attachment.
- Attachment to Place: Formed through long-term residence, sensory experiences, and reflection, varying from person to person.
- Sense of Place: Can be described through different emotional attachments to various places throughout my life, prompting reflection on the nature of settling down.

Week 4 (1-5/7/2024)

- Journal Entry 7: 12:00 01 July 2024

Today, I conducted two interviews with teachers. My parents' home is in the North of Sai Gon, and the school is about 10 km away. I left at 7 am and arrived by 7:30 am. The sun was shining, and the temperature ranged from 28 to 30 degrees Celsius. Riding a scooter in my city is always a unique adventure, offering freedom and flexibility. I felt a sense of community among fellow riders. Despite the hot and humid atmosphere, people remained friendly and trusted each other as they shared the road. Commuting on my scooter allowed me to connect with the city through all my senses. I saw the clear sky and the vibrant colours of the riders' helmets, though most were covered with masks and UV-protected ponchos. I admired the deep purple of the hoa bằng lăng (Banaba trees) in full bloom along Phan Van Tri Street. Besides the engine hum and occasional car honks, I heard early morning birds chirping near this park, the city's green oasis. The most intriguing sound was from a radio belonging to a random street food hawker. It was Vietnamese Family Day last weekend, so I guessed the songs were about parenthood and family love, which I found sweet and homey. Then came the aroma of Bánh mì

(baguette). Nothing beats a glass of iced latte and a baguette for breakfast, or as we say in Vietnamese, ‘cà phê sữa đá’ and ‘bánh mì’.

As advised by the school leaders, teacher interviews were arranged to take place in a designated classroom at the school. Three interviews were scheduled for this morning, but one teacher did not attend. She later contacted me to inform me that she had decided not to participate in the project due to personal commitments during that time. She expressed regret for not being able to manage her schedule to join the research, as she now had other priorities. I felt sorry that she couldn’t make time for this data generation process.

The two teachers who were interviewed today had distinct characteristics. The first teacher was somewhat cautious and shy, which was evident in her slow and unusual speech delivery. She was open about her lifestyle and her relationship with students but often paused and hesitated to answer specific questions about outdoor learning experiences and collaborative lesson planning, particularly when uncertain about her responses. I provided some ideas and examples to help her expand her thinking, which made her more comfortable and willing to share more.

The second interviewee was a cheerful and talkative individual. She was open-minded and enjoyed discussing her teaching experiences and personal growth strategies. Notably, her current focus was on excelling in her own business as a side hustle, alongside her full-time role as a high school teacher. During her conversation, she mentioned several self-help books on attracting wealth and working efficiently.

In general, the teachers conveyed a profound passion for their teaching careers and a genuine fondness for their students. They valued the school culture, the robust support from school leaders, and the harmonious relationships among staff. For future interviews, I plan to change my seating arrangement to face the main entrance and the blackboard. This adjustment will allow me to see the teachers as soon as they enter the room, eliminating the numerous blind spots I encountered while sitting the other way.

- Journal Entry 8: 14:00 02 July 2024

This morning, I conducted four interviews with teachers within a four-hour window, which was quite intense. I had to adjust to the teachers’ availability and the school hours during the summer. The first interviewee was a senior teacher who appeared calm and relaxed. The second interviewee continuously recited a mala (Buddhist prayer beads) clockwise on his right hand, which I assumed aided his concentration. He was the only one who spoke highly of the compulsory educational module of experiential and career education for public high school students. He seemed resourceful and genuinely shared his outdoor teaching practices, and his enthusiasm for outdoor teaching and learning was evident

in his narratives. The third interviewee caught my attention with her naturalness and neutrality. She provided answers that were just right, not too much, not too little. I was intrigued by her calmness in response to each interview question. She admitted she disliked taking students to the school grounds or nearby park for study, finding it too complicated and troublesome, which motivated her to participate in this research project. The last interviewee was likely the youngest, in her early 30s. Although she responded quickly, I struggled to elicit more information from her, even when I encouraged her to elaborate on her previous points. The interview concluded in just 25 minutes, leaving me wondering if I was tired or if she had given closed answers that blocked further conversation. This interview reminded me of the very first one, where the teacher was overly cautious, and it ended similarly in length. In contrast, the other interviews lasted between 45 to 60 minutes.

- Journal Entry 9: 12:00 03 July 2024

The day was challenging for me due to an overwhelming amount of negativity. The first teacher, experienced in supervising students during field trips as extracurricular activities, often during semester breaks, was expected to adopt a new approach to outdoor learning. This method needed to be different from her previous methods but not overly demanding, allowing her to manage it independently. The next teacher expressed his dislike for being outdoors, citing the high city heat and his allergy to the sun, which made him uneasy when outside for extended periods. Leading students beyond the school gate felt like a red flag, instilling in him a sense of insecurity and danger. He remarked, 'It's so cool here in the air-conditioned classroom; why bother with the exhaustion of being out in the sun under 30 degrees Celsius?' Despite this, he enjoyed facilitating the compulsory experiential learning and career education module with his students, prompting him to join the project, albeit with some reservations. I spent 15 minutes calming, encouraging, and reassuring him, and by the end, he felt somewhat better, hoping the upcoming workshops would offer a fresh perspective on outdoor learning. The final interviewee was quite experienced and confident in facilitating the experiential learning and career education module at this school and other learning centres where she worked part-time. She was willing to conduct this module outdoors no more than twice per semester, considering her busy school year schedule. Beyond that, she was cautious about sharing her views, avoiding potential issues that might arise.

On my way home that day, I attempted to dispel the negativity I had absorbed throughout. Despite my efforts, my thoughts drifted freely, and I allowed them to flow without interference. I am aware of the challenges ahead. It involves being mindful of their stress, strategically guiding their metacognitive processes, and encouraging them to choose excitement over anxiety when exploring new pedagogical methods. Most importantly, it means embodying a happy and healthy teacher with an authentic, confident mind and body, who practices being present in and with a place. This teacher loves sharing personal stories of their own places, as well as place-based stories of others, and understands the power

of these narratives. They apprentice themselves to outdoor places and are eager to represent their own place experiences to others.

- Journal Entry 10: 17:00 04 July 2024

Most teachers interviewed over the past three days have over ten years of experience. They taught a variety of subjects and facilitated the experiential learning and career education module with their homeroom students. Outdoor learning at their school primarily occurred through extra-curricular activities like field trips to a power plant, historical sites, the Saigon Zoo and Botanic Garden, and camping for senior students. During these trips, their main role was to supervise students, while site instructors delivered the target learning content. Additionally, outdoor learning included meaningful charity trips, which took place once or twice a year due to time and donation constraints. Participation in these trips was limited to students whose parents could afford the fees. Teachers were hesitant about outdoor learning due to safety concerns and potential student misbehaviours, and they found planning such sessions time-consuming. I hope the collective lesson plan from next week's collaborative sessions with peer teachers will address these issues, and group reflection will help alleviate their stress and encourage them to facilitate place-responsive outdoor learning on school grounds and in nearby nature.

Week 5 (8-12/7/2024)

- Journal Entry 11: 18:00 08 July 2024

The first workshop took place today with great weather. It was sunny, and the temperature ranged between 28 and 30 degrees Celsius. It was hot and humid, typical of summer in Viet Nam. The workshop started at the school grounds. Teachers gathered in a circle and listened to the facilitator go through the agenda before heading to the park near school. Four teachers arrived about 15 to 30 minutes late due to bad traffic on Mondays in HCMC. While waiting, we shared how we connected to the city. At 9 o'clock, all nine teachers were present. They grouped into three groups of three and headed to the park. We used the park section opposite the school. I started the workshop by demonstrating three activities representing the first three signposts of place-responsive pedagogy in outdoor learning. Then, I followed with the last activity, which allowed teachers to self-reflect on their learning. This activity was moved to a dedicated classroom when the heat exceeded 30 degrees. This was a backup room for bad weather and where the interviews were conducted. We scheduled to start at 8:30 and finish at 10:30, so we started at 9:00 and finished at 11:15. The last activity was held indoors from 10:30 to 11:00, followed by a 15-minute Q&A over tea. Two teachers left at 10:15 due to other priorities, but the rest of the groups were enthusiastic and enjoyed the workshop. This encouraged me to continue with them. I'll see them tomorrow at 8:30 at the fountain in front of the park.

Today's outdoor learning session was promising. The teacher participants were happy, cooperative, and enthusiastic about sharing their thoughts. Those who were initially shy became active and open to

speaking up. The outdoors relaxed and encouraged them to share. They enjoyed the four demonstration activities. Apart from the high heat, everything seemed fine.

However, some teachers frequently checked their phones. I should have instructed them to put their phones in their bags and silence them during the workshop. They seemed busy due to side hustles for financial security.

Most teachers learned to reflect on their experiences in the outdoor sessions. Two teachers couldn't find connections to the park environment since they were familiar with it. But when they participated in the third activity, where they could see, hear, smell, and touch living things, they realised it reminded them of their childhood and missed it. I was pleased to hear that. I believe revisiting familiar places can help teachers connect with their students.

Teachers' beliefs are crucial in making outdoor learning effective. If their teaching practices reflect their beliefs, students will benefit.

The first workshop agenda was facilitated as below.

Session	Duration	Venue	Content
1	9:00-9:15	The school ground	Lead-in activity: storytelling and group discussions on place connection and attachment
2	9:15-9:45	The local park	Demonstration activity of signpost 1: Being present in and with a place
3	9:45-10:15	The local park	Demonstration activity of signpost 2: The power of place-based stories and narratives
4	10:15-10:45	The local park	Demonstration activity of signpost 3: Apprenticing ourselves to outdoor places
5	10:45-11:15	The school, room 20	Demonstration activity of signpost 4: The representation of place experiences

- Journal Entry 12: 18:00 09 July 2024

Today, we had a productive workshop in a vacant pergola behind a fountain in the park. We started at 9 am and moved back to the school at 10:30 am, finishing at 11:30. The teachers were enthusiastic and stayed until the end. They participated in two activities on personal development and family responsibilities. Groups of three worked well, with each member having a chance to contribute. The teachers also surveyed park users, and the results were impressive. I heard moving stories, like that of

an old man who sat on the same bench for over 30 years. He shared his experiences of the park's development over three decades.

What could be improved? Collaborating on place-responsive outdoor learning plans was challenging for teachers due to restrictions on familiar outdoor field trips. Working together and receiving guidance helped them overcome ideas. Teachers could revisit place-responsive pedagogy through workshop handouts and then collaborate on lesson plans. Practising collaborative lesson planning with colleagues builds confidence in facilitating these activities. Be brave to try new outdoor teaching and learning ideas. Evaluate, change, and practise them continuously for self-improvement.

The approach was effective. Teachers enjoyed walking between the school and the park, making outdoor learning accessible and sustainable without logistical challenges. The benefits of these environments outweigh any insecurities.

A teacher was absent due to a family issue. More teachers stayed and enthusiastically participated in the workshop. Suggestions were made to start tomorrow's workshop at 8 am and finish at 10 am to avoid fatigue from the heat.

The second workshop agenda was facilitated as below.

Session	Duration	Venue	Content
1	9:00-9:15	The local park	Lead-in activity: storytelling and group discussion on the coherence of teaching beliefs and their teaching practices.
2	9:15-10:15	The local park	Demonstration activity of theme 1: Personal development, utilising signpost 2: The power of place-based stories and narratives
3	10:15-10:30	The local park	Demonstration activity of theme 2: Family responsibility, utilising signpost 1: Being present in and with a place
4	10:30-10:50	The school, room 20	Group presentations on their findings of theme 2 activity.
5	10:50-11:30	The school, room 20	Collaborative lesson planning in practice: groups discuss ideas at school and then update on a shared document at home.

- Journal Entry 13: 18:00 10 July 2024

What went well today? Due to tight workshop hours, I introduced only one theme per workshop, allowing teachers dedicated time for lesson planning and group reflections. The collaborative process went well, with teachers discussing openly and constructively. The first teachers' reflection session was smooth, facilitated by the handkerchief technique. Each group used an A3 sketch paper to capture their thoughts, reflecting on one-third in silence before sharing similarities and differences. Teachers preferred to deliver their reflections in texts on the paper.

What could be improved? I wished the workshops were longer to aid lesson planning, but I respected their busy schedules.

I believe teachers can apply this outdoor learning approach with effort, openness, and cooperation. They understood the benefits, but indoor convenience and student safety concerns were their main concerns. I thought they overthought this, as high school students are 15+ and can mitigate heat with appropriate clothing and sunhats. The park near the school and the school neighbourhood were overlooked.

Other reflections: A teacher dropped out due to family vacation, misunderstanding the schedule. Another arrived 30 minutes late due to an unforeseen event. One more teacher arrived in the last 30 minutes due to his busy schedule.

The third workshop agenda was facilitated as below.

Session	Duration	Venue	Content
1	8:15-8:45	The school, room 20	Group reflections on their learning and collaborative lesson planning process
2	8:45-9:15	The school ground	Demonstration activity of theme 3: Responsibility at school, utilising signpost 3: Apprenticing ourselves to outdoor places
3	9:15-9:45	The school ground	Group presentations on their findings of theme 3 activity.
4	9:45-10:15	The school, room 20	Collaborative lesson planning in practice: groups discuss ideas at school and then update on a shared document at home.

- Journal Entry 14: 12:00 11 July 2024

Today's workshop went well. The teachers cooperated and enthusiastically participated in the demonstration activity. I gave them ample time to share their thoughts at the end of each activity, freeing them from time constraints.

To improve, more Vietnamese reading materials on place-responsive pedagogy and a manual on conducting this method are needed.

Reflecting on the effectiveness of the approach, I've been considering what motivates teachers to apply their learning. They're aware of the benefits of outdoor learning, but they need a nudge to make it happen. Acknowledge from school leaders, incentives for outdoor learning, or both could be effective.

A teacher was absent due to a busy schedule, and another arrived an hour late. Since two teachers will be absent tomorrow, I ran an extra group reflection today.

The fourth workshop agenda was facilitated as below.

Session	Duration	Venue	Content
1	8:15-9:15	The school ground	Demonstration activity of theme 6: Environmental education, utilising signpost 4: The representation of place experiences
2	9:15-9:45	The school, room 20	Group reflections on their learning and collaborative lesson planning process
3	9:45-10:15	The school, room 20	Collaborative lesson planning in practice: groups discuss ideas at school and then update on a shared document at home.

- Journal Entry 15: 12:00 12 July 2024

What went well? Since teachers found it challenging to plan place-responsive outdoor lessons, I dedicated the last workshop to helping each group build lesson plans for the four themes they hadn't collaborated on. They were excited to practice their plans and learn from them. It was great to see them discuss ideas, what would work, and what might not work, then make a common decision for the collaborative activities and worksheets. I was there, answering their questions and commenting on their activities.

What could be improved? More time was needed for teachers to develop collaborative lesson plans and for me to explore the other themes with them instead of just reading and analysing activities.

My thoughts on the approach: The workshop agenda was flexible, adapting to teachers' learning perspectives and working styles to help them plan collaborative lessons.

Other reflections: Two teachers were absent but continued working online with their teammates to develop lesson plans. I'm grateful for their responsibility and their keen interest in integrating place-responsive pedagogy into experiential learning and career education.

The fifth workshop agenda was facilitated as below.

Session	Duration	Venue	Content
1	8:00-8:30	The school, room 20	Collaborative lesson planning for theme 4: Personal finance and entrepreneurship
2	8:30-9:00	The school, room 20	Collaborative lesson planning for theme 5: Community service
3	9:00-9:30	The school, room 20	Collaborative lesson planning for theme 7: Local economic enterprises
4	9:30-10:00	The school, room 20	Collaborative lesson planning for theme 8: Career education

- Journal Entry 16: 08:00 13 July 2024

What was the output of the workshops? A collaborative lesson plan bundle has been created, consisting of 24 place-responsive outdoor learning activities that cover eight themes from the experiential learning and career education module. This effort involved all the teacher participants. Nine teachers collaborated in three groups to develop these activities, which they intend to implement with their students in the upcoming academic year starting in September 2024. The school leaders have committed to providing time and resources to ensure that place-responsive outdoor learning is accessible and sustainable for their students in the coming school year.

What are the next steps? I will continue to communicate with the teachers to support them in integrating PROL into their teaching practices. In November, I will arrange the second online individual interview with these teachers to gather insights from their implementation with students. Group reflections and worksheets have been collected and are ready for analysis. The transcription of pre-workshop interviews will be sent to the teacher participants in the first week of August 2024 for member check before being translated into English for data analysis. Similarly, the transcription of post-implementation interviews will be sent to the teacher participants in December. The dataset will be uploaded to NVivo R1 for data management and analysis.

Appendix 12: Research memo of the professional development workshops

Analytic memo: Insights into the place-responsive outdoor learning (PROL) workshops conducted between 08 and 12 July 2024 at the X High School in Ho Chi Minh City (HCMC).

A qualitative researcher serving as an authentic and confident facilitator of the professional development workshops

The primary goal of the workshops was to introduce teachers to place-responsive pedagogy (Wattchow & Brown, 2011) through hands-on activities. Additionally, the workshops provided an opportunity for teachers to engage in collaborative lesson planning for the Vietnamese compulsory experiential learning and career education activities for Years 10 and 11 (Ministry of Education and Training, 2018) using PROL. A third objective was to foster a culture of reflection among the participating teachers.

In preparation for the workshop learning resources, I collaborated with my supervisors to develop the workshop handouts. Subsequently, I translated these handouts from English to Vietnamese, distributing the Vietnamese version to teachers during the workshops. The handouts featured twelve demonstration activities guided by the four signposts of a place-responsive pedagogy, which include being present in and with a place, the power of place-based stories and narratives, apprenticing ourselves to outdoor places, and the representation of place experiences. The initial workshop handout outlined four specific outdoor learning activities aligned with these signposts to help teacher participants engage with outdoor learning concepts. The subsequent four handouts presented eight theme-based activities in Vietnamese experiential learning and career education through place-responsive pedagogy. During the workshop, I introduced four of these eight theme-based PROL activities: personal development, family responsibility, responsibility at school, and environmental education. The remaining four activities, including personal finance and entrepreneurship, community services, local economic enterprises, and career education, were available in the handouts for teachers to explore independently. The workshop handouts served as the primary PROL resource for the teachers, and I acted as their main filter for PROL.

The workshops resulted in 24 PROL activities, organised around eight themes from the target learning module, collaborated by the nine participating teachers. These teachers were invited to form groups of three during the workshops, allowing them to select their teammates freely. This collaborative approach was crucial for helping the teachers understand the PROL concept, maintain their cooperation in lesson planning, and effectively implement PROL with their students.

The five PROL workshops were held over five mornings from July 8 to 12, 2024, to fit the teachers' summer schedules in Viet Nam. The main reason for scheduling these workshops during the summer

holiday was to cater to the local teachers' preference for time-sensitive professional development in their training courses. Vietnamese teachers generally prefer summer or weekend training and professional development courses over those held during school terms, as this allows them to better manage their daily workload (C. H. Nguyen et al., 2022).

Most of the demonstration activities took place either on the school grounds or in the nearby park. Only one activity was held indoors, where participants composed a folded poem to reflect on their involvement at the conclusion of the first workshop. We opted to move inside due to the rising temperatures. I was delighted that the majority of the demonstration activities were conducted outdoors, as I wanted the teachers to explore various examples of PROL activities, thereby deepening their understanding of PROL and enabling them to design their own PROL activities with their teammates. The chosen school is located in a picturesque green area of the city, with a park conveniently situated at its entrance. This accessibility made outdoor learning both feasible and sustainable for the school. However, I must acknowledge that HCMC is the most bustling place I have visited so far. Consequently, walking back and forth between the school and the park could potentially result in road accidents. The school grounds should serve as an assembly point before heading outside, with supervising teachers or helpers always present. With a small group of nine mature teachers, it was manageable to facilitate activities outdoors. However, in practice, teachers typically handle class sizes of 40 students or more. Maintaining an appropriate ratio between students and teaching assistants or supervisors could be advantageous for managing students outside their school.

The time allocation for specific tasks in the five workshops is as follows (Reality/Plan in minutes).

Workshop	PROL activities	CLP practices	Group reflections
1	120/120	none/none	none/none
2	120/40	none/none	none/none
3	60/40	30/60	30/20
4	60/40	30/60	30/20
5	none/40	120/60	none/20

The initial workshop was dedicated to showcasing four PROL activities corresponding to the four signposts of place-responsive pedagogy. Each activity was given a 30-minute session, resulting in no CLP taking place during the first workshop. I considered extending the workshop by an extra hour to prevent rushing through the activities on display.

During the subsequent workshops, I dedicated 60 minutes to each theme-based PROL activity, which extended the duration by 40 minutes beyond the initial plan. Consequently, I had to forgo some

demonstration activities. I am confident that prioritising quality over quantity was the correct choice. Due to time limitations, I was only able to introduce four out of the eight theme-based PROL activities. I experienced persistent stress when I had to reschedule both the CLP and reflection sessions to different days, rather than completing them as initially scheduled. A theme-based PROL activity necessitates at least 90 minutes for completion, considering the typical class size in Vietnam. If teachers could efficiently utilise two consecutive sessions for PROL (each lasting 45 minutes, totalling 90 minutes), they would be less likely to feel rushed and pressured concerning the lesson plan.

CLP activities during the workshops were held in a dedicated room at the chosen school to accommodate the wet season in summer in HCMC. CLP was scheduled for the final session of each workshop, after teachers participated in PROL demonstration activities. Each CLP session lasted between 30 and 40 minutes, which was 25 to 35 minutes shorter than initially planned, as the sessions were entirely used for PROL demonstrations. The intended 20 minutes for each theme-based PROL activity were inadequate for thorough engagement. In reality, each theme-based PROL activity was conducted over approximately 60 minutes. The final workshop was dedicated solely to CLP for 120 minutes, offering teachers ample opportunity to collaborate with their teammates on lesson planning.

Each workshop, as agreed with the deputy principal, lasted two hours. Teachers spent a total of approximately ten hours participating in these workshops, with 3 hours and 40 minutes specifically allocated to CLP. I was pleased that we utilised the outdoor time effectively during the initial four workshops. I adapted the workshop schedule based on local weather conditions and teachers' feedback. The decision to move the CLP and reflection sessions indoors was influenced by several factors: the heat and humidity in HCMC became excessive after 10 am, it was impractical for teachers to use their computers to update the CLP shared file outdoors, and the refreshments (tea break) were arranged in R.20 as recommended by the school leader. Nonetheless, I regret not conducting both the CLP and reflection sessions outdoors. Teachers could engage in lesson planning discussions outside and jot down notes in a small notebook or on an A3 sheet. It would be beneficial to allocate time at the end of each workshop for updating the CLP shared file.

After attending demo sessions, teachers formed groups to brainstorm ideas for a PROL activity aligned with the theme. This open-ended process allowed teachers to choose their collaboration style. They discussed lesson plans for each theme, taking turns to share insights. They reached a consensus in a collegial manner, selecting signposts of place-responsive pedagogy, naming the activity, choosing the learning venue and timing, grouping students, developing tasks, and listing necessary equipment. One teacher from each team updated the collaboratively created lesson plans in a shared Google file. The teachers, familiar with each other, communicated calmly and effortlessly. They expressed positive views about their school culture and listened attentively to others. More experienced members on a

specific theme typically spoke first, followed by others contributing their critical thoughts. There was no designated team leader; all members played an equal role in crafting a common lesson plan. I observed that the teachers were used to working independently, often downloading plans from online resources rather than creating authentic activities with colleagues. I addressed their queries as they worked on their plans, moving between three teams to assist them.

As a facilitator, I am fully aware of applying collaborative principles during the lesson planning sessions. The first principle is to treat teachers as active and reflective participants who co-construct the process (Kelly et al., 2019). Throughout the workshops, teachers were provided with equal opportunities to express their ideas via warm-up questions, group discussions during demonstration activities, and reflection sessions to reinforce their learning. They proactively collaborated with their colleagues to plan lessons focused on experiential learning and career education. I gained valuable insights from their perspectives on the significance of outdoor learning and their strategies for implementing it with their students.

The second principle is to encourage teachers to take ownership of their lesson plans through a participatory process that actively involves them in designing learning activities (Kyza & Nicolaidou, 2017). Through engaging in collaborative lesson planning sessions, teachers are encouraged to work with their colleagues to exchange ideas for their PROL lesson plans. These collaborative plans are the result of a joint effort with peer teachers, supported by a facilitator to ensure they are tailored to the local context. Teachers will then apply what they have developed in partnership with their peers, gaining insights from their experiences and subsequently improving their skills.

The third principle is to encourage teachers to collaborate as collaborative teams to achieve their desired outcomes through an inclusive and collaborative planning process (Lam & Pitsaki, 2018). All participants had their say in the workshops. I noticed that the teachers were quite open with each other during the CLP process. They seemed to know each other well enough to avoid conflicts. They listened to each other without interrupting and took turns expressing their opinions. Since no one dominated the conversation, they tolerated each other's behaviours when sharing ideas or making decisions. I wish I had given each team a scaffolding worksheet to document the lesson planning process, which would have helped me capture their group dynamics more effectively.

The fourth principle is to facilitate teachers to collaborative rich tasks for a meaningful curriculum context and integrate them into a particular subject area (Sutherland, 2021). The demonstration activity at the beginning of each workshop was crucial in providing an example of what a PROL activity aligned with the target learning module should look like, guided by the four signposts of a pedagogy of place.

The fifth principle is to encourage teachers to act as agents of change in curriculum reforms by actively constructing and implementing their creative products (Kyza & Nicolaidou, 2017). The facilitator emphasised the participants' crucial roles in fostering an innovative learning environment for their students. During the workshop, teachers engaged in group discussions to reflect on various questions and generate ideas. To enhance their reflections, I would provide a menu of tools for sharing insights on specific topics, including a self-reflection booklet, a group reflection worksheet, self-recorded group interviews, and quick chats throughout the workshops.

The sixth principle is to ensure teachers' learning progresses through ongoing support from the facilitator (Kelly et al., 2019). Since my first encounter with the teacher participants in early July 2024, I've maintained my connection with them mainly through Zalo, a popular chat app in Vietnam. During workshops, the deputy principal set up a group chat for official announcements and sharing materials. I also posted questions for brainstorming and encouraged teachers to post their enquiries for group discussions. However, most participants preferred discussing in person instead of posting their thoughts in the group chat. They enjoyed the group chat for announcements and accessing workshop handouts and worksheets but weren't keen on making conversation or discussion there. The group chat served as a notice board and a place to share handouts. I also tried to approach them individually via chat apps, but they were reluctant to keep in touch, likely due to busy side hustles and family commitments. To monitor their learning progress and sustain their engagement, teachers were invited to share their delayed feedback on their viewpoints of outdoor learning four weeks after the workshops and their intention to implement outdoor learning with their students in the upcoming school year via a shared file on Google Drive.

The seventh principle is to facilitate lesson planning sessions through a constructionist collaborative process (Kelter et al., 2021). As a facilitator, I appreciated the teacher participants' existing knowledge and teaching expertise that enriched the workshops. The collaborative lesson plans, supported by the researcher, reflected their collective effort. The participants were eager to collaborate with their peers to bring these collaborative PROL activities to life through outdoor learning practices with their students in the upcoming school year.

To empower the teacher participants in their CLP process, I facilitated the six dimensions of co-existence as a development strategy (Kyza & Nicolaidou, 2017). I encouraged teachers to be active and make their own decisions while constructing lesson plans in groups of three. This team size ensured equal opportunities for sharing viewpoints and voting on different perspectives. I acknowledged their expertise by creating opportunities for them to share their teaching philosophies and practices. I summarised their discussions by echoing their key points and reiterating significant ideas. I reassured them about achieving professional growth through collaborative sessions by encouraging them to be

open-minded, learn from one another, and implement the collaborative lesson plans they created. I motivated them to build upon the workshop handouts and demonstration activities by continuing CLP with colleagues after the workshops ended, collaborating with them to apply their version of PROL with their students. These actions were intended to enhance their learning autonomy. I urged them to share their best practices with other teachers to strengthen their impact and foster community learning and outdoor learning practices both internally and externally.

I faced challenges preparing and facilitating the workshops. I felt pressure to be an authentic and confident teacher researcher in facilitating PROL. My anxiety stemmed from my limited experience in PROL facilitation and teacher training skills. However, engaging with the teachers during the workshops boosted my confidence in facilitating demonstration activities, guiding lesson planning, and developing their reflection habits. Another challenge was that some participants had developed a habit of downloading online lesson plans. I hoped the PROL activities introduced during the workshops equipped them with foundational knowledge and skills to continue their PROL practices with their students. Additionally, the teachers had opportunities to collaborate with their teammates through the CLP process. They should continue working with their colleagues to ensure their practices remain consistent. Since PROL is a student-centred, non-prescriptive, and place-responsive pedagogy, their learning will progress as they reflect on their practices. I continued to collect retrospective feedback from the teacher participants to enrich the dataset. PROL will be implemented at their school in the upcoming school year based on their recent feedback. I am excited to learn more from their perspectives about their practices in the follow-up interviews in November this year.

Appendix 13: Research memo of RTA phase 1, data familiarisation

Detailed notes on teachers' group reflections

Teacher participants	Reflection 1	Reflection 2	Reflection 3
T1	New learning: storytelling for warm-up activities, using PROL signposts in planning outdoor learning periods, facilitating discussions and group interactions. Collaborative team dynamics: enthusiastic, independent, respectful, supporting ideas.	Changes in teaching practices: increase outdoor learning frequency, detail lesson plans, encourage student feedback. Integration of PROL: to encourage students explore the natural environment. Additional knowledge and or support needed: more professional development courses on outdoor learning. Enhancing teachers' experiences of professional development workshops: I learned to adapt interdisciplinary content in outdoor learning sessions.	PROL benefits: students feel free and relaxed, enhancing cognitive learning, human relationships, spiritual and emotional wellbeing. Anticipated challenges: weather contingencies, student management, and maintaining focus in overcrowded classes. PROL plan: might include outdoor learning in nearby park for sensory engagement and nature connection if having support from teacher assistants.
T2	New learning: PROL, sensory activities, connecting with nature, groupwork, interviewing local park users.	Changes in teaching practices: organise more outdoor learning sessions. Integration of PROL: Integrate PROL into maths, experiential	PROL benefits: enhance mental, emotional, and physical wellbeing, reduce stress, foster creativity, strengthen teacher-student relationship, improve

	Collaborative team dynamics: enthusiastic, eager to collaborate, generating new ideas.	learning and career education. Additional knowledge and or support needed: in-service training courses by experts of the field. Enhancing teachers' experiences of professional development workshops: more time for collaborative lesson planning.	environmental literacy and professional development. Anticipated challenges: extreme weather, safety concerns, urban noise, lack of equipment, student management, and time constraints. PROL plan: will conduct PROL activities with support from other colleagues in relevant topics such as nature exploration, personal finance planning, community service, environmental education, career education, and personal development.
T3	New learning: sensory activities, PROL activities, confidence and perseverance, work ethic, planning and delivering outdoor learning. Collaborative team dynamics: collegial atmosphere, desire for more sincere sharing of thoughts.	Changes in teaching practices: guide students in reflection after outdoor sessions. Integration of PROL: if the school principals approve Additional knowledge and or support needed: no additional support needed.	PROL benefits: promote lifelong learning, observational skills, learning autonomy, problem-solving skills, enhance learning experience of science and technology, enhance physical health, creativity, social skills, and personal development. Anticipated challenges: safety concern, weather-

		Enhancing teachers' experiences of professional development workshops: sufficient experience, no need for improvement.	responsive apparel, learning equipment, extreme weather, school principals' approval, school budget, and teaching schedule. PROL plan: will collaborate with colleagues to conduct outdoor learning in the park near school, or in the countryside in semester 2.
T4	New learning: teaching outdoors, facilitating outdoor learning sessions, teamwork, sensory activities, effective collaboration. Collaborative team dynamics: collaborating on lesson planning, proposing budgets for outdoor learning, recommending renovations for outdoor learning spaces in the school grounds.	Absent	Absent
T5	Absent	Absent	PROL benefits: connect with local environment, appreciate nature, enhance human relationship, foster creativity, and encourage active learning.

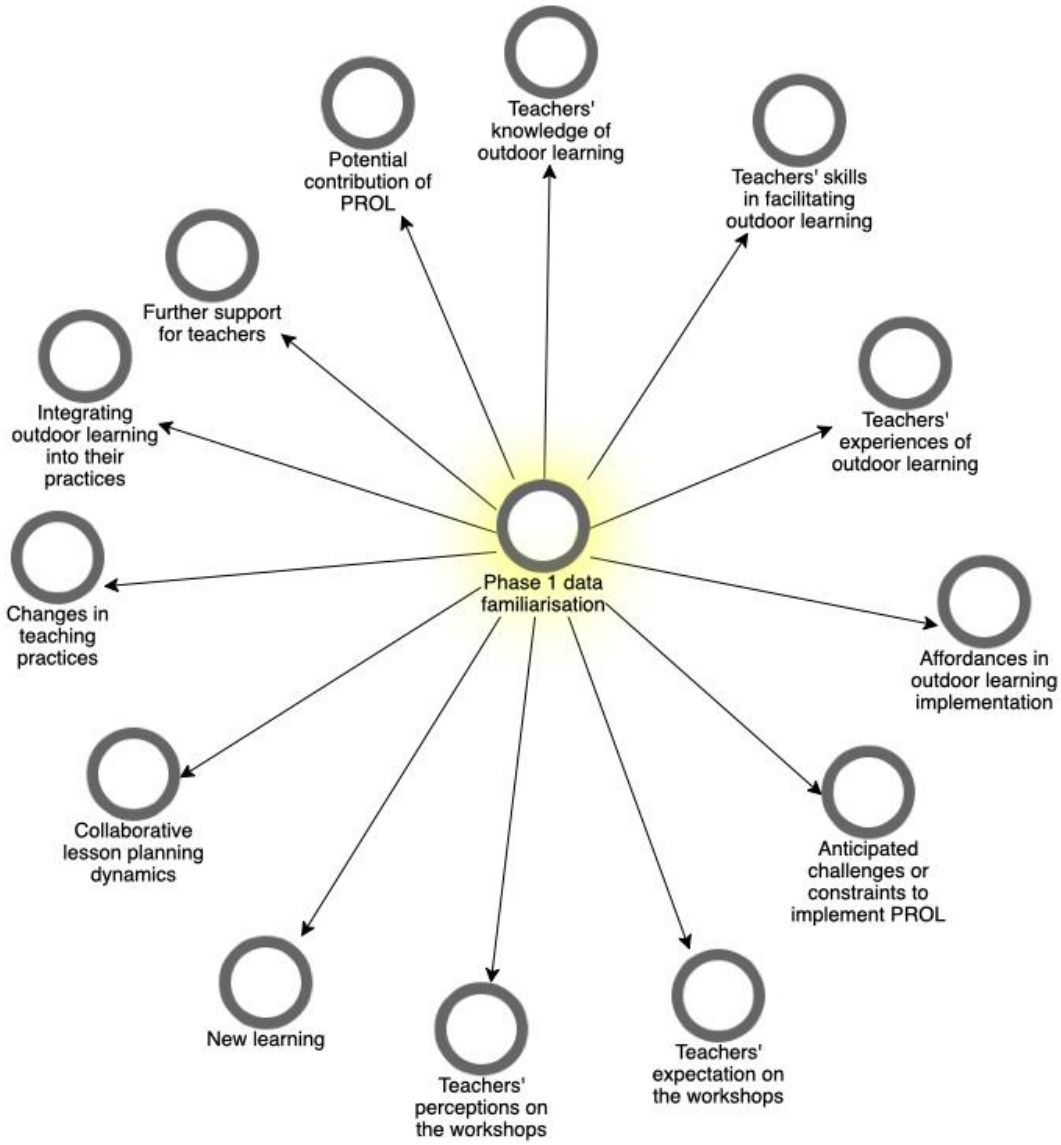
			Anticipated challenges: overcrowded classes, unsuitable condition of school grounds for outdoor learning, weather contingencies, appropriate clothing, and safety concern. PROL plan: will collaborate with other teachers to obtain approval for PROL on the school grounds and other open spaces near school.
T6	New learning: developing and delivering outdoor learning, connecting with the local environment, collaborative lesson planning, appreciation of the neighbourhood. Collaborative team dynamics: harmonious teamwork, contributing ideas, completing worksheets and lesson plans on time.	Changes in teaching practices: encourage active learning and create more reflection opportunities for students. Integration of PROL: to create an innovative learning environment. Additional knowledge and or support needed: advice from experienced colleagues and school principals. Enhancing teachers' experiences of professional development workshops: access to a	PROL benefits: inspire enthusiasm, improve concentration, enhance nature-connectedness. Anticipated challenges: bad weather, overcrowded classes, distractions PROL plan: will collaborate with other teachers to implement outdoor learning sessions in the school grounds or local parks

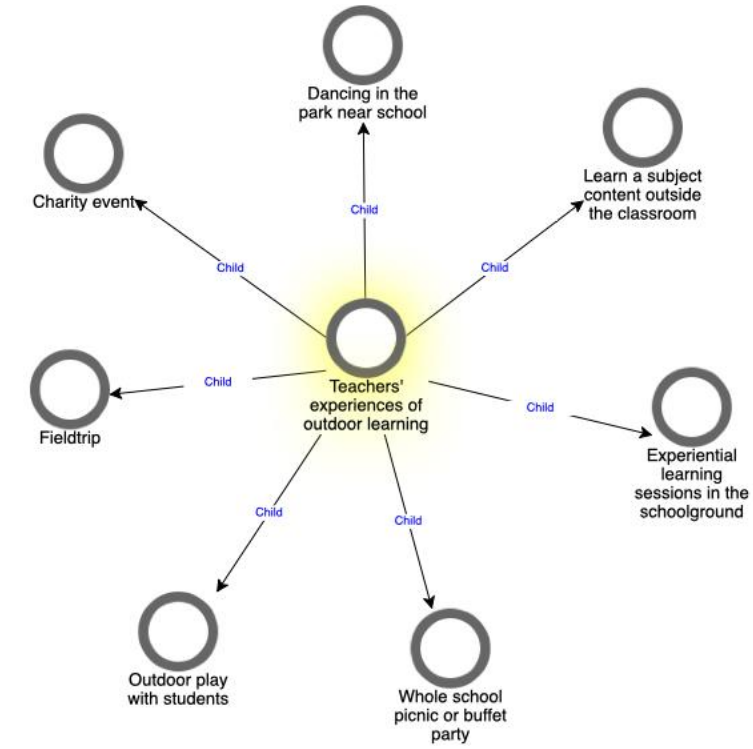
		teaching manual and observation of real outdoor learning sessions with students.	
T7	New learning: preparing outdoor learning sessions, teamwork, recognising colleagues' strengths. Collaborative team dynamics: collegial atmosphere, accountability, listening, contributing to lesson planning.	Changes in teaching practices: adjust facilitation of outdoor learning sessions, set time limits, develop learning agendas, and familiarise with learning venues. Integration of PROL: to foster a positive shift in students' mindsets through evolving learning environments. Additional knowledge and or support needed: school support resources and collaboration with colleagues. Enhancing teachers' experiences of professional development workshops: no answer.	PROL benefits: enhance understanding of the local environment, relaxation, and connection with students. Anticipated challenges: bad weather, time constraints PROL plan: will implement outdoor learning sessions if the principals approve.
T8	New learning: PROL activities, writing poems, principles of leaving no trace, reflection. Collaborative team dynamics: effective	Changes in teaching practices: utilise the demonstration activities and reflections for the experiential and career education modules.	PROL benefits: encourage teachers' initiative in planning outdoor learning activities, reduce stress, promote active, healthy, creative, and socially connected learning.

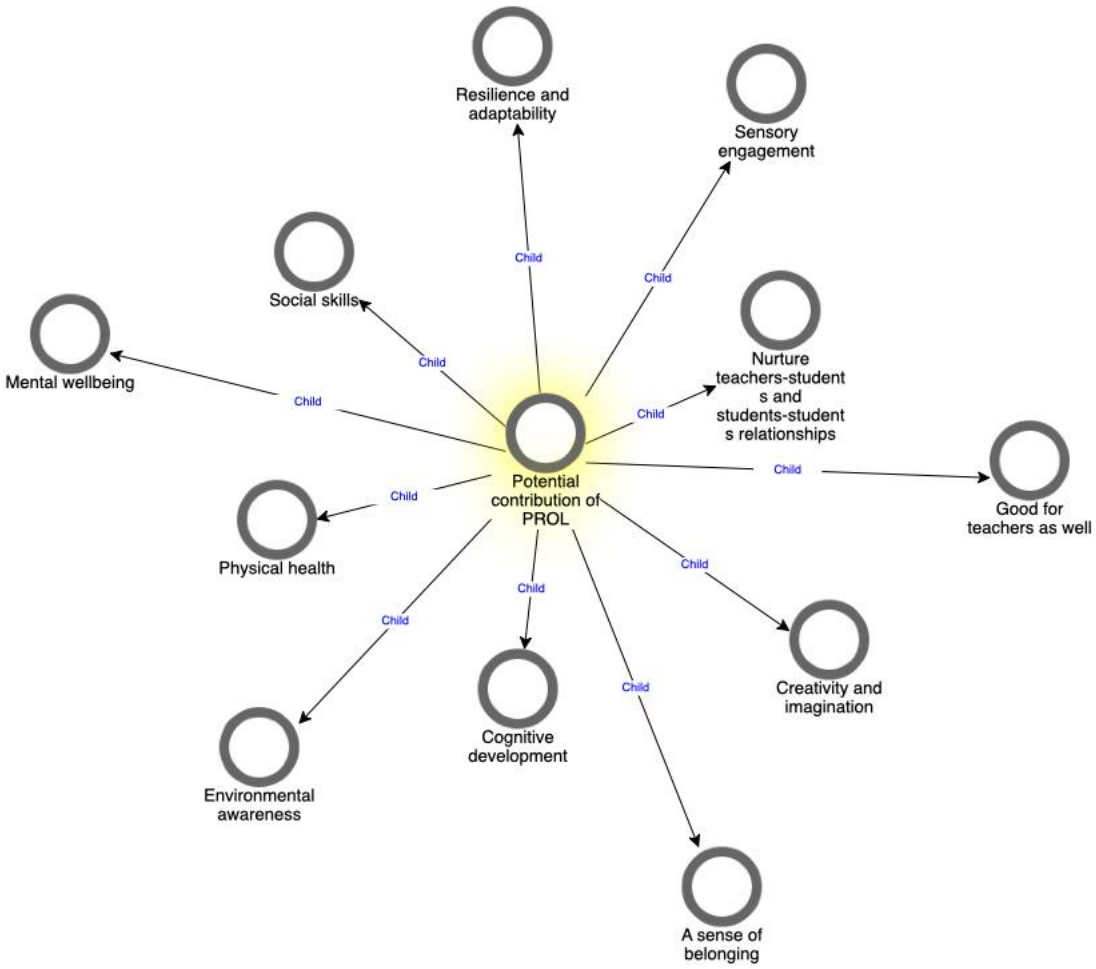
	collaboration, positive attitude, shared mindset, flexibility, responsible and considerate team players.	Integration of PROL: if the school principals offer support and resources. Additional knowledge and or support needed: assistance in developing learning worksheets and support with resources and budget. Enhancing teachers' experiences of professional development workshops: no need for improvement.	Anticipated challenges: rain, crime, plague, student management, safety concern. PROL plan: will collaborate with my teammate from the workshop to implement outdoor learning on school grounds or local parks.
T9	New learning: hands-on PROL activities, experiential learning, connecting with nature and people, flexible and communicative learning approach. Collaborative team dynamics: excellent group interaction, generating ideas, outstanding content for lesson plans.	Changes in teaching practices: implement reflection, facilitate outdoor learning, and promote sensory skills and imagination. Integration of PROL: to connect students with nature and the community. Additional knowledge and or support needed: more learning materials and continued collaboration with colleagues. Enhancing teachers' experiences of	PROL benefits: enhance creativity, nature connection, active and healthy learning, social skills, concentration, and cognition. Anticipated challenges: adverse weather, school approval, parental support, student management, time constraints, safety concern. PROL plan: will collaborate with my colleagues to implement outdoor learning sessions.

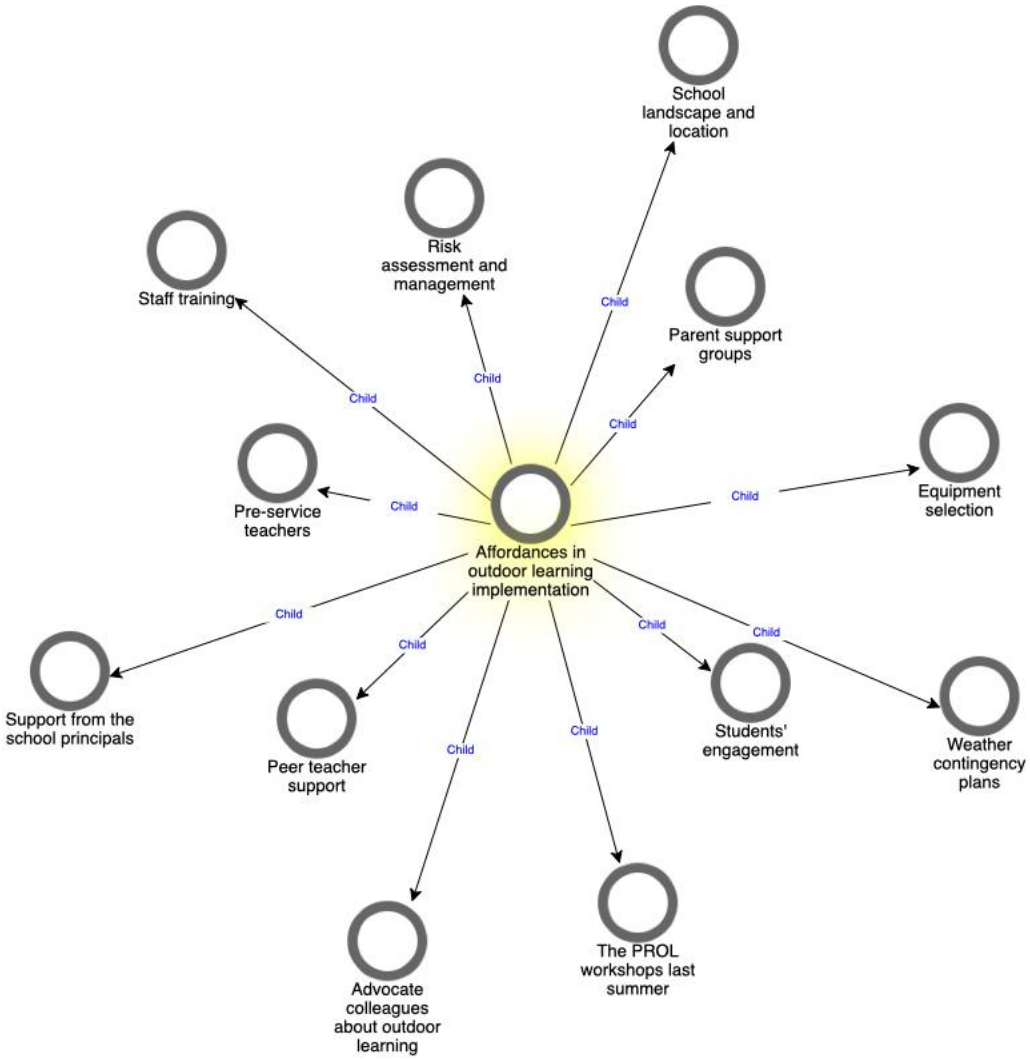
		professional development workshops: more demonstration activities and collaborative lesson planning.	

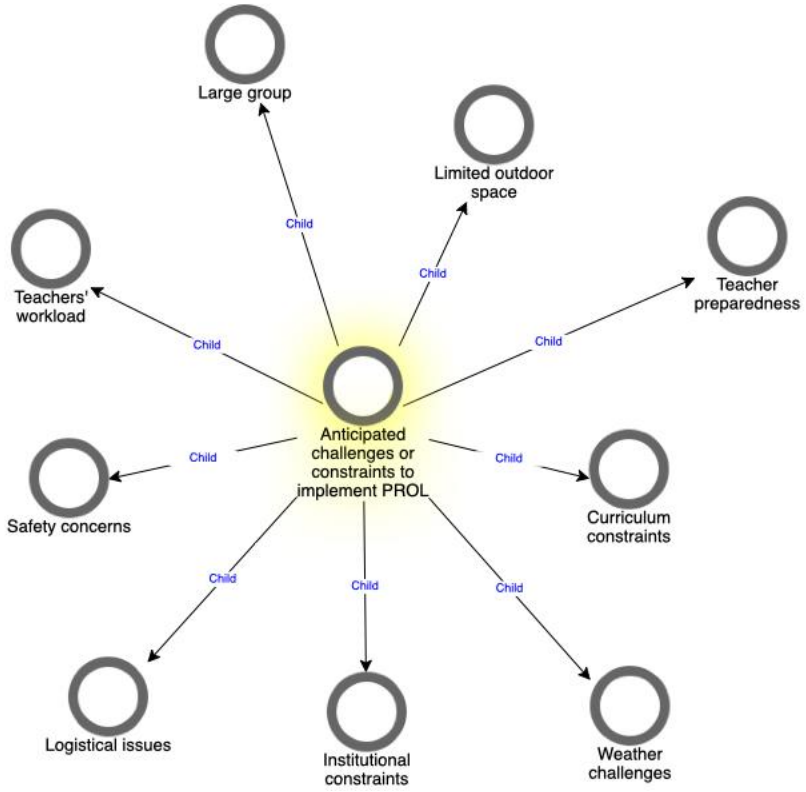
Data exploratory diagrams of the whole dataset including teachers' reflections, pre-workshop interviews, and follow-up interviews

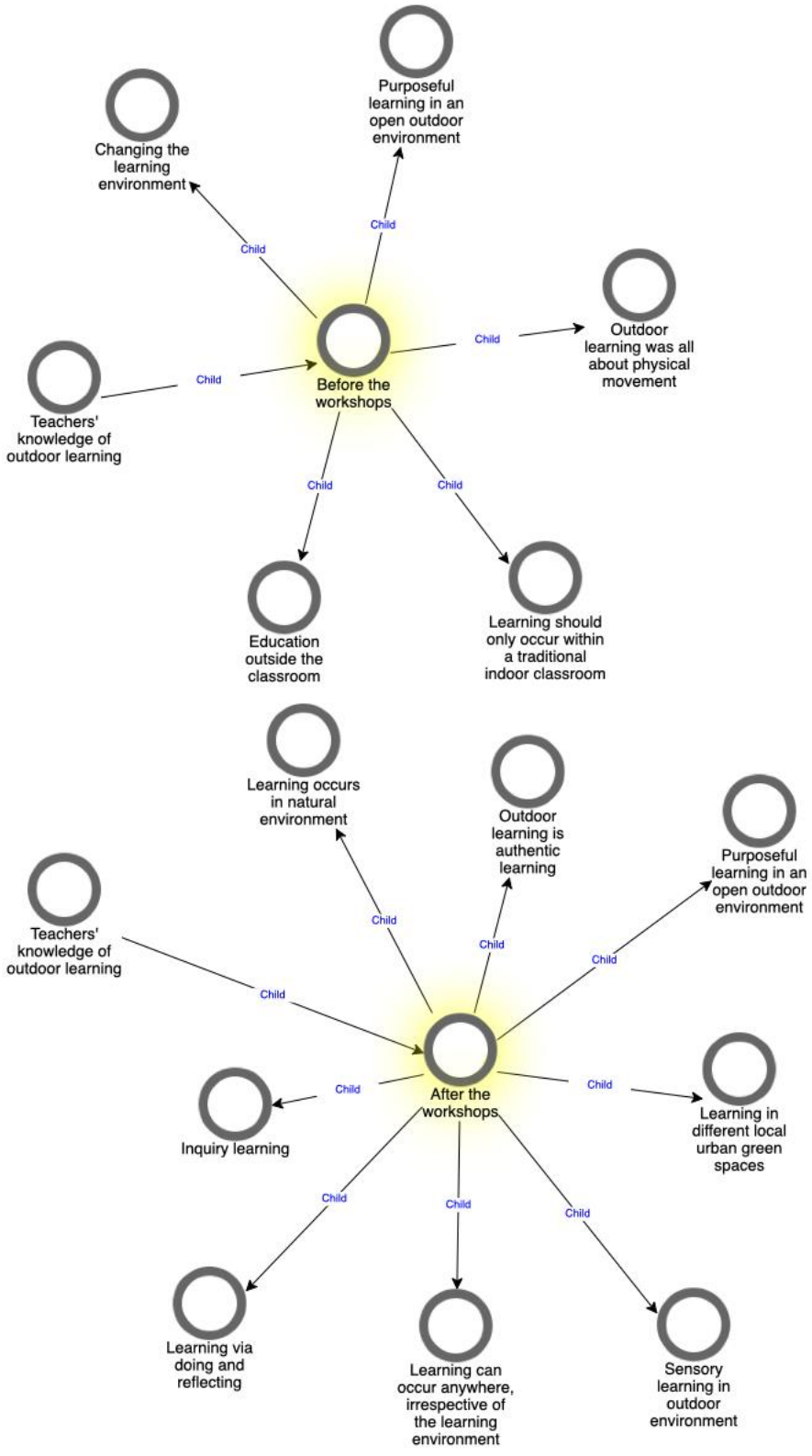


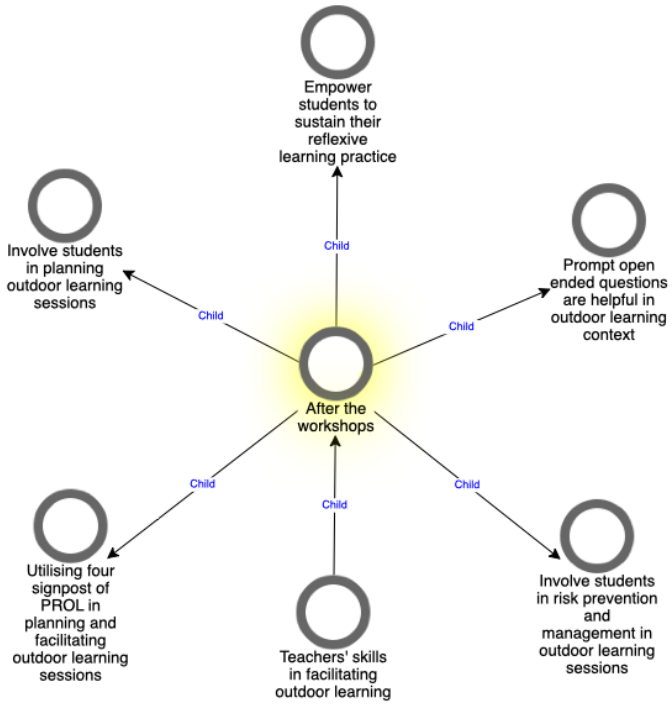

Dancing in the park near school
Charity event
Learn a subject content outside the classroom
Child
Child
Child
Teachers' experiences of outdoor learning
Child
Fieldtrip
Child
Experiential learning sessions in the schoolground
Child
Child
Outdoor play with students
Whole school picnic or buffet party

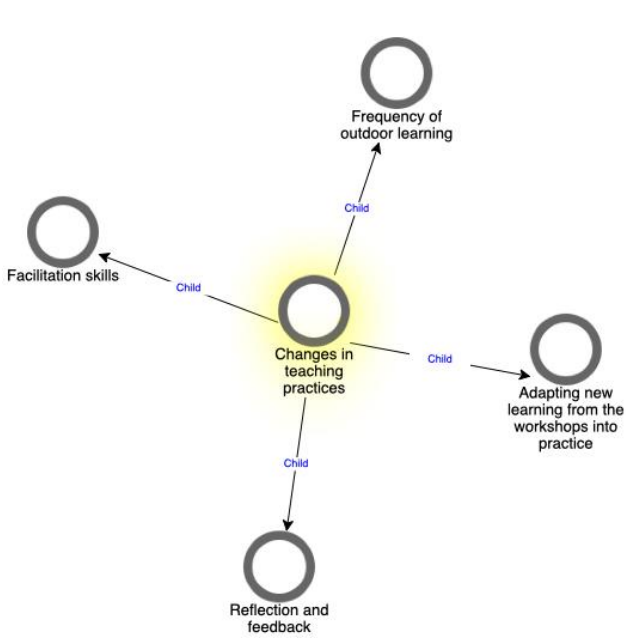

Resilience and adaptability
Sensory engagement
Child
Child
Social skills
Child
Nurture teachers-students and students-students relationships
Mental wellbeing
Child
Child
Potential contribution of PROL
Child
Good for teachers as well
Child
Physical health
Child
Child
Child
Creativity and imagination
Child
Cognitive development
Environmental awareness
Child
A sense of belonging

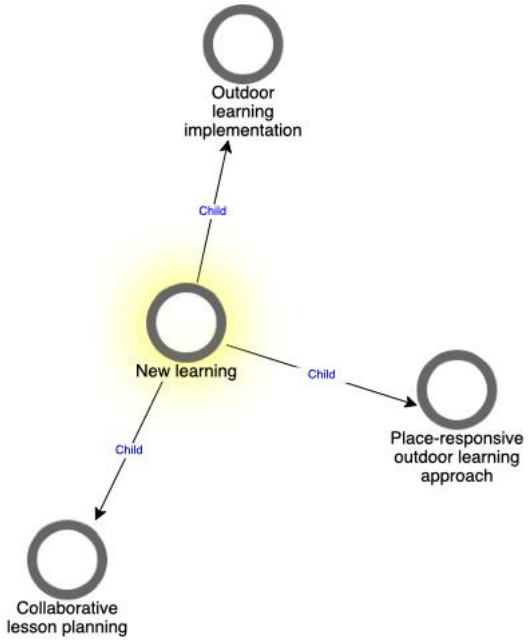

School landscape and location
Risk assessment and management
Staff training
Parent support groups
Child
Pre-service teachers
Equipment selection
Affordances in outdoor learning implementation
Support from the school principals
Peer teacher support
Students' engagement
Weather contingency plans
Advocate colleagues about outdoor learning
The PROL workshops last summer

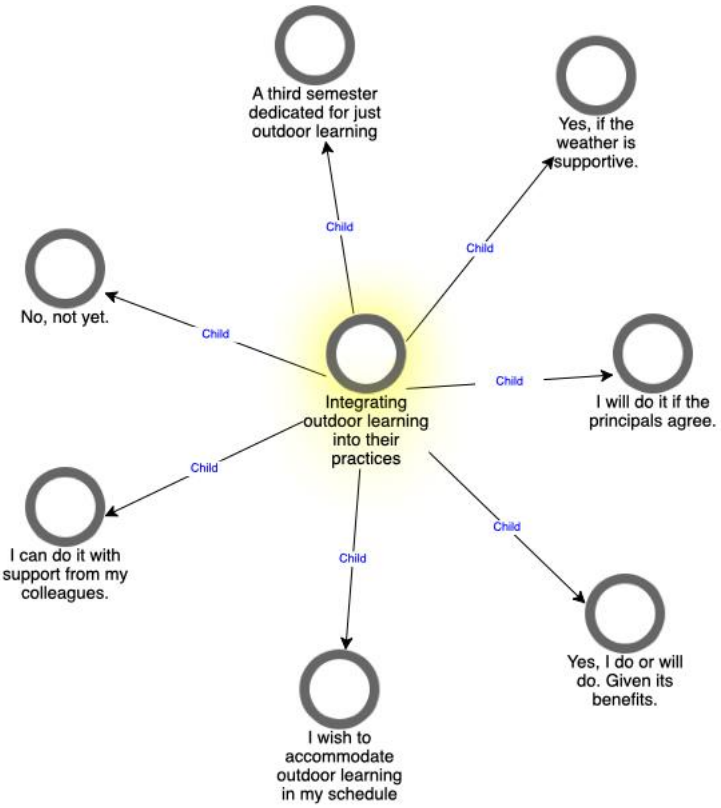

Large group
Limited outdoor space
Teachers' workload
Teacher preparedness
Child
Anticipated challenges or constraints to implement PROL
Safety concerns
Curriculum constraints
Logistical issues
Institutional constraints
Weather challenges

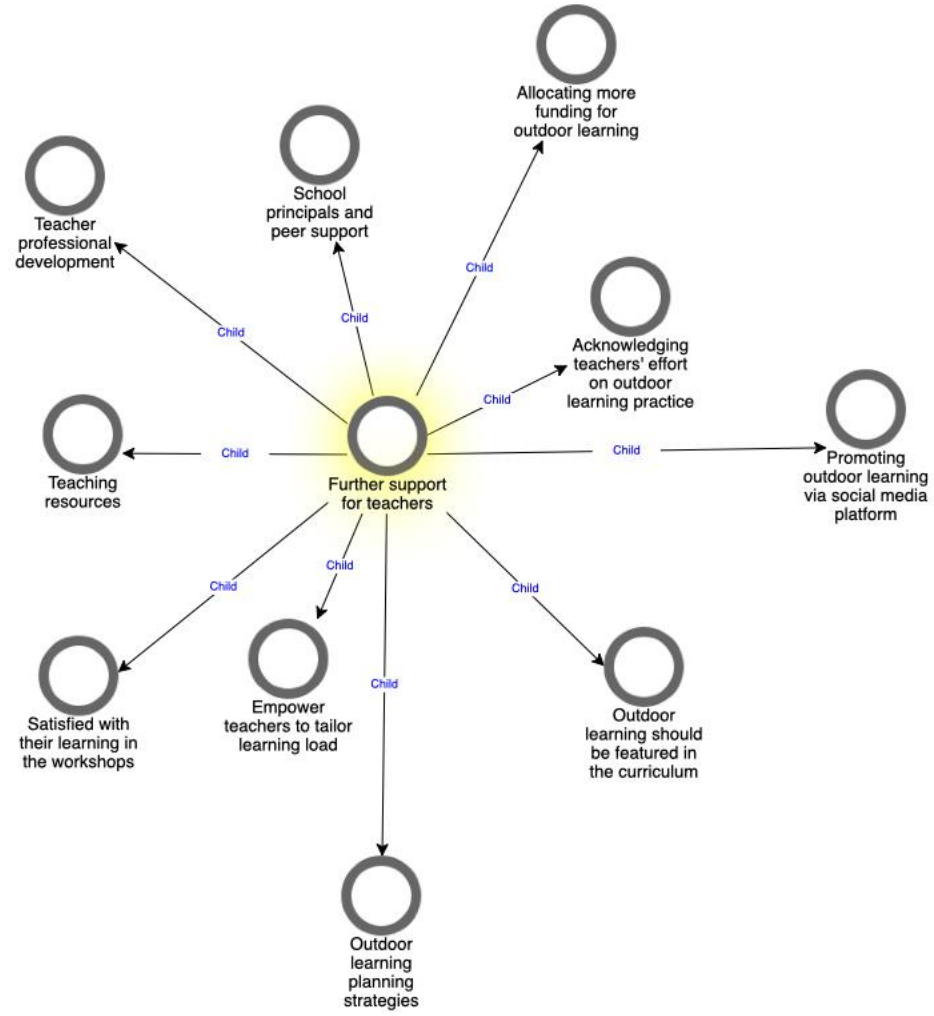

Purposeful learning in an open outdoor environment
Changing the learning environment
Child
Child
Outdoor learning was all about physical movement
Child
Teachers' knowledge of outdoor learning
Child
Before the workshops
Child
Child
Education outside the classroom
Learning should only occur within a traditional indoor classroom
Learning occurs in natural environment
Outdoor learning is authentic learning
Purposeful learning in an open outdoor environment
Teachers' knowledge of outdoor learning
Child
Child
Child
Child
Child
After the workshops
Inquiry learning
Learning in different local urban green spaces
Child
Child
Child
Learning via doing and reflecting
Learning can occur anywhere, irrespective of the learning environment
Sensory learning in outdoor environment

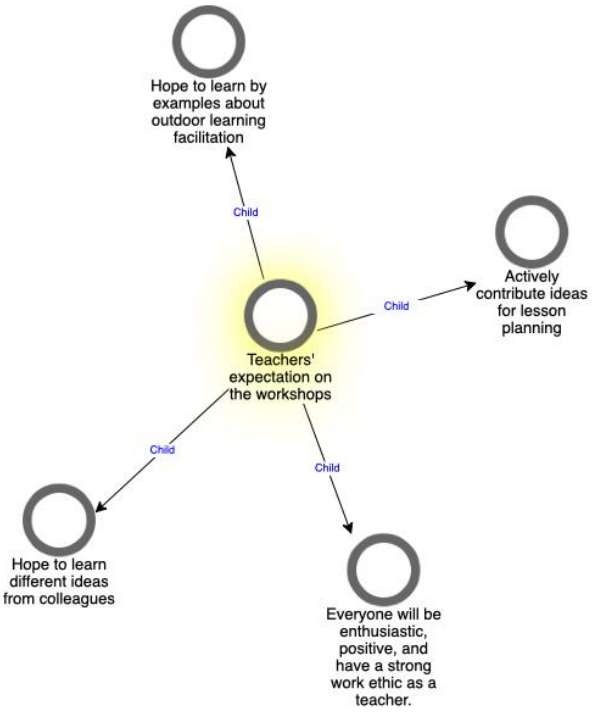

Empower students to sustain their reflexive learning practice
Involve students in planning outdoor learning sessions
Prompt open ended questions are helpful in outdoor learning context
After the workshops
Utilising four signpost of PROL in planning and facilitating outdoor learning sessions
Teachers' skills in facilitating outdoor learning
Involve students in risk prevention and management in outdoor learning sessions
Child

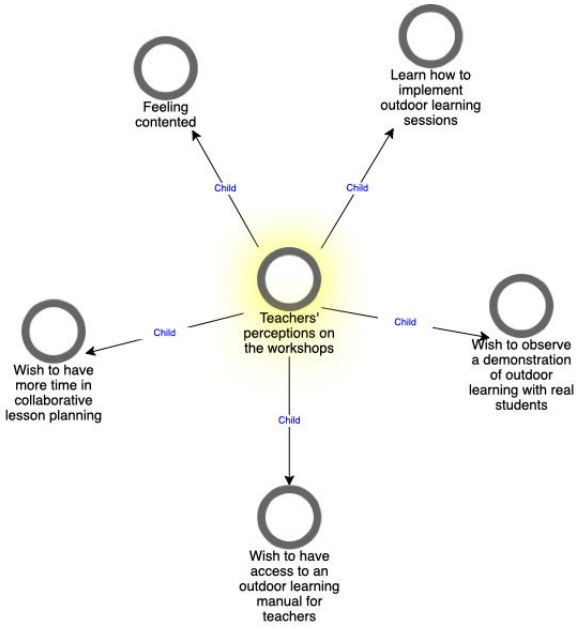

Frequency of outdoor learning
Facilitation skills
Changes in teaching practices
Adapting new learning from the workshops into practice
Reflection and feedback
Child

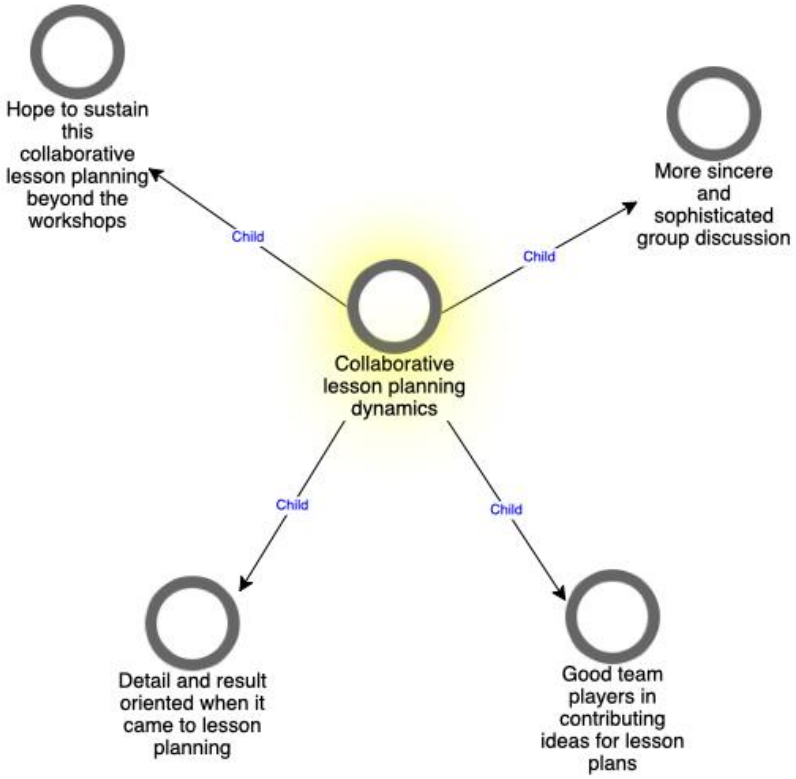

Outdoor learning implementation
New learning
Place-responsive outdoor learning approach
Collaborative lesson planning
Child


A third semester dedicated for just outdoor learning
Yes, if the weather is supportive.
No, not yet.
Integrating outdoor learning into their practices
I will do it if the principals agree.
I can do it with support from my colleagues.
I wish to accommodate outdoor learning in my schedule
Yes, I do or will do. Given its benefits.
Child


Allocating more funding for outdoor learning
School principals and peer support
Teacher professional development
Acknowledging teachers' effort on outdoor learning practice
Teaching resources
Further support for teachers
Promoting outdoor learning via social media platform
Satisfied with their learning in the workshops
Empower teachers to tailor learning load
Outdoor learning should be featured in the curriculum
Outdoor learning planning strategies
Child


Hope to learn by examples about outdoor learning facilitation
Child
Actively contribute ideas for lesson planning
Child
Teachers' expectation on the workshops
Child
Hope to learn different ideas from colleagues
Child
Everyone will be enthusiastic, positive, and have a strong work ethic as a teacher.


Feeling contented
Child
Learn how to implement outdoor learning sessions
Child
Wish to have more time in collaborative lesson planning
Child
Teachers' perceptions on the workshops
Child
Wish to observe a demonstration of outdoor learning with real students
Child
Wish to have access to an outdoor learning manual for teachers


Hope to sustain this collaborative lesson planning beyond the workshops
Child
More sincere and sophisticated group discussion
Child
Collaborative lesson planning dynamics
Child
Detail and result oriented when it came to lesson planning
Child
Good team players in contributing ideas for lesson plans

Personal reflections

To familiarise myself with the data, I transcribed it in Vietnamese and translated it into English. The name of the selected school, the names of the teacher participants, and their identifying details were omitted from my transcription and translation. After completing the initial translation, a professional translator reviewed it to ensure it met quality standards. I diligently wrote my analytic memo to document my thoughts and reflexivity during this process. This undertaking fostered my genuine engagement and connection as I read and reread the data multiple times. I reviewed each interview three times and drafted my analytic memo before moving on to the next. This method significantly enhanced my analytical skills in the initial phase of reflexive thematic analysis. Although time-consuming, it proved to be a rewarding experience that allowed me to immerse myself in the data and understand its breadth and depth.

Throughout this process, I noticed that I delayed transcribing and translating the interviews shortly after generating them because of the overwhelming emotions I felt after each one, whether conducted in person or online. This pause allowed me to return to a neutral state before proceeding. I aimed to give myself time to understand my participants without succumbing to emotionally impulsive judgements. As a qualitative researcher, I remain mindful of approaching my data with curiosity and wonder. When I felt more emotionally stable, I dedicated time to engaging with the data by reading and rereading it with inquisitiveness and inquiry to gain deeper insights.

Regarding analysis strategies, there was no preexisting frame for codes. Instead, I developed codes from the data and adjusted them as I explored the patterns and meanings of the interviews and reflections with teachers.

Emerging questions and ideas for further analysis

The questions below facilitated my understanding and interpretation as I read and reread my data.

1. What factors shaped the teacher's understanding of PROL and their incorporation of this learning approach into their teaching practices?

   Many teachers have experienced the benefits of being in nature, such as reduced stress and increased enthusiasm. These personal experiences shape their belief that similar advantages will extend to their students.

   PROL aligns with a holistic approach to education, emphasising the development of the whole person cognitively, emotionally, physically, and socially. Teachers' observations of students' positive responses to outdoor activities, as evidenced by their engagement, creativity, and collaboration, reinforce their confidence in the effectiveness of PROL.

   They assert that fostering students' appreciation and connection to nature will cultivate a sense of stewardship for the environment within them.

They recognise that PROL provides opportunities for their professional development in innovative teaching strategies, enhancing creativity, and improving leadership and teamwork skills.

They are more likely to embrace this innovative approach with support from their school principals, colleagues, and the parent support group.

Their motivation to create a more engaging and enjoyable learning experience for their students leads them to believe that PROL can render learning more relevant and meaningful by connecting it to real-world contexts.

Their anticipation of positive outcomes from PROL, such as improved academic performance, better relationships with teachers and peers, and enhanced well-being, drives their commitment to implementing PROL.

2. What assumptions underpin these teachers?

   They assume that being outdoors will positively impact both their own and their students' mental, emotional, and physical wellbeing. They believe outdoor learning will enhance cognitive abilities, creativity, problem-solving skills, and overall academic performance. They think this innovative learning approach will foster a strong connection to nature and the local environment, leading to increased environmental literacy and responsibility. They contend that PROL supports holistic development, including physical health, social skills, personal growth, and mindfulness. They are convinced that students will be more engaged and motivated to learn in an outdoor setting compared to a traditional classroom. They seek support from school principals, colleagues, and parents to implement PROL effectively. They believe adequate planning and preparation can help mitigate challenges like weather conditions, safety concerns, and student management in open spaces.

3. What kind of worldview do these teachers support or rely upon?

   The teacher participants believe in holistic development in education. They emphasise the importance of environmental stewardship and sustainability. They prioritise their students' needs, interests, and overall wellbeing. They advocate for a collaborative learning process that strengthens social bonds and fosters a sense of belonging and mutual support. They are open to innovative teaching methods and a flexible approach to education to enhance learning outcomes. They support creating a positive, stress-free learning environment for effective education. They believe in empowering students to take responsibility for their learning and encourage teachers to initiate innovations in their teaching practices.

4. How do their worldviews influence their teaching practices?

   They might utilise interdisciplinary lessons that connect different subjects and focus on the overall growth of their students. They will prioritise creating learning environments that allow students to interact with nature, such as school grounds, school gardens, and local parks. They will tailor their teaching methods to meet students' needs and ensure they feel valued and

supported. They will focus on building strong relationships with students, parents, and the community to foster a supportive and inclusive learning environment. They will be creative in their approach and willing to experiment with new ideas. They will encourage their students to set goals, make decisions, and reflect on their progress. They will continuously seek improvement and professional development opportunities.

5. What implications do these teachers have?

   Their implications underscored the potential for PROL to transform teachers' practices, enhance students' learning experiences, and promote a more holistic and environmentally conscious educational approach.

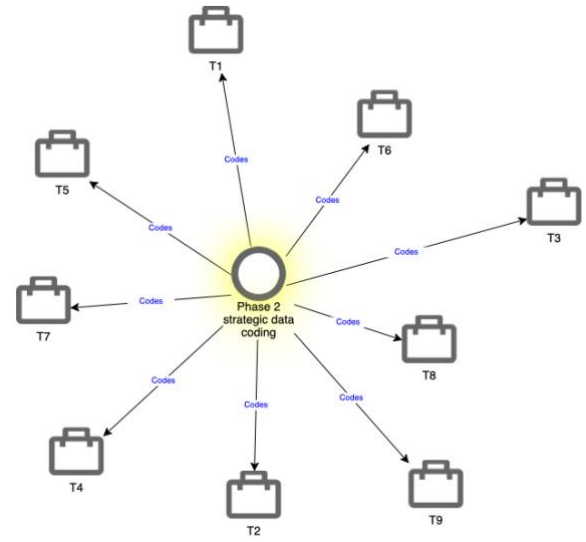
Appendix 14: Research memo of RTA phase 2, systematic data coding

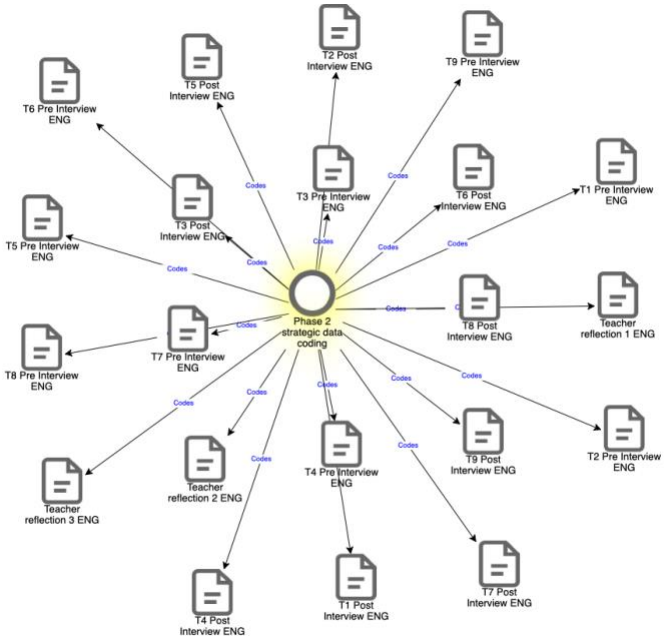
Purpose

To document how I engaged and developed a systematic approach to coding my data.

Data source

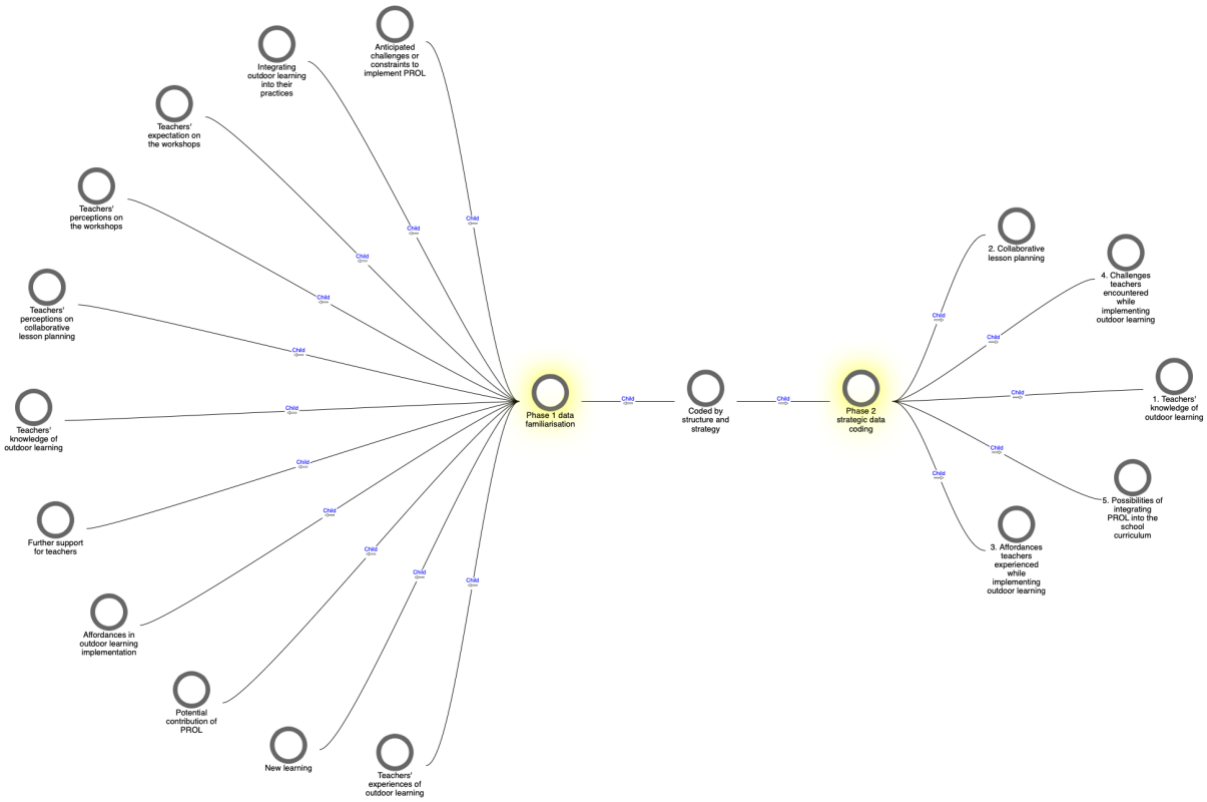
The data comprise nine in-person pre-workshop interviews, three written reflections during and after the workshops, and nine online follow-up interviews with the teacher participants.





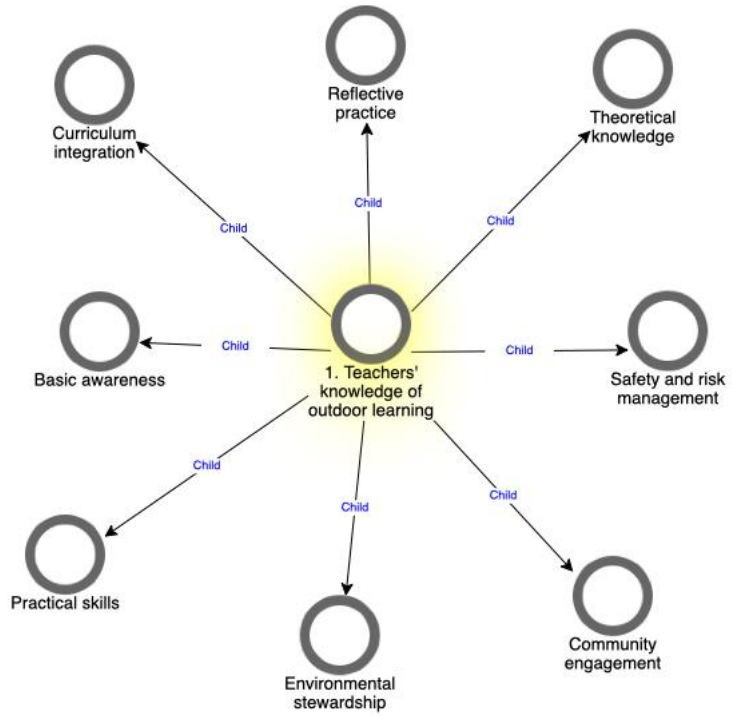
Developing initial codes

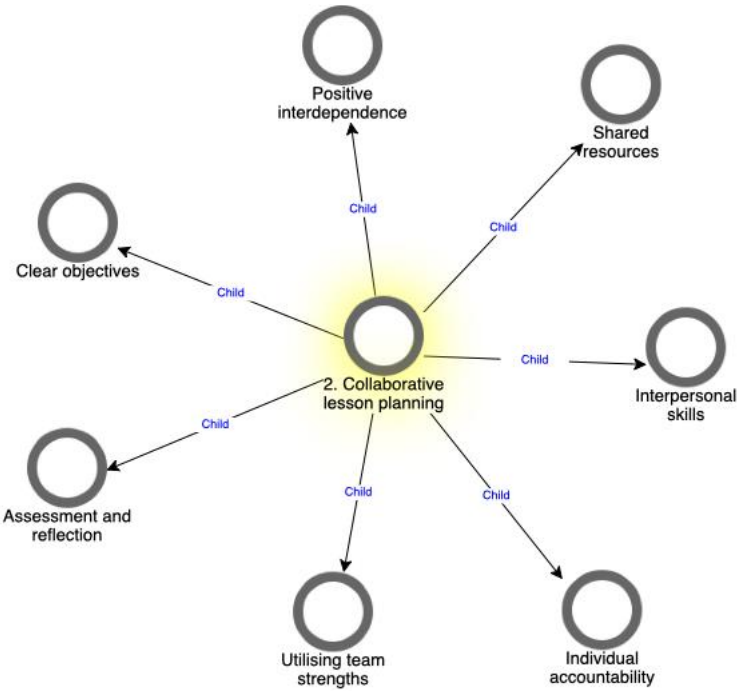
I used various approaches to generate codes in phases 1 and 2 of RTA. To familiarise myself with the data, I adopted an inductive approach. I developed 11 subtopics within the focus area of outdoor learning to organise the insights from the teacher participants. When I began coding the data in detail, I shifted to a more deductive approach. I created five main concept areas to categorise my codes. The codes and relevant descriptions and references were included in the codebook. Excerpts of the teachers' responses can be retrieved and saved in separate documents. Alternating between inductive and deductive approaches in data coding enabled me to view the data from different perspectives.

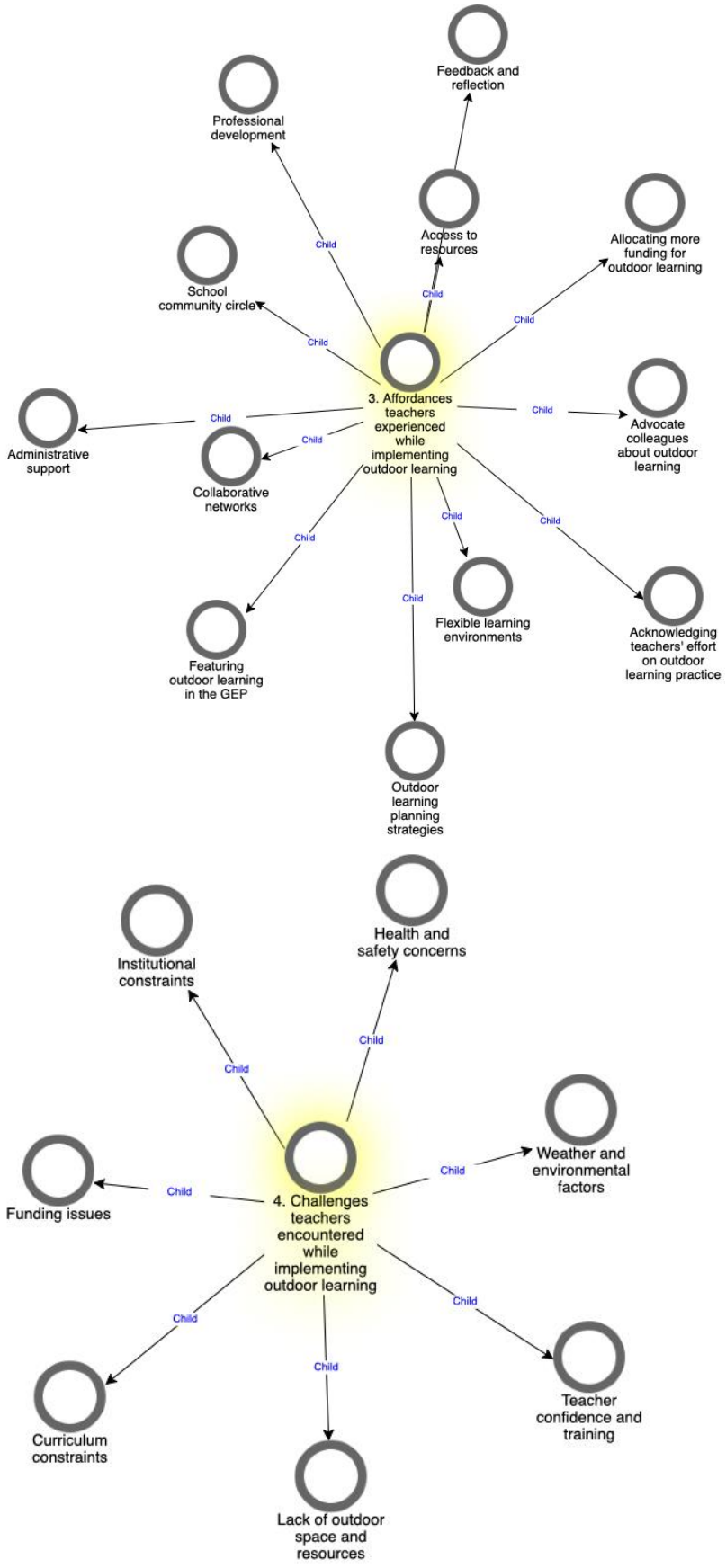


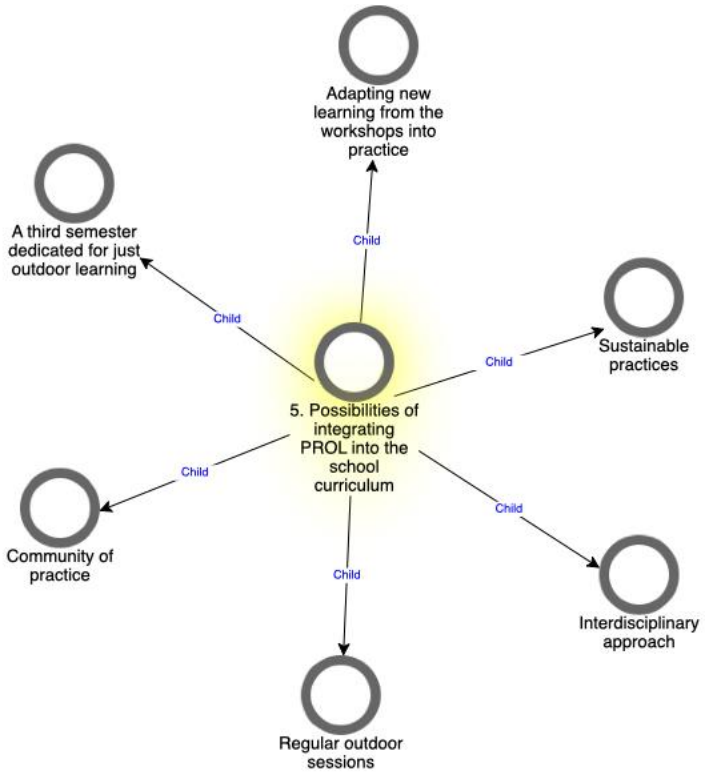
Organising codes

Below are the collated codes after grouping.

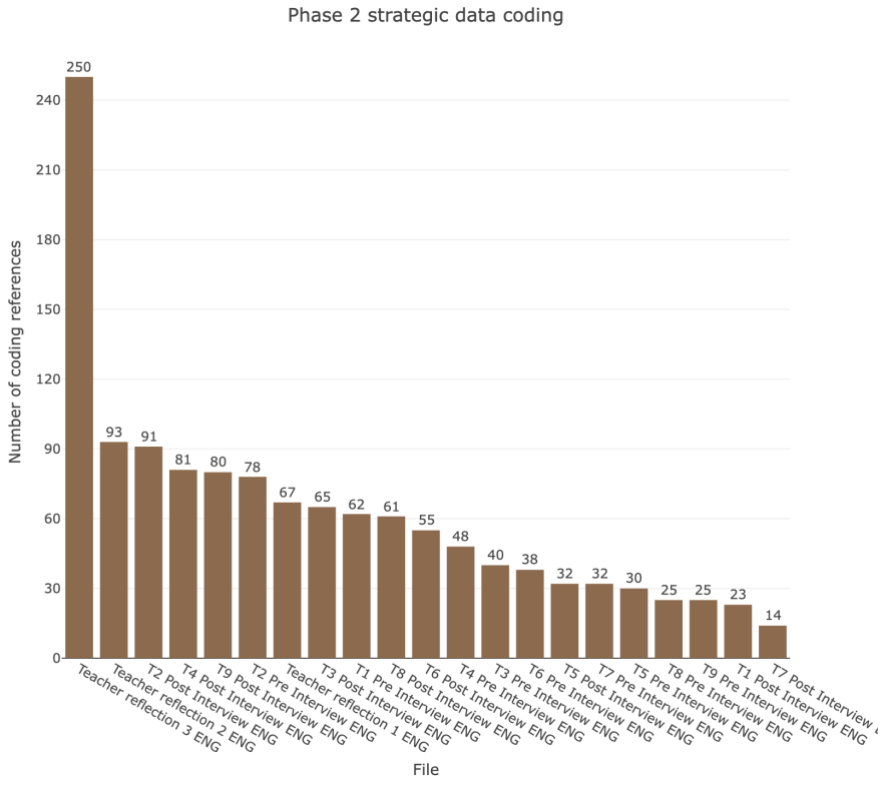




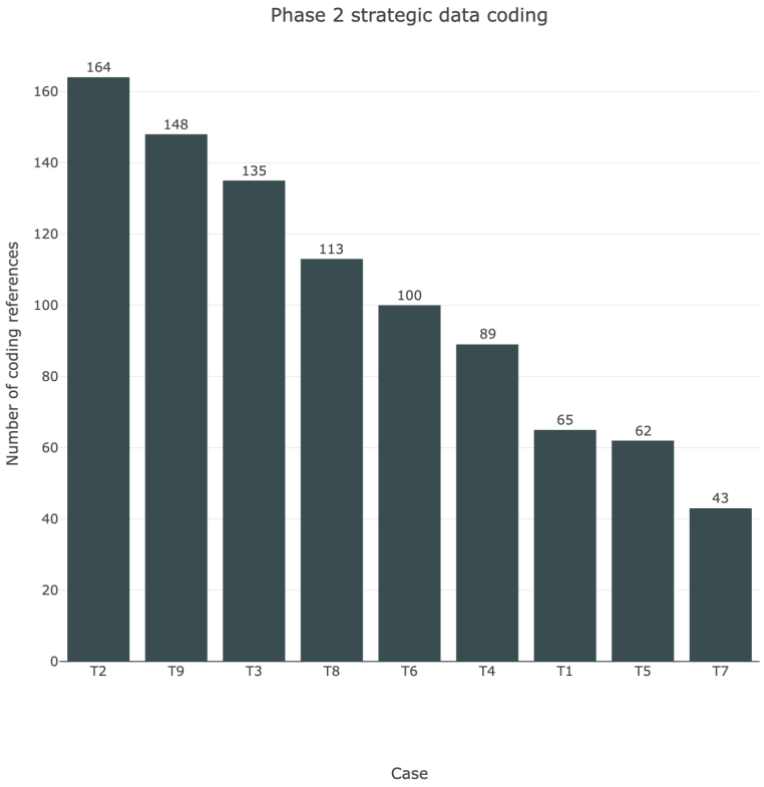

Feedback and reflection
Professional development
Access to resources
Allocating more funding for outdoor learning
School community circle
Child
3. Affordances teachers experienced while implementing outdoor learning
Advocate colleagues about outdoor learning
Administrative support
Collaborative networks
Featuring outdoor learning in the GEP
Flexible learning environments
Acknowledging teachers' effort on outdoor learning practice
Outdoor learning planning strategies
Health and safety concerns
Institutional constraints
Weather and environmental factors
Funding issues
4. Challenges teachers encountered while implementing outdoor learning
Curriculum constraints
Teacher confidence and training
Lack of outdoor space and resources



The chart below illustrates the frequency of coding references by files.



The chart below shows how often coding references are made in various cases.



Below is the result of a matrix coding query I conducted to explore the coding intersections among the 21 data files and the five top-level codes.

	Phase 2 strategic data coding	1. Teachers' knowledge of outdoor learning	2. Collaborative lesson planning	3. Affordances teachers experienced while implementing outdoor learning	4. Challenges teachers encountered while implementing outdoor learning	5. Possibilities of integrating PROL into the school curriculum
T1 Post Interview ENG	12	1	2	4	3	2
T2 Post Interview ENG	45	19	3	13	7	4
T3 Post Interview ENG	29	13	2	11	3	0
T4 Post Interview ENG	36	17	4	10	5	2
T5 Post Interview ENG	13	1	0	9	6	0
T6 Post Interview ENG	25	19	0	3	3	1
T7 Post Interview ENG	5	1	0	4	0	0
T8 Post Interview ENG	32	11	1	12	7	1

T9 Post Interview ENG	40	14	1	17	6	3
T1 Pre Interview ENG	33	17	12	0	3	2
T2 Pre Interview ENG	37	25	8	3	0	1
T3 Pre Interview ENG	25	9	8	1	7	0
T4 Pre Interview ENG	22	14	3	4	1	1
T5 Pre Interview ENG	17	10	2	1	4	0
T6 Pre Interview ENG	23	19	4	0	0	0
T7 Pre Interview ENG	19	11	7	0	1	0
T8 Pre Interview ENG	16	11	2	0	3	0
T9 Pre Interview ENG	13	6	6	0	0	1
Teacher reflection 1 ENG	16	14	8	8	0	0
Teacher reflection 2 ENG	27	10	0	20	0	13
Teacher reflection 3 ENG	58	14	0	5	32	9

Below is the outcome of a matrix coding query I conducted to compare the responses of nine teacher participants regarding the five main concepts explored.

	1. Teachers' knowledge of outdoor learning	2. Collaborative lesson planning	3. Affordances teachers experienced while implementing outdoor learning	4. Challenges teachers encountered while implementing outdoor learning	5. Possibilities of integrating PROL into the school curriculum
T1	9	2	8	5	7
T2	23	4	21	13	9
T3	18	3	15	9	3
T4	19	5	11	5	3
T5	3	0	9	10	1
T6	24	1	7	5	4
T7	4	1	7	2	2

T8	14	2	16	11	4
T9	20	2	21	12	7

Below is the result of a word frequency query I conducted with a minimum word length of six letters, including stemmed words, displaying the 100 most frequent words.



Reflections

I coded the data electronically using NVivo R1 for Mac (Lumivero, 2025). I chose this Qualitative Data Analysis Software (QDAS) to support my analysis process because it allowed me to do more than I could with manual methods (Beekhuyzen & Bazeley, 2025). This software programme effectively assisted me in storing, organising, managing, and reconfiguring my data to facilitate my analytical reflection (Saldaña, 2016). The coding process stimulated my reflections on the teacher participants' responses. I employed holistic coding during this process and utilised both 'lumper' and 'splitter' coding (Saldaña, 2016). I started with the top-level codes as hangers for the initial codes within the same concepts (Beekhuyzen & Bazeley, 2025). Code and sub-codes were added or evolved as I coded

each data segment. I aimed for a high-quality, in-depth, consistent, and thorough coding (Terry et al., 2017). To prevent the development of an unmanageable coding system that leads to unhealthy code hierarchies (Beekhuyzen & Bazeley, 2025), I assigned each code to a single position in the coding system. Whenever I felt distanced from a particular coded dataset, I reread its reference files. I also revisited the codes with the most and least coding references to reconsider the data from a different perspective (Beekhuyzen & Bazeley, 2025). This systematic data coding process outputted a collection of my code labels referenced in their relevant data extracts (Braun & Clarke, 2022).

Reflecting on my attributes for coding, I maintained a well-structured and documented coding system in my analytical memos, which made it easier to comprehend and manage. At first, I felt quite paralysed due to the overwhelming nature of confronting the entire data matrix. Fortunately, my perseverance has guided me through the challenges, enabling me to tackle complex problems one segment of data at a time. Frequent communication with my supervisors via memo writing or in-person meetings has prevented me from procrastinating and strengthened my data analysis. During this time, I also learned how to deal with ambiguity as I developed my ability to make decisions with incomplete information and adapted them as I faced new detailed information from the data. I was flexible and open to learning NVivo R1 along this journey to support my data analysis process. I learned that coding was not just about logic. My creativity reflected how I approached the data and analysed them. Most importantly, I respected the privacy of my teacher participants and adhered to AUT ethical guidelines in my analysis. I am committed to the trustworthiness of my research results.

Review and refinement

I am collaborating with my supervisors to review and enhance the consistency of the coding system in preparation for phase 3 of the RTA, which entails generating initial themes. Discussing my systematic data coding with my supervisors will assist me in writing more precise and concise codes along with their descriptions while working towards developing initial themes from that robust foundation of codes.

Appendix 15: Research memo of RTA phase 3, generating initial themes

Purpose: to examine the codes to identify broader patterns of meaning, also known as potential themes, and to collate data relevant to each candidate theme.

Data source: 21 data files of 18 interviews and three written reflections with nine Vietnamese public high school teacher participants

1. **Review of codes:**

Summary of codes: Please refer to a separate codebook for more information about the list of codes and their descriptions. The codes were developed and aligned with the five main explored concepts at this stage.

- **Teachers' insights on outdoor learning**
- **Collaborative lesson planning**
- **Affordances of implementing outdoor learning**
- **Challenges of implementing outdoor learning**
- **Possibilities of integrating place-responsive outdoor learning into the school curriculum**

2. **Grouping codes:**

Criteria for grouping: I categorised the codes according to their thematic similarity and relevance to the research questions.

Code clusters: I then created clusters of related codes and provided a brief description for each of them.

- **Concept 1: Teachers' insights on outdoor learning**

  Cluster 1: Education and learning

  Codes: curriculum integration; theoretical knowledge, practical skills

  Description: This cluster includes codes related to the teacher participants' understanding of embedding relevant outdoor learning topics and skills into the school curriculum to provide students with comprehensive theoretical knowledge and practical experience.

  Cluster 2: Community and engagement

Codes: basic awareness; community engagement

Description: This cluster includes codes for students and teachers engaged in community-benefiting activities and raising awareness about significant issues.

Cluster 3: Environmental and ethical practices

Codes: environmental stewardship; reflective practice

Description: This cluster encompasses codes that promote the responsible use of natural resources and encourage continuous ethical improvement through reflective practices.

Cluster 4: Safety and management

Codes: safety and risk management

Description: This cluster encompasses codes for ensuring safety and well-being by identifying, assessing, and mitigating risks in outdoor learning environments.

- **Concept 2: Collaborative lesson planning**

Cluster 5: Team dynamics and collaboration

Codes: interpersonal skills; positive interdependence; shared resources; utilising team strengths

Description: This cluster includes codes that foster effective interactions and relationships among the teacher participants as they work with their colleagues to plan lessons. Such collaboration emphasises interpersonal skills, positive interdependence, shared resources, and leveraging team strengths.

Cluster 6: Individual contributions and responsibilities

Codes: clear objectives; individual accountability

Description: This cluster includes codes highlighting the importance of clear objectives and individual accountability, recognising each teacher's unique contributions and promoting ownership toward team goals.

Cluster 7: Evaluation and improvement

Codes: assessment and reflection

Description: This cluster contains codes related to the ongoing assessment and reflection of outdoor learning practices to identify improvement areas and make informed decisions for better outcomes.

- **Concept 3: Affordances of implementing outdoor learning**

Cluster 8: Support and resources

Codes: access to resources; administrative support; allocate more funding; flexible learning environments

Description: This cluster comprises codes that ensure the availability of all necessary materials, equipment, and financial resources to facilitate effective outdoor learning, along with robust administrative support to promote and sustain these initiatives.

Cluster 9: Teacher and community engagement

Codes: acknowledge teachers' efforts; advocate colleagues; school community circle

Description: This cluster includes codes that emphasise recognising and celebrating the efforts of teachers who implement outdoor learning, encouraging colleagues to adopt these methods and fostering a supportive network within the school community, which includes students, peer teachers, parents, and local organisations, to enhance and sustain outdoor learning initiatives.

Cluster 10: Planning and development

Codes: outdoor learning planning strategies; professional development; collaborative networks

Description: This cluster comprises codes associated with developing comprehensive plans and strategies for integrating outdoor learning into the curriculum, offering continuous professional development for educators, and building collaborative networks with other schools and organisations to exchange resources and best practices.

Cluster 11: Integration and improvement

Codes: featuring place-responsive outdoor learning in the General Education Programme; feedback and reflection

Description: This cluster comprises codes related to integrating PROL into the GEP and ensuring its valued status within the curriculum. It also includes implementing regular feedback and reflection sessions to continually enhance the quality and effectiveness of outdoor learning practices.

- **Concept 4: Challenges of implementing outdoor learning**

Cluster 12: Institutional and resource constraints

Codes: curriculum constraints; institutional constraints; funding issues; lack of outdoor space and resources

Description: This cluster includes codes that encompass the various limitations and challenges associated with the structure and resources of the Vietnamese public school system. These challenges include rigid curricula, administrative hurdles, financial constraints, and a lack of necessary physical spaces and materials for outdoor learning.

Cluster 13: Health, safety, and environmental factors

Codes: health and safety concerns; weather and environmental factors

Description: This cluster includes codes that address concerns about the well-being of students and staff, as well as the impact of weather and environmental conditions on educational activities.

Cluster 14: Teacher preparedness and confidence

Codes: teacher confidence and training

Description: This cluster includes codes that focus on the readiness and self-assurance of the teacher participants in facilitating outdoor learning, highlighting the importance of adequate training and professional development.

- **Concept 5: Possibilities of integrating place-responsive outdoor learning into the school curriculum**

Cluster 15: Outdoor learning and sustainability

Codes: regular outdoor learning sessions; sustainable practices

Description: This cluster includes codes for integrating regular outdoor learning sessions into the school curriculum to foster sustainable practices and enhance environmental awareness.

Cluster 16: Interdisciplinary and adaptive learning

Codes: adapting new learnings; interdisciplinary approach

Description: This cluster contains codes encouraging an interdisciplinary approach, adapting new learning to enrich educational experiences.

Cluster 17: Collaborative and community-based learning

Codes: community of practice

Description: This cluster comprises codes that foster a community of practice among local and regional teachers, as well as beyond, to support collaborative learning and shared expertise.

3. **Generating initial themes**

Potential themes:

Theme 1: Outdoor learning for the holistic and responsible development of the Vietnamese public high school curriculum

Summary: This theme encompasses education and learning, community and engagement, environmental and ethical practices, as well as safety and management. It emphasises the holistic development of individuals and communities through outdoor learning practices, active participation, sustainable and ethical initiatives, and responsible management to ensure safety and well-being.

Relevant codes: curriculum integration, practical skills, theoretical knowledge, basic awareness of outdoor learning, community engagement, environmental stewardship, reflective practice, and safety and risk management

Theme 2: Striving for collaborative excellence and ongoing enhancement in lesson planning practices among the Vietnamese teacher participants

Summary: This theme integrates team dynamics and collaboration, individual contributions and responsibilities, as well as evaluation and improvement. It emphasises the significance of effective

teamwork and collaboration, acknowledging individual roles and responsibilities, and cultivating a culture of continuous evaluation and enhancement to attain excellence.

Relevant codes: interpersonal skills, positive interdependence, shared resources, utilising team strength, clear objectives, individual accountability, assessment and reflection

Theme 3: The teacher participants require comprehensive support and collaborative development for accessible and sustainable outdoor learning practices

Summary: This theme integrates support and resources, teacher and community engagement, planning and development, and integration and improvement. It emphasises the importance of providing robust support and resources, fostering strong engagement between teachers and the community, implementing strategic planning and development, and ensuring continuous integration and improvement to achieve holistic growth and success in outdoor learning among public schools.

Relevant codes: access to resources, administrative support, allocating more funds for outdoor learning, flexible learning environments

Theme 4: Navigating constraints and ensuring local teachers are prepared for outdoor learning practices in the Vietnamese public school system

Summary: This theme integrates institutional and resource constraints, health, safety, environmental factors, teacher preparedness and confidence. It emphasises the need to address and overcome institutional and resource limitations, ensure health and safety, and enhance teacher confidence and preparedness to foster a supportive and effective educational environment.

Relevant codes: curriculum constraints, institutional constraints, funding issues, lack of outdoor space and resources, health and safety concerns, weather and environmental factors, teacher confidence and training

Theme 5: Fostering an innovative and sustainable school community for outdoor learning initiatives within the Vietnamese public school system

Summary: This theme integrates outdoor learning and sustainability, interdisciplinary and adaptive learning, and collaborative and community-based learning. It emphasises the importance of creating innovative outdoor learning environments that promote sustainability, adapt to various disciplines, and foster collaboration within the community to enhance educational experiences.

Relevant codes: regular outdoor learning sessions, sustainable practices, adapting new learning from the workshops into practice, interdisciplinary approach, community of practice

4. **Checking for coherence:**

I created visual maps and charts to see the coherence between the themes and their data extracts. This helped me spot inconsistencies or overlapping themes.

I also revisited the original data extracts I coded. I reread them to ensure they fit well within the themes I developed. Each data extract should clearly illustrate the theme to which it is assigned.

I also wrote a summary for each theme, explaining what it captured and why it was necessary. This clarified the scope and focus of each theme. I compared these summaries with the data extracts to ensure they were aligned with each other.

I also verified that all data within a theme was consistent and conveyed a coherent story. The data extracts within a theme should share similar meanings and contexts.

I also ensured that each theme was distinct from the others. Themes should not overlap significantly; each should capture a unique aspect of the data.

Most importantly, I discussed my themes with my supervisors. They offered external perspectives and helped me identify any inconsistencies or overlaps that I had missed. Iterative refinement allowed for adjustments to themes as needed based on further analysis and consultation with my supervisors.

5. **Next steps:**

I will revisit the data to ensure that the themes accurately reflect the experiences of the teacher participants. I will also discuss this with my supervisors for further insights.

Appendix 16: Research memo of RTA phase 4, developing and reviewing themes

Purpose: to assess the candidate themes against the coded data and the entire dataset to ensure they convey a compelling narrative. Refine themes by dividing, merging, or eliminating them as necessary.

Data source: 21 data files of 18 interviews and three written reflections with nine Vietnamese public high school teacher participants

1. **Initial themes generated**

Theme 1: Outdoor learning for the holistic and responsible development of the Vietnamese public high school curriculum

Theme 2: Striving for collaborative excellence and ongoing enhancement in lesson planning practices among the Vietnamese teacher participants

Theme 3: The teacher participants require comprehensive support and collaborative development for accessible and sustainable outdoor learning practices

Theme 4: Navigating constraints and ensuring local teachers are prepared for outdoor learning practices in the Vietnamese public school system

Theme 5: Fostering an innovative and sustainable school community for outdoor learning initiatives within the Vietnamese public school system

2. **Review process**

I revisited the data using the extracts that support the themes to ensure coherence. I then refined the definitions of the themes. From the initial five themes, I developed them into three. Below are the detailed themes following the revision.

- **Theme 1: Building a hybrid platform for Vietnamese teachers to share insights and collaboratively plan lessons on PROL**

Theme definition: The teacher participants sought a common space to share and learn from each other. This platform enables Vietnamese teachers to exchange insights, collaboratively plan lessons, and provide feedback. It includes options for uploading lesson plans, commenting on one another's work, and accessing a repository of effective teaching strategies and classroom management techniques for the pedagogical approach of place-responsive outdoor learning.

Support data extracts:

“We did not continue collaborating on lesson planning. Collaborative lesson planning is beneficial for learning from the collective efforts of participating teachers. However, I find such a practice time-consuming when developing a shared resource of lesson plans for everyone. I prefer to plan lessons independently and consult with my colleagues if necessary.” (T1)

“PROL enhances my mental well-being. I feel less stressed and anxious when I teach outdoors. I feel relaxed being surrounded by nature. It alleviates the pressure from my workload. I concentrate better in open areas. PROL also improves my emotional well-being, enhancing my positive thinking. I feel more excited and enthusiastic while teaching outside. This feeling arises from the beautiful outdoor landscape and the fresh air. I feel refreshed and optimistic when outdoors. PROL fosters creativity, encouraging me to be more inventive in my teaching approach and lesson planning. I can experiment with new ideas and remain flexible in facilitating learning activities. PROL enhances my physical well-being as I become more active, moving around and participating in outdoor activities. This helps reduce the risks of diseases linked to a sedentary lifestyle. Sunlight exposure stimulates vitamin D production in the skin, contributing to bone health and supporting the immune system. PROL fosters a strong and positive relationship between teachers and students. I feel I have more time to interact with my students in open spaces, which helps me understand and connect with them better. Through facilitating PROL with my students, I have opportunities to develop my leadership, teamwork, and problem-solving skills. PROL improves my environmental literacy, encouraging students to make informed decisions and take responsible actions regarding environmental issues. They become aware of their impact on ecosystems and learn to take the initiative in protecting and preserving the natural environment in their community. I can engage in self-reflection, contemplating my experiences with PROL and noticing how I have changed mentally, emotionally, and physically through participation and facilitation. These positive changes motivate me to develop lesson plans around PROL, implement what I have planned, reflect on those experiences, and seek improvement. PROL is an innovative approach that I wish to facilitate learning with my students. It also enhances my mental, emotional, and physical well-being as a teacher. Given these benefits, PROL enriches the quality of my life. Consequently, my improved quality of life positively affects my teaching.” (T2)

“Students acquire new knowledge from PROL, which is an excellent opportunity for them to embark on their lifelong learning journey. The outdoors provides a fantastic environment for learning through play, enabling students to develop their observational skills, autonomy in learning, problem-solving abilities, and understanding of science and technology. Engaging with nature positively impacts students, fostering a positive attitude towards learning, free from boredom and stress. PROL embodies a holistic development approach, with physical well-being as a fundamental component. Students learn to remain active and healthy, as outdoor learning can enhance their health and well-being. It may boost their muscle development and strengthen their immune system while reducing the risk of chronic health conditions such as type 2 diabetes, obesity, and cardiovascular disease. […] PROL can enhance creativity through interactions with the natural environment. It nurtures students’ social skills by encouraging collaboration with their peers in outdoor activities. Students cultivate positive thinking through outdoor experiences, making them happy when immersed in nature. Personal development is also fostered through outdoor learning, communication skills, teamwork, and leadership. Additionally, they can practise mindfulness, critical thinking, and reflection. Participation in a variety of outdoor activities encourages students to be more reflexive. By learning in, about, and with nature, students strengthen their connection and attachment to the natural environment they engage with. They embrace a healthy lifestyle while challenging themselves to reach their fullest potential.” (T3)

“My perspective on outdoor learning has shifted after participating in the workshops. Previously, I believed outdoor learning was limited to subjects such as Health and Physical Education and Military Education. The traditional indoor classroom was the only place to learn other specialist subjects. Following the workshops, I realised that outdoor learning is an innovative pedagogical approach that enhances students' engagement through authentic learning. Outdoor learning is an effective teaching method for my students.” (T4)

“This could help students connect learning concepts with real-world applications. […] PROL helps me better understand my local environment. I feel more connected to my neighbourhood and learn to appreciate the small things in nature around me. I learn to act as a nature ambassador. Learning outdoors positively and flexibly enhances the relationship between teachers and students, leading to positive outcomes from the learning sessions. This fosters a sense of novelty and enhances the creativity of both

teachers and students. I can be an agent of change in my teaching methodology, taking the initiative to employ new teaching methods and learning approaches to improve my facilitation skills and enrich my students' learning experiences. […] Students will have opportunities to practise active learning through sensory activities and reflection." (T5)

"PROL inspires both me and my students with its open space, fostering greater enthusiasm for my teaching practices. My students can concentrate more on the lessons and feel free to create. This method enhances the nature-connectedness of teachers and students, helping us appreciate nature and our local environment. We learn to connect with our neighbourhood and familiar places, such as our local park, residential areas, and hometown." (T6)

"Outdoor learning helps me understand more about my local environment. I feel more connected to my local places, relaxed, and able to connect better with students, which helps improve my learning outcomes." (T7)

"The colleague with whom I often collaborated and with whom I am extremely busy with the duties assigned by the school principals. We taught different subjects and had different schedules; therefore, we had to carve out time to continue our collaboration on lesson planning. We did our utmost to collaborate in the first two months of this semester when there were fewer activities. Some female colleagues in my specialist groups maintain an excellent relationship with me, but are too busy to conduct outdoor learning sessions together. The male teachers in my team are not particularly keen on outdoor learning." (T8)

"The four signposts to place-responsive outdoor learning includes being present in and with a place, recognising the significance of place-based stories and narratives, developing an apprenticeship with the natural environment, and sharing experiences of place. When present in and with a place, we sit quietly, close our eyes, and listen to the surrounding sounds. Different individuals may perceive distinct sounds. Such activities can help students practise mindfulness and adopt a calmer pace of life in contrast to the hustle and bustle of this megacity. They can cultivate concentration and deeper learning through various sensory activities in the outdoor environment. The strength of place-based narratives lies in the compelling stories that connect students to the places they inhabit, live in, and study. Students are more engaged with the narratives of their local areas, and thus, we could advocate for their connection to such

places more effectively. For example, our school has a monthly award to recognise the students of the month. These students are either exceptional learners who have overcome adversities to study well and display persistence in their learning or exemplify outstanding character. We encourage our students to learn from these remarkable individuals. I can invite students to clean the school grounds to help them develop their apprenticeship with the natural environment. This is a practical activity. Students were also assigned to water and care for the trees and plants on the school grounds. Students can also participate in picking up litter around the school, sorting it, and recycling it where applicable. Through such activities, students can contribute to caring for their surrounding environment. Regarding presenting their place-based experiences, my students can research their local history and culture and then reflect on this knowledge through creative work, such as drawing or designing posters. They can also interview their peers about their feelings and connections to their school or clubs. These activities will enhance their creativity. Integrating the outdoor learning approach into experiential learning, career education, and other specialist subjects is essential to meeting the learning outcomes of the new curriculum, with a focus on students' holistic development and creativity through interdisciplinary learning practices." (T9)

- **Theme 2: Creating a comprehensive guide or toolkit that addresses both the affordances and challenges of implementing PROL in the Vietnamese public high school context**

Theme definition: The teacher participants expressed a desire to access a PROL manual. This learning manual addresses the affordances and challenges of implementing PROL in public high schools in Viet Nam, offering practical solutions and learning models to assist Vietnamese educators in effectively integrating it.

Support data extracts:

"The best I can do is lead by example, so I will first conduct outdoor learning sessions with my students. When other classes find them interesting, they will follow suit." (T1)

"I believe that collaboration among classes and the school's flexibility are key factors in enhancing the uptake of outdoor learning activities. My students would enjoy outdoor learning even more if they could study alongside students from other classes, as they love learning with new friends. […] I wish to participate in more teacher training workshops focused on outdoor learning to enhance my knowledge,

skills, and confidence in conducting outdoor learning with my students. If we, as teachers, wish to facilitate outdoor learning with our students, we must overcome our anxieties and refrain from dwelling on barriers such as time constraints." (T2)

"We must enhance collaboration among school principals, teachers, and students. Students should be part of the decision-making process of choosing extracurricular activities aligned with their interests and talents. Risk prevention and management skills and a contingency plan need to be discussed thoroughly in advance. We must nurture our students' learning autonomy, curiosity, and creativity. Regarding the learning resources, we need support for learning requirements to enrich students' learning experiences. We can also organise fundraising events to support school trips. We need to be flexible when it comes to outdoor learning facilitation. […] We must take the initiative in outdoor learning, enrich our knowledge of outdoor learning, and develop outdoor learning facilitation skills. We also need training in life skills, musical skills, communication skills, speaking skills, etc. Training courses should concentrate on developing collegial relationships among teachers and supporting their colleagues in co-teaching and collaborative lesson planning. They should learn to look after one another. We also need to nurture our compassion for teaching and our students. […] My concerns include safety, weather-responsive apparel, learning equipment, extreme weather conditions, school leadership, the budget, and the schedule." (T3)

"The most sensible choice was to conduct outdoor learning in the nearby outdoor area to simplify the management process and funding. […] New learning activities within a positive and enjoyable environment could motivate students to engage more actively." (T4)

"I would like to share my experiences facilitating outdoor learning sessions with my colleagues. If they are keen on outdoor learning, I would happily assist them in conducting their sessions. However, there may be issues stemming from a lack of enthusiasm for experiential learning among some teachers, particularly those assigned to teach this subject, against their will. As a result, they do not enjoy teaching it, let alone incorporating outdoor learning into their lessons." (T5)

"I would like to learn more from the school principals and my colleagues, who are genuine and experienced teachers. Their authentic pedagogical experience allows them to offer me valuable advice.

[…] I wish to access a teaching manual featuring demonstration PROL activities and observe an authentic outdoor learning session conducted with real students." (T6)

"I would like to introduce outdoor learning to my colleagues. I plan to organise outdoor learning sessions that will allow my colleagues to observe and learn from one another, thereby enhancing the uptake of outdoor learning within our school." (T7)

"Sustaining outdoor learning is essential for everyone. I can only have an impact on my homeroom students. I teach them to keep their classroom tidy and to sort the rubbish. My students can sustain this practice, and I hope they will continue their good habits in Year 12 next year. I will continue this effort with the other homeroom classes I oversee in the future. However, we do not yet have a system to sort out waste at the school level. Thus, even when my students did their part, they did not know what to do with the rubbish they had already sorted. I suggested that my students collect the recyclable items and give them to the school cleaner to help. The common solid waste will be deposited in the same bin. […] Some of these were cancelled due to overlaps with whole-school events, such as the youth union seminar, the specialist subject seminar, and the career orientation seminar. The school is the hub for events promoted by the Department of Education. Whole-school events often drain our students' energy, leaving everyone exhausted from participation, from teachers to students. It has been quite tiring! We are under immense pressure. […] At the school level, I hope that principals will allocate funds for learning equipment to support outdoor learning sessions. […] Furthermore, these outdoor learning sessions should be recognised as working hours for teachers. […] School activities are voluntary and noted in the annual performance report for innovative teaching practices. […] At the national level, the Ministry of Education and the Department of Education should make outdoor learning a compulsory aspect of the general education curriculum and require teachers to collaborate within their subject specialist groups or through interdisciplinary cooperation. […] I find it unfeasible to undertake this alone; we must work together and be recognised as a team. Contributions should be acknowledged as a collective effort rather than merely recognising individual teachers. Some outdoor learning sessions necessitate a week's preparation, which we managed without compensation. It required significant effort, yet we succeeded because it was a top-down directive. […] Generally, they feel pressured to facilitate such extracurricular activities. We must appreciate their contributions to

motivate teachers to promote outdoor learning with their students. Our teachers are highly qualified; they often receive a higher pay rate for their positions at other institutions than at our school. They will not collaborate in outdoor learning sessions if there is no compensation in terms of time or incentives. They will not do it for free. […] I find persuading my colleagues to engage in outdoor learning quite challenging, as we are inundated with whole-school events, seminars, and activities. Other schools may organise only a third to half of our extracurricular activities. Our school aims to secure the prestigious Order of Labour Medal from the government; consequently, we are burdened with social events and competitions. Our school resembles a mini-university, with our students juggling three to five projects simultaneously. They face numerous deadlines for subjects, standard tests, and club assignments. Given our heavy workload, my colleagues might support me for one or two sessions, while some may refuse outright. I am constantly under pressure and am considering resigning from my position here to accept a role at a school closer to home. Once I move to a new school with a calmer pace, I intend to conduct more outdoor learning with my students there. The pace of life in HCMC is three to five times faster than in other provinces, and this school's pace is three times quicker than that of other schools in the city. Therefore, the school is always filled with a hurried atmosphere. We hardly ever have time to reflect or practise mindfulness, as we tend to pursue awards, medals, and honours." (T8)

"The school principals could also encourage teachers from the same specialist subjects to develop a standard plan for their group to seek approval in advance for outdoor learning during the school year. Outdoor learning should be included in the school's annual plan. […] Outdoor learning should be included in the General Education Programme and is a mandatory component to enhance uptake and accessibility for all students. […] Teachers must understand what outdoor learning involves and what educational content they can provide their students in an outdoor setting. Consequently, thoroughly comprehending the intended learning material and the pedagogical approach to outdoor learning is essential for teachers to facilitate meaningful sessions with their students. […] The professional development workshops I attended last summer significantly aided me in developing my lesson plans and implementing these outdoor learning strategies with my students. Currently, I have grasped the introduction of a place-responsive outdoor learning approach. As for my attitude towards outdoor learning, having participated in the workshops, I am more positive, responsible, hardworking, and

compassionate. I have become a better version of myself. My students will benefit immensely from outdoor learning. Teachers must be positive and confident when conducting outdoor learning with their students. They cannot do so if they are negative, shy, or unenthusiastic about outdoor learning, given their responsibilities for the safety of their students. […] From the workshops, I learned new knowledge about PROL through hands-on activities, experiential learning, and learning through all senses. I also had opportunities to connect with nature and people in the natural environment near my school. I gained new knowledge, a new teaching and learning method, and how to use it. PROL is a learning approach that is flexible, communicative, and responsive to learning environments. […] I will certainly share my experiences facilitating outdoor learning with my students. I invite my colleagues to join me in my outdoor learning sessions to support one another. There is currently a trend towards interdisciplinary learning in Vietnam. Consequently, teachers from various specialist subjects can collaborate on lesson planning and delivery. I cannot make any promises, but I plan to engage in more outdoor learning with my students if I can manage my current workload." (T9)

- **Theme 3: Developing a framework to integrate the innovative approach of PROL into the existing public high school curriculum in Viet Nam**

Theme definition: This framework outlines the steps for integrating PROL into the curriculum, including alignment with educational standards, teacher training, and assessment of student outcomes. It explores ways to incorporate PROL into the Vietnamese public high school curriculum to enhance the learning experiences of both local teachers and students.

Support data extracts:

"Given the benefits of outdoor learning, I will try it in my teaching practices. I may first conduct outdoor learning with my students on the school grounds and then head to the nearby park. […] It is possible to implement outdoor learning sessions once per month, given the potential benefits of this learning approach and its challenges from the safety issues and the effectiveness of this approach. It is better to combine both learning in a traditional classroom and from the outdoors. […] I will increase the frequency of outdoor learning for my students and prepare details of my lesson plans by answering the WH-questions: who, what, when, and where. I will also encourage students to share feedback after each

outdoor learning session to refine my PROL practices. […] This semester, I will incorporate PROL into my teaching practices to encourage my students to explore the natural environment, their neighbourhood, and other local areas near the school."(T1)

"I wanted more time to reflect on my experience. I do not yet have a standard lesson plan, and I still improvise a lot when it comes to outdoor learning. I wanted to document my practices to share with other teachers. I could also update my teaching journal and improve from there. […] PROL assists students in developing various skills, including communication and connection. It aligns closely with experiential learning, so I plan to incorporate it into maths, my specialised subject, the experiential learning and career education, and form teacher guidance sessions." (T2)

"I will guide my students in reflection after each outdoor learning session." (T3)

"Nevertheless, I have always wanted to adopt an innovative learning approach in my teaching practices to help students learn in real-life contexts. Such innovative teaching and learning methods would enhance student engagement, enrich teachers' creativity, and develop their teaching abilities and outdoor learning management skills. Such innovative practice will impress the school principals, students, and the parent support group." (T4)

"I will collaborate with other teachers to obtain approval from the school leader to implement PROL for students on school grounds or other open spaces." (T5)

"I will try PROL. I aim to create an innovative learning environment that stimulates a passion for learning among teachers and students." (T6)

"I will adjust how I facilitate an outdoor learning session. I will set a time limit for group presentations, develop a learning agenda, and familiarise myself with the venue and assembly point." (T7)

"Furthermore, I propose a summer semester to organise more outdoor learning sessions. If students could earn a certificate for their participation in outdoor learning during the summer, it could benefit their university admissions. Additionally, outdoor learning could be a mandatory component of the general education curriculum, and students would need to engage in it to earn an independent certificate as a requirement to pass the national examination at the end of Year 12. […] I will facilitate outdoor learning for my students, utilising my school's resources and support from the school leaders. This is a

meaningful pedagogical approach to nurture students' connection with their local environment while teaching them to be mindful and reflective." (T8)

"I have two sessions of experiential learning and career education each week. I don't believe I can engage in outdoor learning all the time, as it is time-consuming from preparation to implementation. However, I could manage it twice per semester, a maximum of two or three times. That would be acceptable. I can't participate in outdoor learning every week, but I might do so monthly. […] I will implement reflection with my students. I will facilitate outdoor learning to encourage them to connect with local people and the natural environment. I will promote their practice of various sensory skills and imagination, allowing them to foster interconnection with the local environment through reflection." (T9)

3. Next steps

My next step is further analysis by refining, defining, and naming themes. I will also continue to consult with my supervisors for feedback on the consistency of my data analysis.

Appendix 17: Research memo of RTA phase 5, refining, defining and naming themes

Purpose: To comprehensively analyse each theme, identify the scope and focus, and select an appropriate name for each theme.

Data source: 21 data files of 18 interviews and three written reflections with nine Vietnamese public high school teacher participants

1. **Candidate themes**

Theme 1: Building a hybrid platform for Vietnamese teachers to share insights and collaboratively plan lessons on PROL

Description: The teacher participants sought a common space to share and learn from each other. This platform enables Vietnamese teachers to exchange insights, collaboratively plan lessons, and provide feedback. It includes options for uploading lesson plans, commenting on one another's work, and accessing a repository of effective teaching strategies and classroom management techniques for the pedagogical approach of place-responsive outdoor learning.

Theme 2: Creating a comprehensive guide or toolkit that addresses both the affordances and challenges of implementing PROL in the Vietnamese public high school context

Description: The teacher participants expressed a desire to access a PROL manual. This learning manual addresses the advantages and challenges of implementing PROL in public high schools in Viet Nam, offering practical solutions and instructional models to help Vietnamese educators integrate it effectively.

Theme 3: Developing a framework to integrate the innovative approach of PROL into the existing public high school curriculum in Viet Nam

Description: This framework outlines the steps for integrating PROL into the curriculum, including alignment with educational standards, teacher training, and student outcomes assessment. It explores ways to incorporate PROL into the Vietnamese public high school curriculum to enhance the learning experiences of both local teachers and students.

2. **Refining themes**

Theme 1: Teachers faced challenges and isolation while planning and implementing PROL and sought collaborative support systems.

Description: Teachers felt incompetent, experienced isolation, and lacked appropriate resources when planning and implementing PROL. They also wished for a way to share ideas and successes with fellow teachers.

Theme 2: Teachers needed practical resources and structured guidance on PROL practices.

Description: Teachers expressed a need for structured and feasible manuals or resources to assist them in planning and implementing PROL lessons.

Theme 3: Teachers perceived a gap between PROL initiatives and formal curriculum requirements.

Description: Teachers felt that PROL is valuable, but struggled to integrate it into the formal curriculum requirements and standards.

3. **Defining themes**

Theme 1: Need for Collaborative Support

Definition: Teachers felt incompetent, experienced isolation, and lacked appropriate resources when planning and implementing PROL, expressing a strong need for platforms or networks to share ideas, practices, and encouragement with colleagues.

Theme 2: Need for Practical Resources

Definition: Teachers emphasised a shortage of accessible, practical resources to assist in the planning and executing PROL activities. They sought manuals, toolkits, and models to facilitate integration into their teaching.

Theme 3: Disconnection Between PROL and School Annual Plan based on the Formal Curriculum

Definition: Teachers perceived a significant gap between PROL, the school's annual plan, and the formal curriculum expectations, often feeling pressure to prioritise standardised academic goals over outdoor learning experiences.

4. **Naming themes**

Theme 1: Teachers' Need for Collaborative Support

Definition: Teachers reported feelings of professional incompetence and isolation when planning and implementing PROL and expressed a need for structured opportunities to collaborate, exchange practices, and build supportive professional communities.

Theme 2: Teachers' Demand for Practical Resources

Definition: Teachers identified a significant lack of structured guidance and practical, convenient resources for PROL, which they viewed as a barrier to confident and effective practice.

Theme 3: Challenges Integrating PROL into the GEP

Definition: Teachers described systemic tensions between the demands of the school's annual plan, which is aligned with formal curriculum standards, and the pedagogical opportunities for PROL, resulting in challenges in aligning PROL activities with prescribed educational outcomes.

5. Next steps

My next steps include writing up the results and conducting further analysis simultaneously. I will also continue to seek advice from my supervisors to ensure consistency in my data analysis.

Appendix 18: Workshop agenda

Workshop 1: Introduction of place-responsive outdoor learning

Learning venue: the school ground & the park near the school

Duration: 2 hours

<table>
<tr><th>Workshop sessions</th><th>Content</th><th>Objective</th><th>Materials</th></tr>
<tr><td>Session 1 (15 minutes)</td><td>Introduction of place-responsive outdoor learning</td><td>Teachers will understand what place-responsive outdoor learning is , why place-responsive outdoor learning important, and how to navigate a place-responsive outdoor learning module.</td><td rowspan="3">Workshop handout 1</td></tr>
<tr><td>Session 2 (25 minutes)</td><td>Signpost 1: Being present in and with a place</td><td rowspan="2">Introduce place-responsive outdoor learning activities.
Discuss the application of the signposts required in place-responsive outdoor learning.</td></tr>
<tr><td>Session 3 (25 minutes)</td><td>Signpost 2: The power of place-based stories and narratives</td></tr>
<tr><td colspan="4">Break (5 minutes)</td></tr>
<tr><td>Session 4 (25 minutes)</td><td>Signpost 3: Apprenticing ourselves to outdoor places</td><td rowspan="2">Introduce place-responsive outdoor learning activities.
Discuss the application of the signposts required in place-responsive outdoor learning.</td><td rowspan="2">Workshop handout 1</td></tr>
<tr><td>Session 5 (25 minutes)</td><td>Signpost 4: The representation of place experiences</td></tr>
<tr><td colspan="4">Q&A (5 minutes)</td></tr>
</table>

Workshop 2: Co-design lesson planning of a place-responsive outdoor learning module

Learning venue: the park near the school
Duration: 2 hours

Workshop sessions	Content	Objective	Materials
Session 1 (10 minutes)	Group reflections	Discuss in groups of three about their learning happened in the previous workshop	Workshop handout 2
Session 2 (40 minutes)	Theme 1: Personal development Theme 2: Family responsibility	Introduce a hands-on activity focusing on a particular theme taken from the experiential and career orientation module for year 10 students.	Workshop handout 2
Break (5 minutes)			
Session 3 (40 minutes)	Each team will design a place-responsive outdoor learning activity for the target learning theme above.	Ensure the four signposts are included in the co-design activities.	
Session 4 (25 minutes)	Each team will present their own co-design activity to the other teams.	Presentation of themed activities	The co-design activities will be treated as teaching resources for teachers to further utilise in their own practices after the workshop. These activities will be compiled and emailed to the teachers.
Q&A (5 minutes)			

Workshop 3: Co-design lesson planning of a place-responsive outdoor learning module (continue)

Learning venue: the school ground
Duration: 2 hours

Workshop sessions	Content	Objective	Materials
Session 1 (10 minutes)	Group reflections	Discuss in groups of three about their learning happened in the previous workshop	Workshop handout 3
Session 2 (40 minutes)	Theme 3: Responsibility at school Theme 4: Personal finance and entrepreneurship	Introduce a hands-on activity focusing on a particular theme taken from the experiential and career orientation module for year 10 students.	Workshop handout 3
Break (5 minutes)			
Session 3 (40 minutes)	Each team will design a place-responsive outdoor learning activity for the target learning theme above.	Ensure the four signposts are included in the co-design activities.	
Session 4 (25 minutes)	Each team will present their own co-design activity to the other teams.	Presentation of themed activities	The co-design activities will be treated as teaching resources for teachers to further utilise in their own practices after the workshop. These activities will be compiled and emailed to the teachers.
Q&A (5 minutes)			

Workshop 4: Co-design lesson planning of a place-responsive outdoor learning module (continue)

Learning venue: the park near the school
Duration: 2 hours

Workshop sessions	Content	Objective	Materials
Session 1 (10 minutes)	Group reflections	Discuss in groups of three about their learning happened in the previous workshop	Workshop handout 4
Session 2 (40 minutes)	Theme 5: Community service Theme 6: Environmental education	Introduce a hands-on activity focusing on a particular theme taken from the experiential and career orientation module for year 10 students.	Workshop handout 4
Break (5 minutes)			
Session 3 (40 minutes)	Each team will design a place-responsive outdoor learning activity for the target learning theme above.	Ensure the four signposts are included in the co-design activities.	
Session 4 (25 minutes)	Each team will present their own co-design activity to the other teams.	Presentation of themed activities	The co-design activities will be treated as teaching resources for teachers to further utilise in their own practices after the workshop. These activities will be compiled and emailed to the teachers.
Q&A (5 minutes)			

Workshop 5: Co-design lesson planning of a place-responsive outdoor learning module (continue)

Learning venue: the school ground
Duration: 2 hours

Workshop sessions	Content	Objective	Materials
Session 1 (35 minutes)	Theme 7: Local economic enterprises Theme 8: Career education	Introduce a hands-on activity focusing on a particular theme taken from the experiential and career orientation module for year 10 students.	Workshop handout 5
Session 2 (35 minutes)	Each team will design a place-responsive outdoor learning activity for the target learning theme above.	Ensure the four signposts are included in the co-design activities.	
Break (5 minutes)			
Session 3 (25 minutes)	Each team will present their own co-design activity to the other teams.	Presentation of themed activities	The co-design activities will be treated as teaching resources for teachers to further utilise in their own practices after the workshop. These activities will be compiled and emailed to the teachers.
Session 4 (20 minutes)	Group reflections	Reflect on the entire workshop process and their learning over 5 workshops.	Workshop handout 5
Q&A (5 minutes)			

Appendix 19: Workshop handouts

Handout 1

Facilitator: Nhu Thi Yen Nguyen, PhD candidate
Supervisors: A/P Mike Brown & Dr Denise Atkins
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Zalo: 0903.192.144

1. **What is place-responsive outdoor learning?**

   Outdoor learning is purposeful learning taking place in natural settings and outdoor environments that go beyond the classroom walls and "with the sky as a ceiling" (Faskunger et al., 2018; Learning and Teaching Scotland, 2010). It is an educational approach to enhance students' engagement, physical activity, and connection to the environment through sensory, hands-on, and place-responsive learning activities (Irwin et al., 2012). Formal outdoor learning has existed in several Western countries since the 16th century (Joyce, 2012). Since then, outdoor learning has been gradually developed and featured the following key principles which include, but are not limited to; experiential learning, nature connection, holistic development, child-led exploration, risk-benefit assessment, integration with curriculum, inclusion and diversity, reflective practice, sustainability, and environmental responsibility. Over decades, outdoor learning in developed countries has been manipulated by policy-making, mass media, and private business which made it high on government policy and documentation (Joyce, 2012).

   The sustainability of outdoor adventure education teaching and learning approach has been critiqued by outdoor education researchers (Beames & Brown, 2016; Brookes, 2003a, 2003b, 2022; Goodman, 2022; Webber & Hardwell, 2019), and contemporary and innovative outdoor learning pedagogies have been developed that respond to cultural values, student diversities, and environmental concerns worldwide (Gruenewald, 2008; Renshaw & Tooth, 2017; Smith, 2002; Vladimirova, 2022; Wattchow & Brown, 2011). One approach is place-responsive outdoor learning (PROL). Wattchow and Brown (2015) suggested a definition of place-responsiveness as below.

   > "To be place-responsive is to enter into a relationship of interdependence that requires sensitivity and empathy for and with place(s) rather than the imposition of beliefs and associated actions that render the specifics of the local invisible. It is clear that places, and the relationships that are fostered with them, have a bearing on learning and individual and collective identity." (Wattchow & Brown, 2015, p. 37)

   This new vision of outdoor learning lays out an approach toward a school curriculum which is more focused on human-nature interconnectedness, sustainability and place-responsiveness than that of a conventional practice of outdoor education in which the outdoors was often used as a backdrop venue (Dyment & Potter, 2015; Wattchow & Brown, 2011). A localised and modest approach to outdoor learning claimed to create opportunities for educators to express their genuine interest in the localities and help students gain insights into the importance of connections and belonging to certain places (Wattchow & Brown, 2011). Building up a strong connection between young learners and the local environment around them might help strengthen their understanding towards the land they are living in (Wattchow & Brown, 2020). Learning outdoors through practical and experiential learning experiences that are affordable and accessible for public and mainstream schools, could be achieved through everyday outdoor learning contexts on school grounds or nature nearby (Thorburn & Allison, 2017). The greater the reflection on various place-responsive experiences, the greater the degree to which students embody and enhance a sense of belonging to a certain place (Häggström & Schmidt, 2020). Students became more self-driven and responsible for their cognitive development as well as their spatial awareness which connected to their identities, communities and localities (Dolan, 2016). The integration of PROL into the Vietnamese experiential learning and career orientation

module is expected to develop students' connection and attachment to their everyday taken-for-granted places.

2. **Why is place-responsive outdoor learning important?**
Given the enormous social, economic, and environmental challenges as a result of the post-war period and the rapid urbanisation in Viet Nam, Vietnamese school children have been restricted from spending time with nature nearby for both learning and recreation. Investing in an innovative pedagogical approach is one way to nurture young Vietnamese to strengthen their empathetic connection and attachment to places with the hope that they will play their part in the urban regeneration process for Vietnamese community well-being, and for the common good of the entire society. Integrating the PROL approach into the current Vietnamese experiential and career orientation curriculum is considered as a solution to reinforce meaningful and democratic teaching and learning experiences for Vietnamese public school teachers and students and work toward achieving the key qualities and competencies valued by the locals. This outdoor learning approach will give teachers and students opportunities to understand local conditions and how to connect to global changes as an existential and empathetic insider (Relph, 1976). By locating learning in the everyday activities of the community, PROL envisages schools to act as an extension of the lived experience for students to enrich their lives, their community and their places (Wattchow & Brown, 2011). Given the tremendous challenges regarding climate change, and social and economic uncertainty in the 21st century, place-responsive pedagogies to outdoor learning experiences came to take shape as a potential and contemporary way to enhance place-connectedness between humans and a certain place they inhabit (Brown, 2012), going some way to address these global issues.

3. **How to navigate a place-responsive outdoor learning module?**
Wattchow and Brown suggested four signposts to a place-responsive pedagogy in outdoor learning (Wattchow & Brown, 2011) to help Vietnamese public high school teachers navigate their lesson plans and implement their version of place-responsive outdoor learning with their students which is relevant to their local places, and their cultural and social contexts. These four signposts are; being present in and with a place, the power of place-based stories and narratives, apprenticing ourselves to outdoor places, and the representation of place experiences (Wattchow & Brown, 2011). The value of place mindfulness will be highlighted in learning activities in and about local contexts to foster learners' engagement with their community. This is a contemporary way to a renewal of outdoor education which encourages attentiveness and thoughtfulness toward an accessible, engaging, comfortable, and sociable learning place. Vietnamese teachers and students will be empowered to tell their stories of place by accommodating their voices and agency. By telling their own stories of places or facilitating other people's stories, it creates an opportunity to connect nature and culture and make sense of our originality and identity. Through participating in a place-responsive learning activity, Vietnamese students will have an opportunity to apprentice themselves to outdoor places which contributes towards sustainability and environmental stewardship. They will be exposed to experiential and inquiry-based learning with a focus on understanding that place experiences lie within their narratives about their immediate environment (Wattchow & Brown, 2011). The four recommended signposts will help Vietnamese educators identify if their lesson planning and implementation are responsive to a particular local place. They will be guided to apply place-responsive pedagogy into their teaching practices which are learner-centred, non-prescriptive, flexible, sensitive, and culturally and materially place-conscious (Renshaw & Tooth, 2017; Tooth & Renshaw, 2017). Teachers will be shown how to create linkages between place, students, and curriculum, as well as provide an abundance of choices for learning to happen in real contexts and beyond the classroom walls (Lloyd et al., 2018).

4. **Demonstration activities of place-responsive outdoor learning**
Activities are adapted from the Sharing Nature with Children (Cornell, 1998)

- **Signpost 1: Being present in and with a place**
  Name of activity: Sounds and colours.
  Activity description: In a local park, participants will sit or lie down on their back, relax, with their fists held up in the air, and then close their eyes. Every time someone hears a sound (such as a new bird song, falling leaves, wind in the grass, people chatting, ambulance siren, etc.), they will lift one finger. This is a wonderful way to make participants aware of the sounds (and the stillness) of nature nearby as well as the vibrant sounds of the city itself. After a while, the facilitator will tell them to open their eyes, from the place where they are sitting, the participants will concentrate more deeply on any natural setting, and they will then notice how many different colours and shades of colours they can see in front of them without moving from where they are sitting. After a while, the participants will be asked to recall their mood through focus attention and visual awareness.

- **Signpost 2: The power of place-based stories and narratives**
  Name of activity: Exploring special places
  Activity description: Select a natural area where the participants can spread out and each person can find a special place but still be able to keep the facilitator in sight. They will have about ten minutes to find a special place. After choosing a special area, they can sit down, think about their comfortable spot and answer the questions in the explorer's guide.
  1. What are some of the first things you noticed about your site?
  2. How do you feel being here?
  3. Pick a name that suits your special spot. You can change it later if you think of something better. But naming it at the start will help you make it your own right away. The name of my special place is …
  4. Sketch the view that you can see from your special place in the "photo" space in the guide card.
  5. How does your special place resonate with you?

  The participants will have a chance to share their special places with others after they complete their explorer's guide.

- **Signpost 3: Apprenticing ourselves to outdoor places**
  Name of activity: Scavenger Hunt
  Activity description: The participants will be assigned a scavenger list that requires them to think creatively or to look very closely. Since the list includes both natural and man-made objects, collect only things that they can return safely and without damage.
  Scavenger list:
  1. A feather
  2. A bone
  3. An insect
  4. A sun trap
  5. One seed dispersed by the wind
  6. A dry leaf/stem/branch
  7. A piece of man-made litter
  8. A big smile
  9. Exact ten of something
  10. Something round
  11. Something fuzzy
  12. Something sharp
  13. Something soft
  14. Something perfectly straight
  15. Something peculiar
  16. Something beautiful

17. Something that makes a noise
18. Something that is of no use in nature
19. Something important in nature
20. Something that reminds you of yourself

After finishing hunting, they will discuss in groups of three the following questions:

1. What is here in this place?
2. What will this place permit us to do?
3. What will this place help us to do?
4. How is this place interconnected with my home place?

- **Signpost 4: The representation of place experiences**
  Name of activity: Folding poem
  Activity description: Participants will be divided into teams of three. They will choose a comfortable spot to sit down. Each team will have 15 minutes to write a poem about their today experience out and about in nature nearby their school. The first person for each team writes the first line of the poem then passes it to the second person. This person writes one line that responds to the first writer's line, then writes another; then folds the poem so the third person sees only the last line written. The third person writes a line responding to the second person's last line, then writes another; then folds the poem so that the first writer sees only the last line. The first person writes the last line of the stanza. Below is the diagram of how it works.

LINES		
1	First person	Write a line
2	Second person	Responds
Second person fold here before …		
3	Second person	Write a new line
4	Third person	Responds
Third person fold here before …		
5	Third person	Write a new line
6	First person	Responds

After all the teams have written their poems, have each team read theirs to the group. They'll be amazed at the beautiful continuity of thought that runs through the poems.

Handout 2

Facilitator: Nhu Thi Yen Nguyen, PhD candidate
Supervisors: A/P Mike Brown & Dr Denise Atkins
Email: nhu.nguyen@autuni.ac.nz
Zalo: 0903.192.144

1. **Group reflection**
   What was new learning for you from the previous workshop that you have participated in?
   Thinking about the dynamic of your co-design team. What contribution are you making? Are there any areas you would like others to contribute more in?

2. **Examples of place-responsive outdoor learning for the Vietnamese experiential learning and career orientation module for Year 10 students (MOET, 2018)**

- **Theme 1: Personal development**

Signpost: The power of place-based stories and narratives

Name of activity: Cool facts about the local park and its neighbourhood (Adapted from natgeokids.com)

Activity description: In ten minutes, participants will walk around the park and have conversations with as many park users as they can by asking this question. *Can you name a cool fact about this local park and/or its neighbourhood?* It can be something that you have heard from the people around here or you have made up that cool fact of the place based on your own attentive observation. After ten minutes, participants will get together. They will pick up the coolest fact that they have just learned about this place to share with their peers. Participants can also resonate these facts with their own experiences of this place. This activity helps build a step closer to place connectedness, a sense of identity and belonging. The more they practice getting to know their local places, the better they understand their local community and increase meaningful connections.

- **Theme 2: Family responsibility**

Signpost: Being present in and with a place

Name of activity: Planning for family recreation in the park (Adapted from iabhp.com and ips.gov)

Activity description: Family responsibility can range from family chores to family recreational activities at weekends and holidays. In groups of 3, each participant will play a particular role as a mum, a dad, and a kid. Together they will plan for a family recreational activity in the park. Participants will use these questions to brainstorm an activity for their family.

1. What are the benefits of family recreation?
2. How regularly should family recreation happen?
3. Which tasks can be assigned to each family member in coordinating a family recreational activity?
4. What is the cost of a typical family recreation in a local park?
5. How do you get there? Think about active mobility modes to the park.
6. What can you do in the park as a family?
7. How can we adopt the seven principles of Leaving No Trace in the outdoors in the context of a local park? These include; plan ahead and prepare, travel and camp on durable surfaces, dispose of waste properly, leave what you find, minimise campfire impacts, respect wildlife, and be considerate of other visitors.

Handout 3

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1. **Group reflection**

   What was new learning for you from the previous workshop that you have participated in?

   Thinking about the dynamic of your co-design team. What contribution are you making? Are there any areas you would like others to contribute more in?

2. **Examples of place-responsive outdoor learning for the Vietnamese experiential learning and career orientation module for Year 10 students (MOET, 2018)**

   - **Theme 3: Responsibility at school**

Signpost: Apprenticing ourselves to outdoor places
Name of activity: Creating a plan to rejuvenate the school ground (Adapted from ChatGPT3.5)
Activity description: Rejuvenating a school ground can be a fantastic project. Here is a plan to get started. In groups of 3, participants will sketch out their detailed plan to revitalise their school ground. How are they going to proceed with these steps toward revitalising their school ground? Each team will then share their master plan with other teams.

Step 1: Assessing the current state of the school ground. Take notes of what is here on the school ground and its functionality.

Step 2: Research different ideas and options for rejuvenating the school ground to make it more vibrant and welcoming to students and staff. Consider elements such as green spaces, seating areas, playground equipment and sports facilities for both students and school staff, an outdoor classroom area, a school garden, sun-smart shelters, drinking fountains, and recycle bins. Keep in mind the idea of design for environmental sustainability and adhering to safety regulations.

Step 3: Involve the school community in the rejuvenation project to ensure that the project reflects the needs and preferences of those who will use the place. Think about the feedback from students, parents, and teaching staff about what they would like to see improved or added. Use this information to create a vision for the rejuvenated school ground.

Step 4: Identify the budget needed for the project and explore fundraising options. This could include donations, crowdfunding, or community events. Develop a detailed budget plan to allocate funds effectively and track expenses throughout the project.

Step 5: Create a timeline and action plan for implementing the rejuvenation project. Identify tasks, responsibilities, and deadlines for each phase of the project, from site preparation and construction to installation and maintenance. Consider factors such as weather, school holidays, and logistics when scheduling activities.

Step 6: Executing tasks such as coordinators with contractors, volunteers, staff, students and other stakeholders to ensure that work progresses smoothly and safely. Monitoring progress regularly and addressing any issues or changes that arise during the construction phase.

Step 7: Set up a plan for monitoring and maintaining the school ground once the rejuvenation project is complete. Engaging students, staff, and volunteers in caring for the newly rejuvenated space to promote ownership and sustainability.

Step 8: Celebrate the completion of the rejuvenation project, evaluate the success of the project and identify lessons learned for future initiatives.

   - **Theme 4: Personal finance and entrepreneurship**

Signpost: Apprenticing ourselves to outdoor places
Name of activity: How could entrepreneurial skills be used to develop a new public park, and save native trees, and endangered species (Adapted from ChatGPT3.5)

Activity description: Developing a new public park while also conserving native trees and endangered species would require a multifaceted approach that combines entrepreneurial skills with environmental stewardship. Participants will work in groups of 3 to develop a new public park with a commitment to environmental conservation. Below are some questions to help brainstorm their detailed plan.

1. What is the natural history of this place?
2. How has it changed over time?
3. Why does it look the way it does now?
4. What might it look like if we left it undisturbed for 10-20 years?
5. Is the design of the new park what we want it to look like or the way nature would want it to look like?
6. How can we raise awareness about the importance of native trees and endangered species conservation? Such as developing educational programmes (guided nature walks, workshops, and interpretive exhibits) and signage within the park.
7. How can we generate income to be reinvested into park maintenance and conservation efforts? Exploring revenue-generating opportunities within the park, such as eco-tours, concessions, and events.
8. What can we do to track the impact of the park on native trees and endangered species? This will allow for adaptive management practices to be implemented as needed.

By combining entrepreneurial skills with a commitment to environmental conservation, it is possible to create a new public park that not only provides recreational opportunities for the community but also protects and preserves the local ecosystem.

Handout 4

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1. **Group reflection**

   What was new learning for you from the previous workshop that you have participated in?

   Thinking about the dynamic of your co-design team. What contribution are you making? Are there any areas you would like others to contribute more in?

2. **Examples of place-responsive outdoor learning for the Vietnamese experiential learning and career orientation module for Year 10 students (MOET, 2018)**

   - **Theme 5: Community service**

Signpost: Apprenticing ourselves to outdoor places

Name of activity: Planning a neighbourhood clean-up (Adapted from ChatGPT3.5)

Activity description: In groups of 3, participants will plan a community clean-up for their school zone following these steps. They will then share their plan with other teams to learn from each other.

Step 1: Identify which area needs cleaning

Step 2: Obtain permission from the local authorities

Step 3: Gather volunteers (staff, students, parents, etc.)

Step 4: Gather gloves, garbage bags, trash pickers, and any other necessary cleaning supply.

Step 5: Ensure volunteers are briefed on safety guidelines, like wearing gloves and being cautious of hazardous materials.

Step 6: Set a date and time that works for most volunteers and the community.

Step 7: Divide the area into sections and assign teams to cover each section effectively.

Step 8: Use the opportunity to educate volunteers and the community about the importance of environmental stewardship.

Step 9: Arrange for proper disposal of collected waste, whether through recycling, composting, or landfill.

Step 10: After the clean-up, celebrate the collective effort with refreshments to thank volunteers for their hard work.

Questions for brainstorming:

1. What is a neighbourhood clean-up programme?
2. Why conduct a neighbourhood clean-up programme?
3. Who should be involved in a neighbourhood clean-up programme?
4. When should you conduct a neighbourhood clean-up programme?
5. How do you conduct a neighbourhood clean-up programme?

   - **Theme 6: Environmental education**

Signpost: The presentation of place experiences

Name of activity: Draw a memory map of your unique neighbourhood (Adapted from centerforarchitecture.org)

Activity description: Close your eyes and imagine taking a walk from your home out into your block or neighbourhood. What places or things stand out? Everyone experiences their neighbourhood in their own personal way. Share yours by making a memory map that shows the places that make your neighbourhood special to you.

Memory maps often mix drawings and words, and don't need to be accurate. Think about the sounds, colours, textures, and smells that are part of your experience as you walk around your neighbourhood. Can you include these somehow? There is no right way to make a memory map. Your map should reflect you and your unique view of your neighbourhood! Once you are done, share your creation with other participants as you tell them about your own stories of your unique neighbourhood.

Handout 5

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1. **Examples of place-responsive outdoor learning for the Vietnamese experiential learning and career orientation module for Year 10 students (MOET, 2018)**
    - **Theme 7: Local economic enterprises**

Signpost: Apprenticing ourselves to outdoor places
Name of activity: Local retail assessment (Adapted from resources.depaul.edu)
Activity description: In groups of 3, participants will take a walk around the neighbourhood and work together to complete a local retail assessment as shown in the worksheet below.

What kinds of retail businesses did you find?	**How many of this type did you find?**	**How many should there be?**	**Business size by the number of employees of businesses you find in the community**
Building materials			Ranged between … and …
Garden supplies			
Hardware stores			
Department stores			
Grocery stores			
Meat and fish markets			
Fruit and vegetable markets			
Dairy products			
Bakeries			
New and used car dealers			
Gasoline service stations			
Men's clothing stores			
Women's clothing stores			
Children's clothing stores			
Shoe stores			
Furniture stores			
Eating and drinking places			
Drug stores			
News stands			

Questions for reflection and creating a concept map about local retail businesses.

1. What types of retail businesses are found in your neighbourhood?
2. How have local retail businesses made a difference in your community?
3. How might these local retail businesses influence future generations?

- **Theme 8: Career orientation**

Signpost: The power of place-based stories and narratives
Name of activity: New jobs, old jobs: the evolution of work in Viet Nam's cities and towns (Adapted from productivity.govt.nz)
Activity description: Participants will work in groups of three and look at a map to locate different cities and towns in Vietnam. They will start brainstorming old and new jobs in Viet Nam using the suggested questions below.

1. How many jobs have historically been linked to these places (e.g. fisher on the coast, farmer in rural areas, banker in the city)? Students could think about jobs that have traditionally been place-based and see if this is still the case.
2. How has industrialisation changed the location of jobs?

3. What jobs have been created or lost due to environmental changes?
4. If a student wants to live in a particular place, what jobs might be open to them?
5. If they want a particular job (e.g. forest ranger), where might they live in future?

Students can interview people with specific/interesting jobs and retell these stories. They can also write stories about their future self and what they will do, where they might live, and what it will be like to live there.

2. Group reflection

What would you change in your teaching as a result of the co-design workshops that you have participated in?

Have you planned to integrate place-responsive outdoor learning into your own teaching practices for the upcoming semester? Why/ why not?

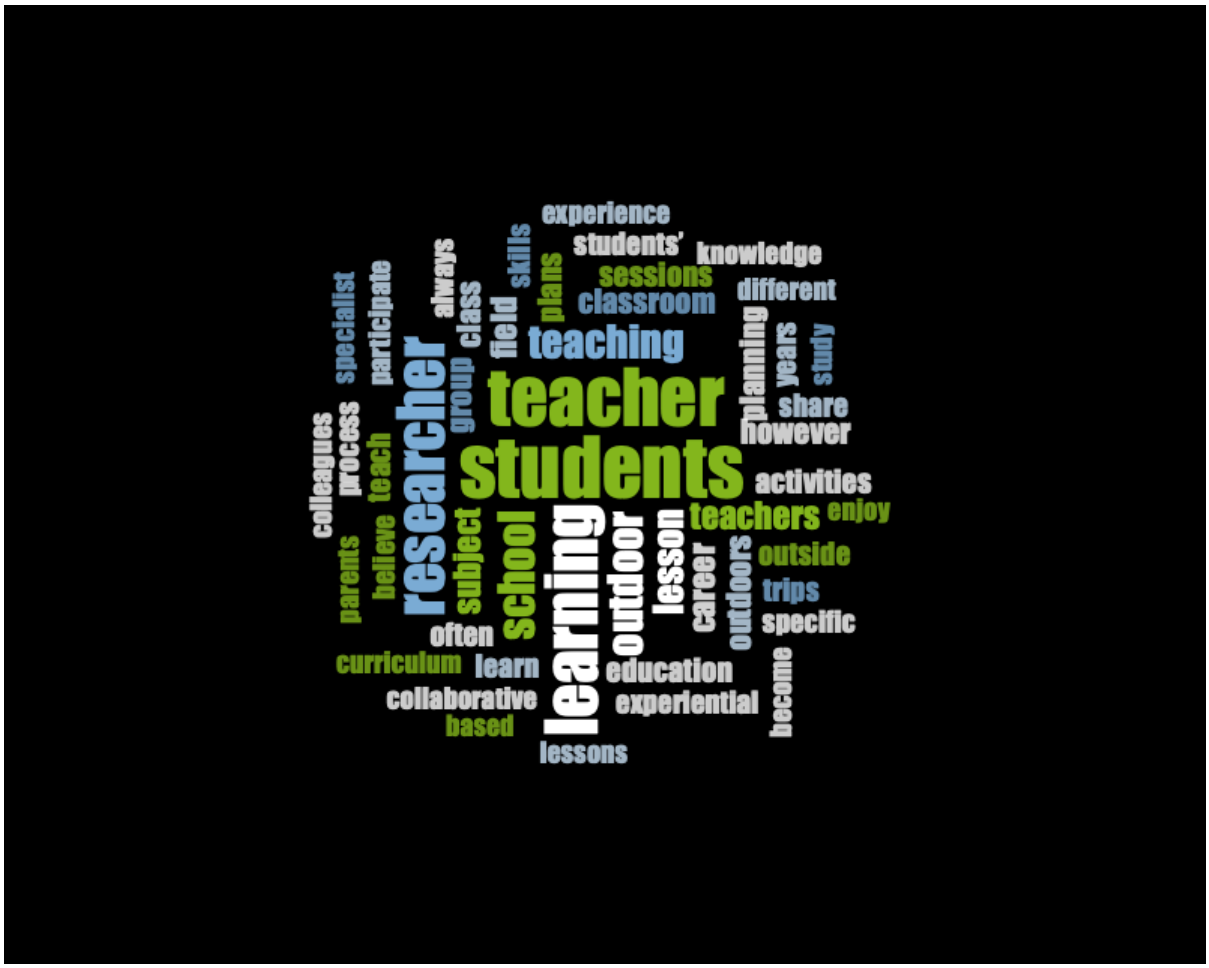
What additional knowledge or support do you need from the facilitator/ your teammates / your school?

What else could enhance your experience in the workshops? What (if anything) could be left out?

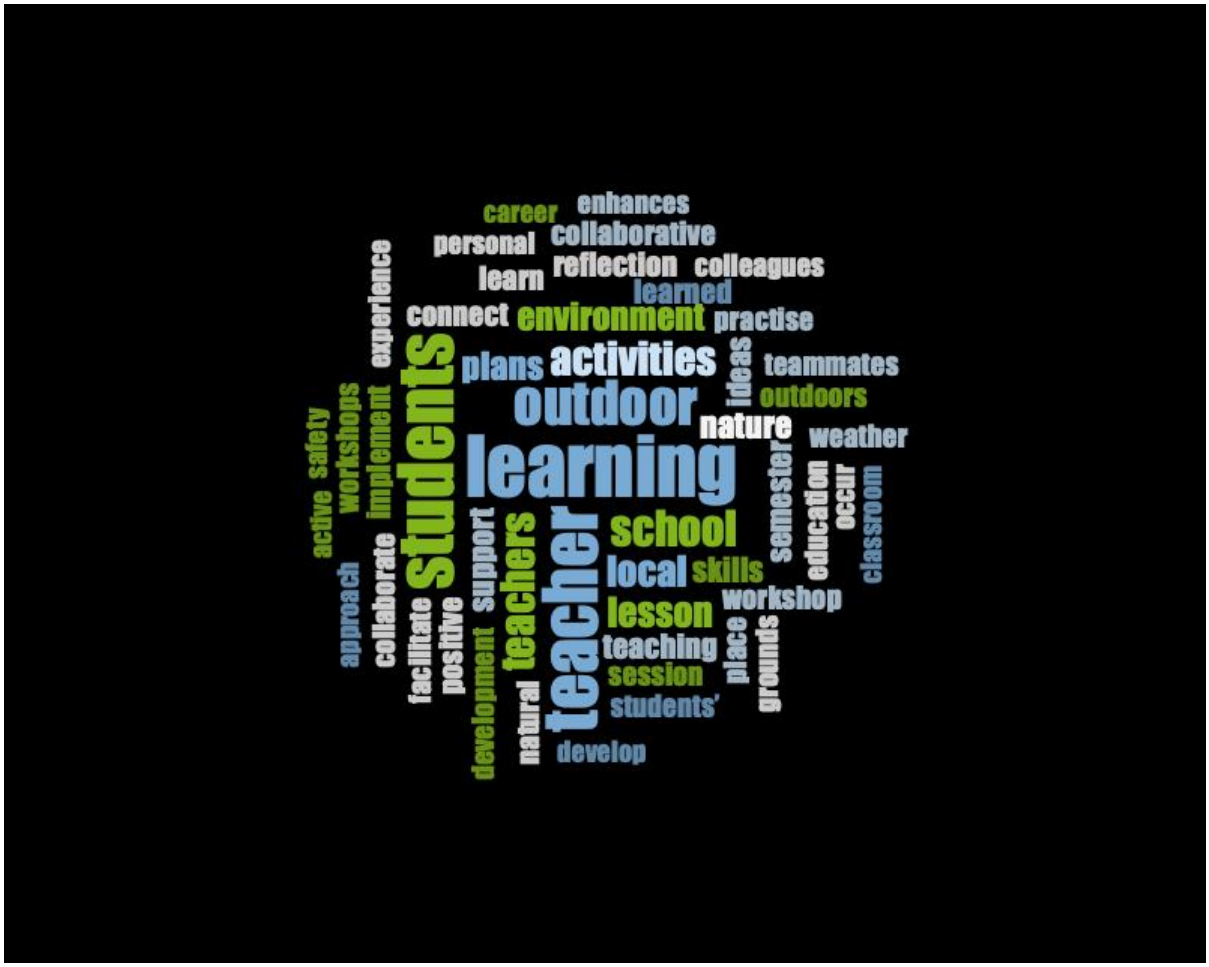
Appendix 20: Word frequency for each data component

I ran three Word Frequency Queries: 50 most frequent words with the minimum length of 5.

This is the result for the nine pre-workshop interviews.



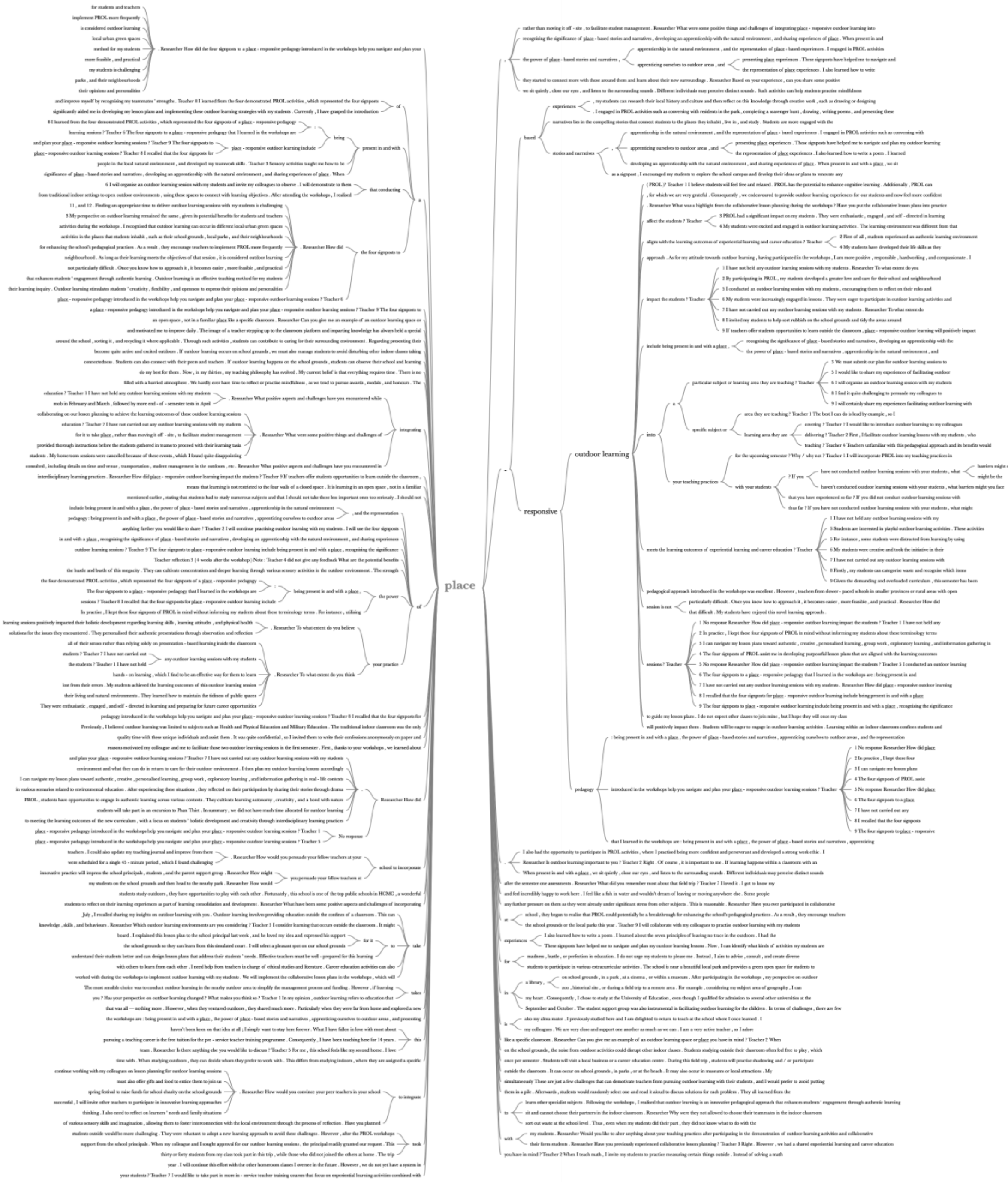
This is the result for the three teachers' group reflections.



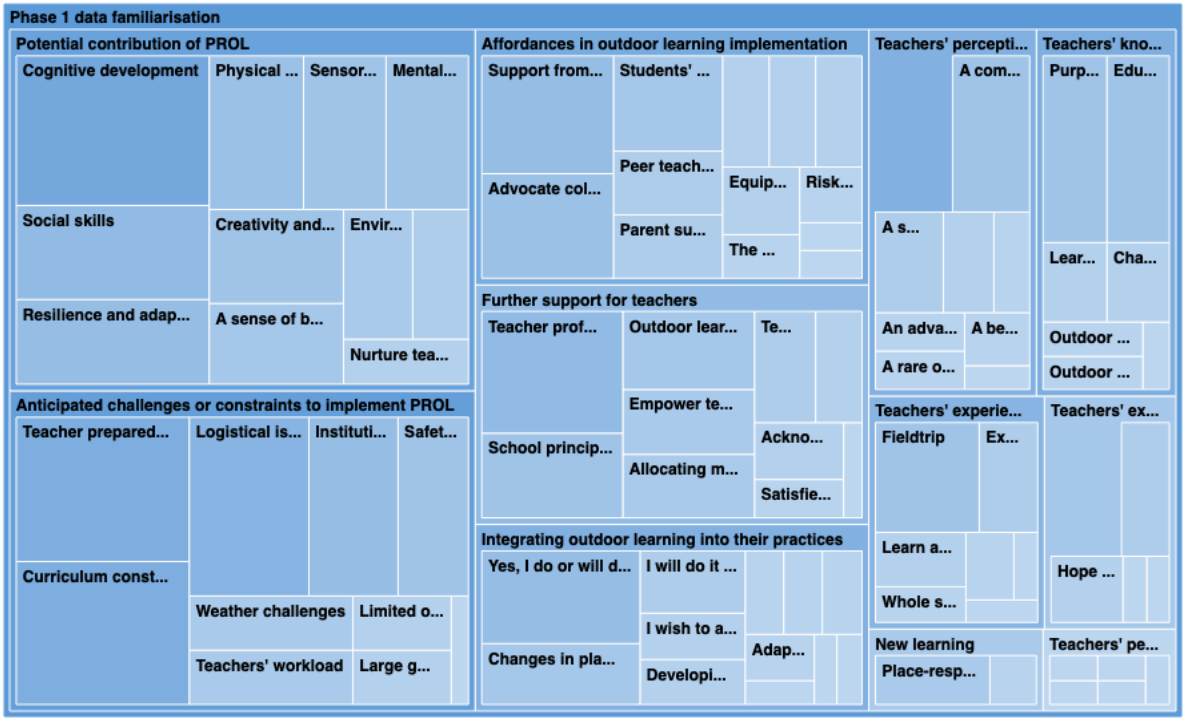
This is the result for the nine post-workshop interviews.

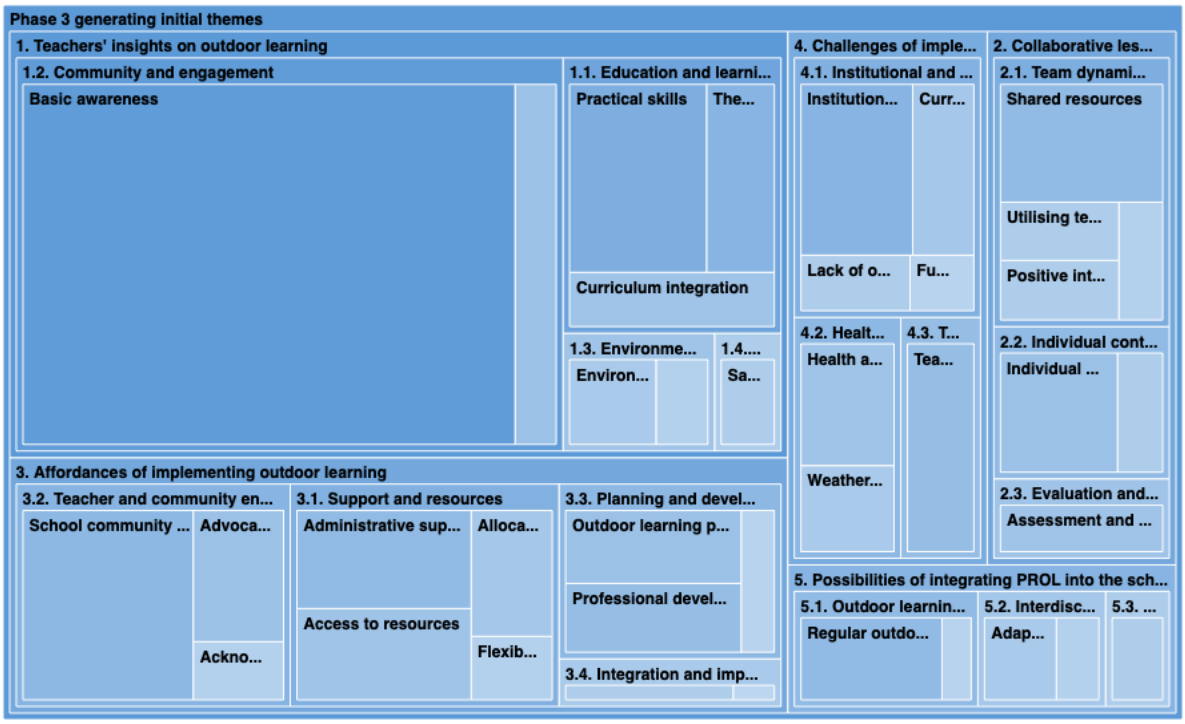


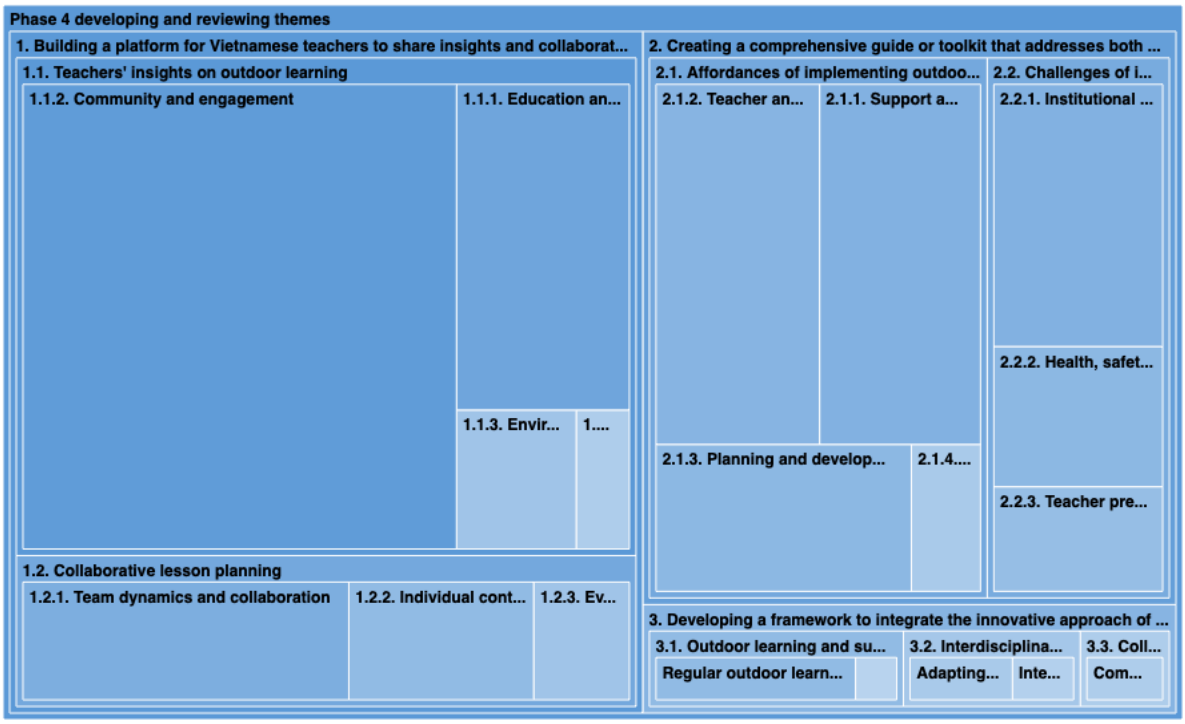
Appendix 21: Text searches for key words

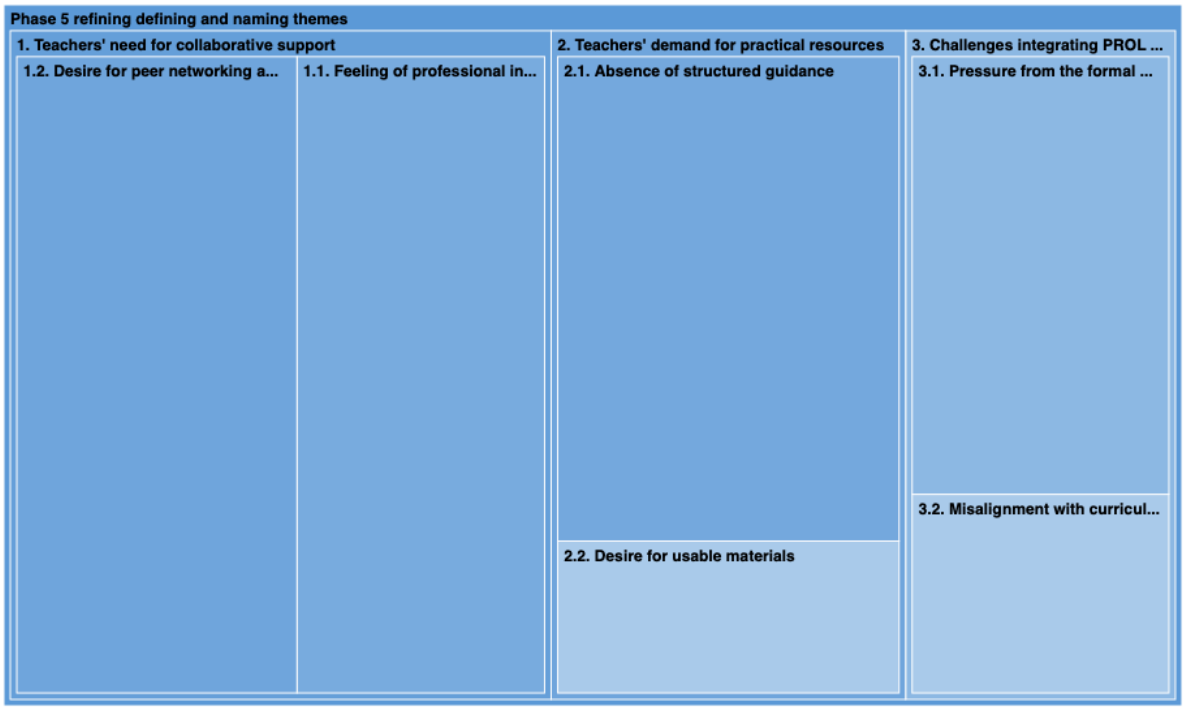


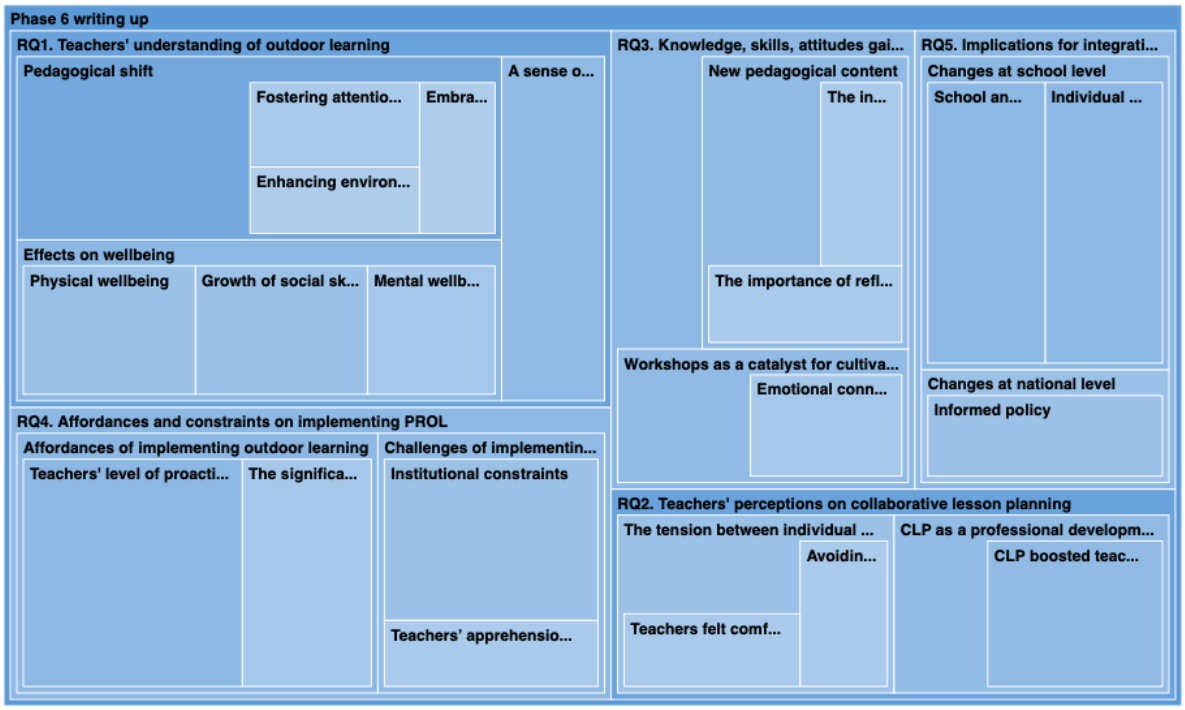
Appendix 22: Hierarchy chart to create visualisations for the thematic progression generated from the data



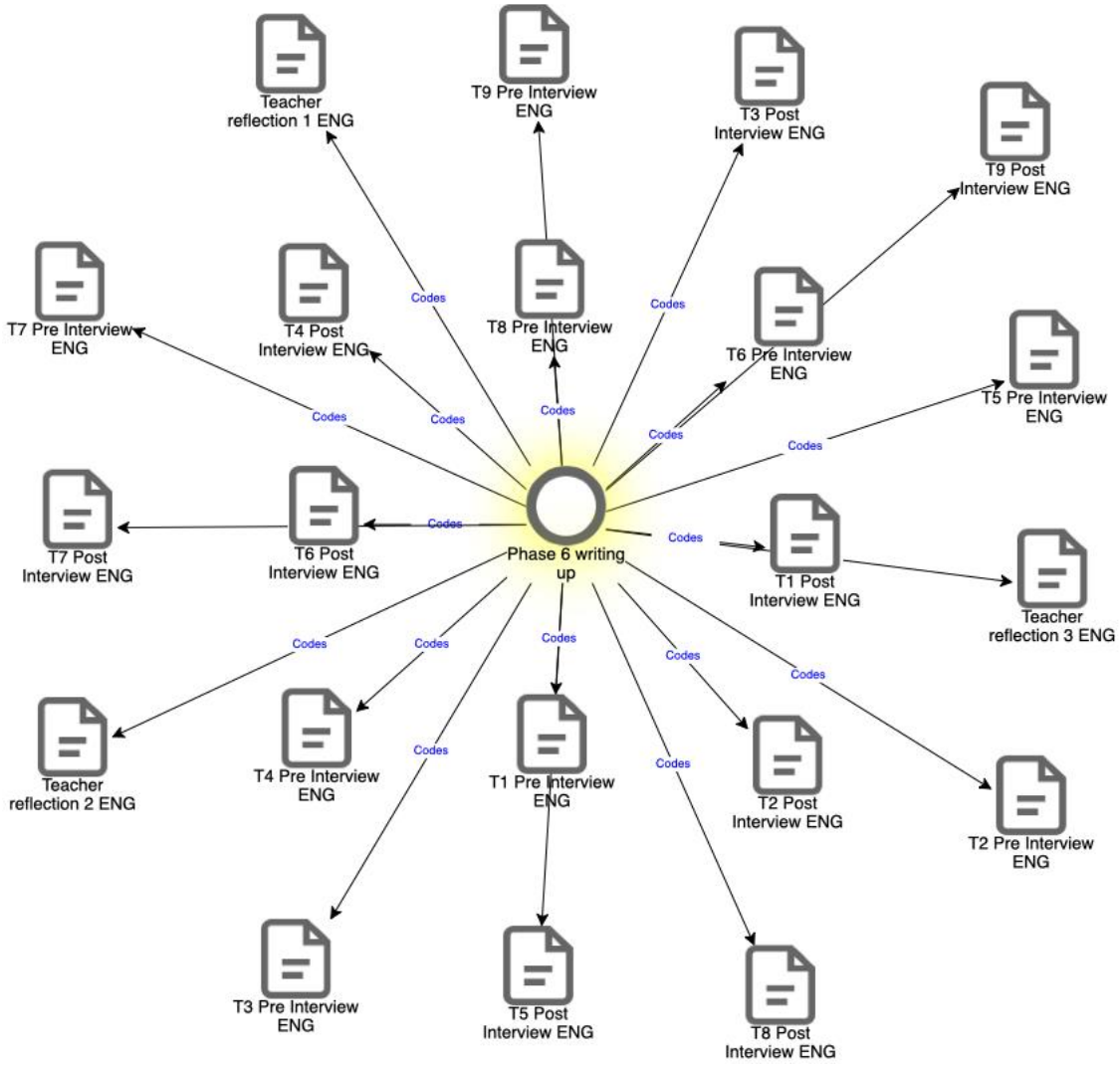

Phase 3 generating initial themes
1. Teachers' insights on outdoor learning
1.2. Community and engagement
Basic awareness
1.1. Education and learni...
Practical skills
The...
Curriculum integration
1.3. Environme...
Environ...
1.4....
Sa...
4. Challenges of imple...
4.1. Institutional and ...
Institution...
Curr...
Lack of o...
Fu...
4.2. Healt...
Health a...
Weather...
4.3. T...
Tea...
2. Collaborative les...
2.1. Team dynami...
Shared resources
Utilising te...
Positive int...
2.2. Individual cont...
Individual ...
2.3. Evaluation and...
Assessment and ...
3. Affordances of implementing outdoor learning
3.2. Teacher and community en...
School community ...
Advoca...
Ackno...
3.1. Support and resources
Administrative sup...
Alloca...
Access to resources
Flexib...
3.3. Planning and devel...
Outdoor learning p...
Professional devel...
3.4. Integration and imp...
5. Possibilities of integrating PROL into the sch...
5.1. Outdoor learnin...
Regular outdo...
5.2. Interdisc...
Adap...
5.3. ...

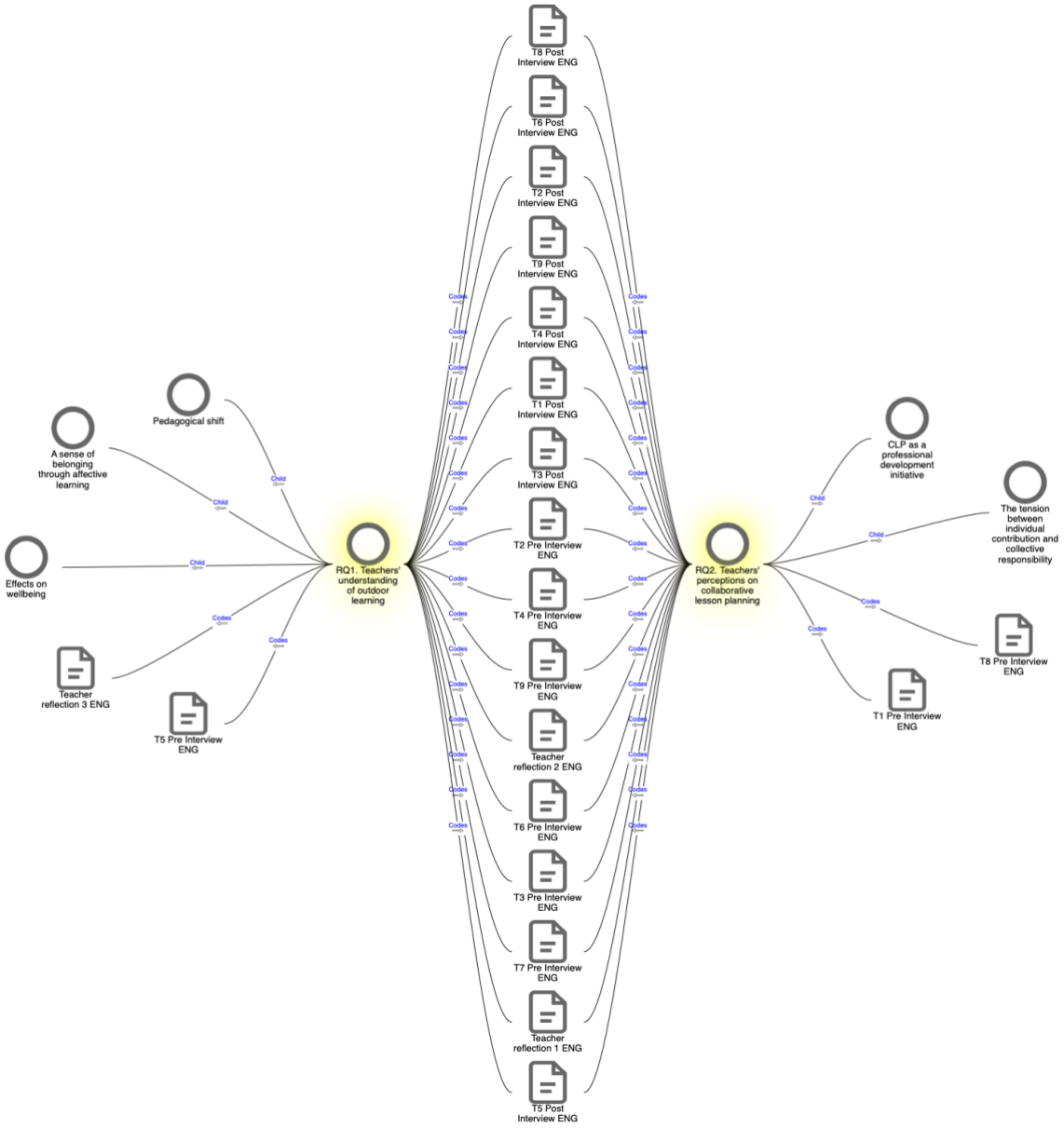

Phase 4 developing and reviewing themes
1. Building a platform for Vietnamese teachers to share insights and collaborat...
1.1. Teachers' insights on outdoor learning
1.1.2. Community and engagement
1.1.1. Education an...
1.1.3. Envir...
1....
1.2. Collaborative lesson planning
1.2.1. Team dynamics and collaboration
1.2.2. Individual cont...
1.2.3. Ev...
2. Creating a comprehensive guide or toolkit that addresses both ...
2.1. Affordances of implementing outdoo...
2.1.2. Teacher an...
2.1.1. Support a...
2.1.3. Planning and develop...
2.1.4....
2.2. Challenges of i...
2.2.1. Institutional ...
2.2.2. Health, safet...
2.2.3. Teacher pre...
3. Developing a framework to integrate the innovative approach of ...
3.1. Outdoor learning and su...
Regular outdoor learn...
3.2. Interdisciplina...
Adapting...
Inte...
3.3. Coll...
Com...

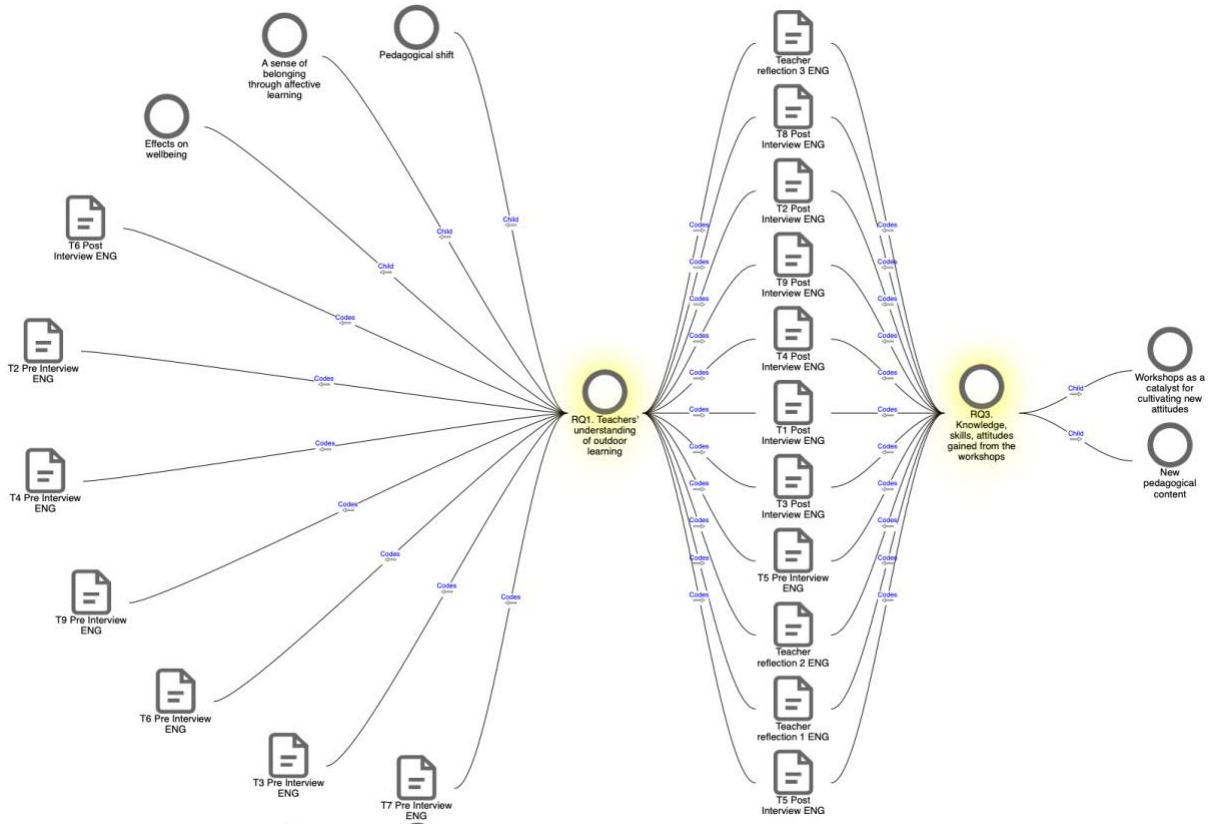

Phase 5 refining defining and naming themes
1. Teachers' need for collaborative support
1.2. Desire for peer networking a...
1.1. Feeling of professional in...
2. Teachers' demand for practical resources
2.1. Absence of structured guidance
2.2. Desire for usable materials
3. Challenges integrating PROL ...
3.1. Pressure from the formal ...
3.2. Misalignment with curricul...

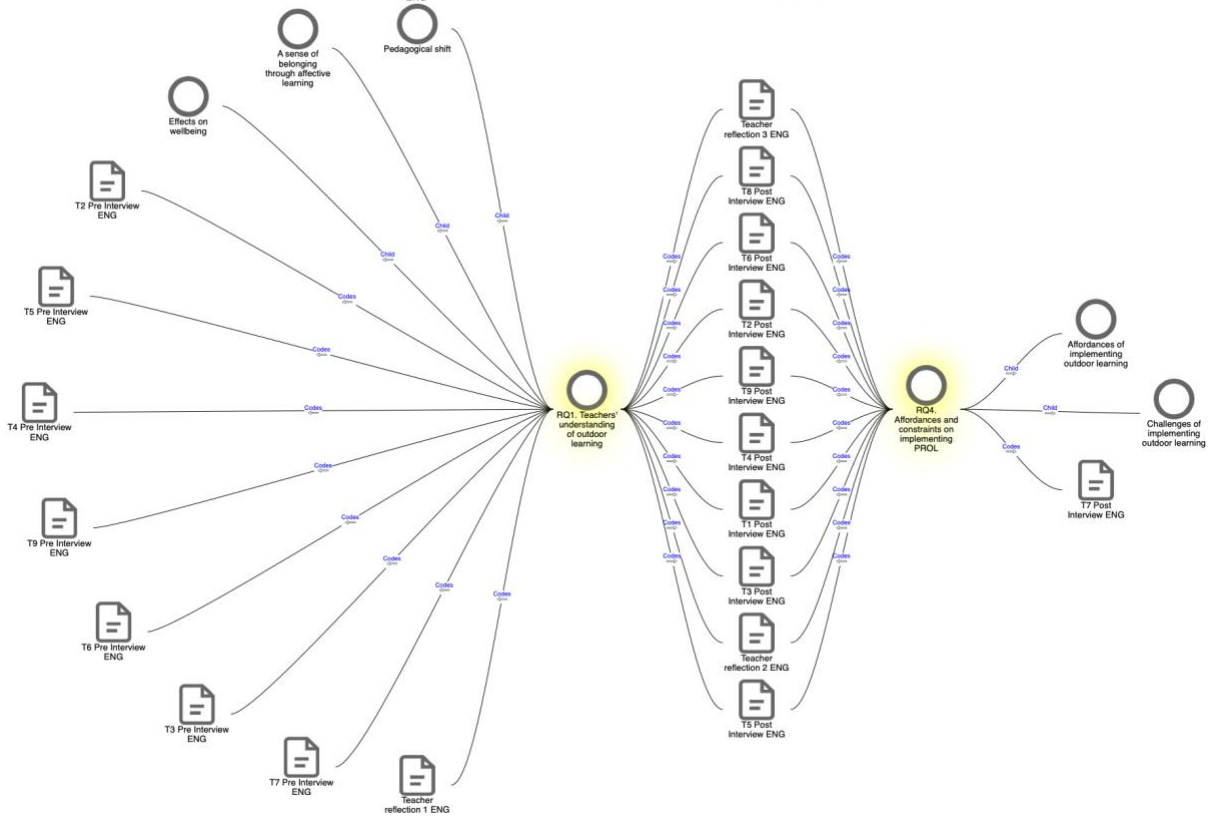

Phase 6 writing up
RQ1. Teachers' understanding of outdoor learning
Pedagogical shift
Fostering attentio...
Embra...
Enhancing environ...
A sense o...
Effects on wellbeing
Physical wellbeing
Growth of social sk...
Mental wellb...
RQ4. Affordances and constraints on implementing PROL
Affordances of implementing outdoor learning
Teachers' level of proacti...
The significa...
Challenges of implementin...
Institutional constraints
Teachers' apprehensio...
RQ3. Knowledge, skills, attitudes gai...
New pedagogical content
The in...
The importance of refl...
Workshops as a catalyst for cultiva...
Emotional conn...
RQ5. Implications for integrati...
Changes at school level
School an...
Individual ...
Changes at national level
Informed policy
RQ2. Teachers' perceptions on collaborative lesson planning
The tension between individual ...
Avoidin...
Teachers felt comf...
CLP as a professional developm...
CLP boosted teac...

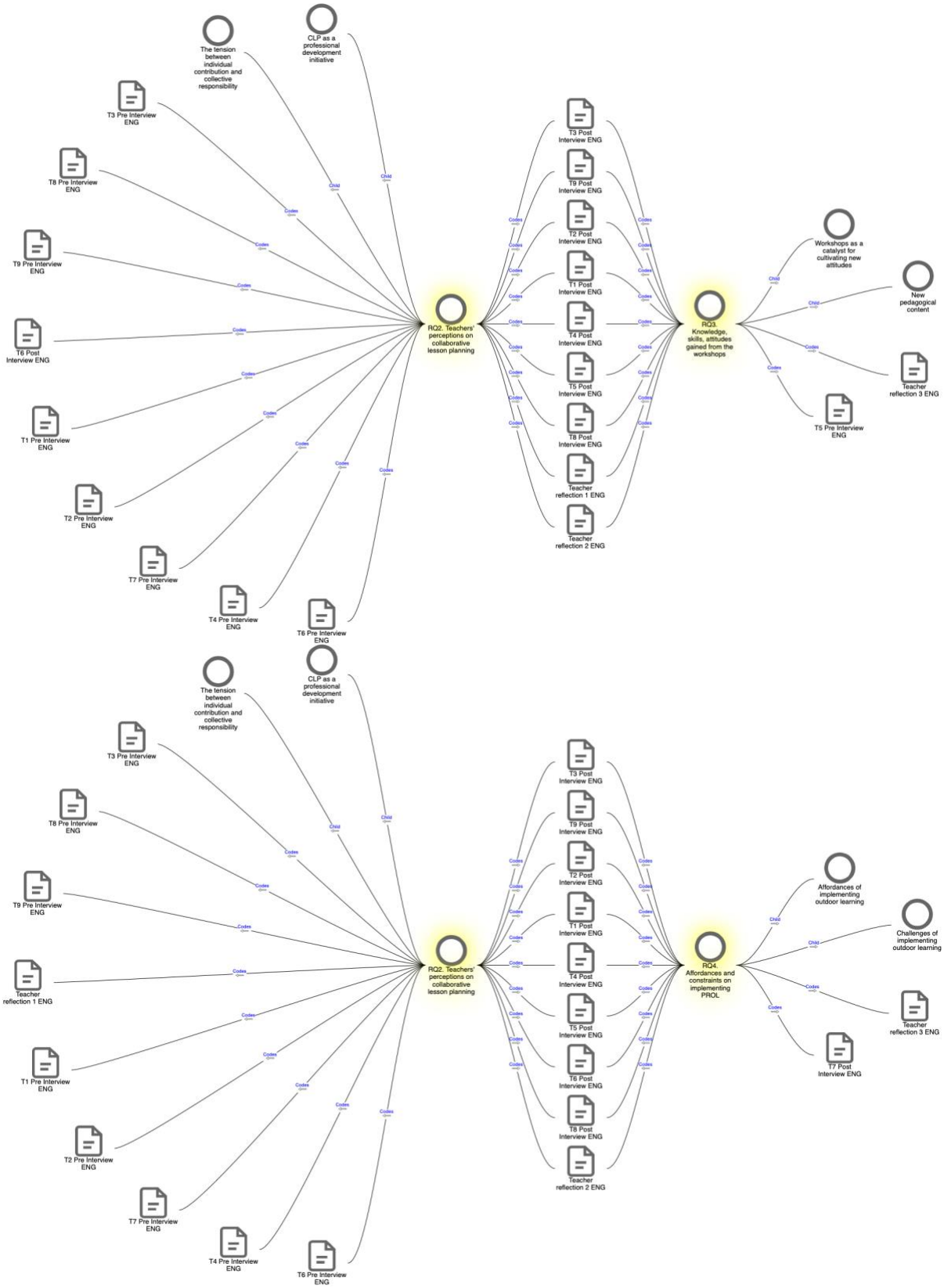
Appendix 23: Exploring diagrams to explore the project maps

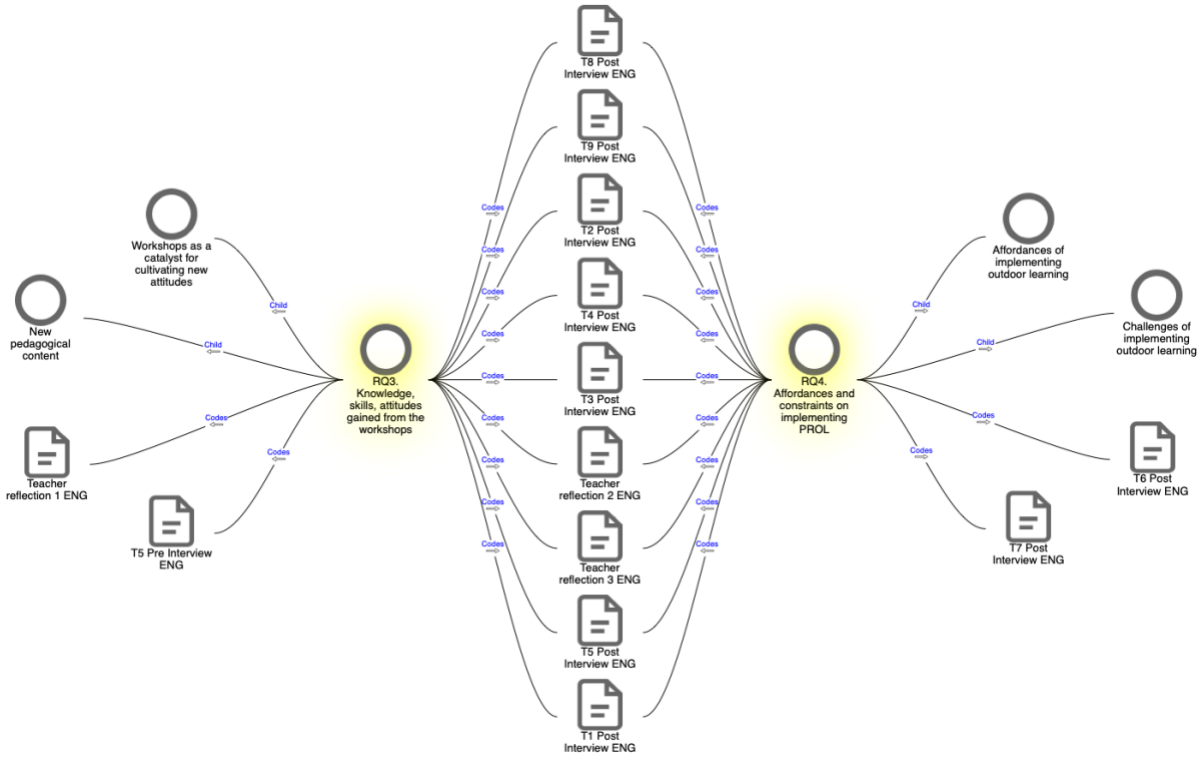



T8 Post Interview ENG
T6 Post Interview ENG
T2 Post Interview ENG
T9 Post Interview ENG
T4 Post Interview ENG
T1 Post Interview ENG
T3 Post Interview ENG
T2 Pre Interview ENG
T4 Pre Interview ENG
T9 Pre Interview ENG
Teacher reflection 2 ENG
T6 Pre Interview ENG
T3 Pre Interview ENG
T7 Pre Interview ENG
Teacher reflection 1 ENG
T5 Post Interview ENG
Codes
Child
Pedagogical shift
A sense of belonging through affective learning
Effects on wellbeing
Teacher reflection 3 ENG
T5 Pre Interview ENG
RQ1. Teachers' understanding of outdoor learning
RQ2. Teachers' perceptions on collaborative lesson planning
CLP as a professional development initiative
The tension between individual contribution and collective responsibility
T8 Pre Interview ENG
T1 Pre Interview ENG


A sense of belonging through affective learning
Pedagogical shift
Effects on wellbeing
T6 Post Interview ENG
T2 Pre Interview ENG
T4 Pre Interview ENG
T9 Pre Interview ENG
T6 Pre Interview ENG
T3 Pre Interview ENG
T7 Pre Interview ENG
RQ1. Teachers' understanding of outdoor learning
Teacher reflection 3 ENG
T8 Post Interview ENG
T2 Post Interview ENG
T9 Post Interview ENG
T4 Post Interview ENG
T1 Post Interview ENG
T3 Post Interview ENG
T5 Pre Interview ENG
Teacher reflection 2 ENG
Teacher reflection 1 ENG
T5 Post Interview ENG
RQ3. Knowledge, skills, attitudes gained from the workshops
Workshops as a catalyst for cultivating new attitudes
New pedagogical content


A sense of belonging through affective learning
Pedagogical shift
Effects on wellbeing
T2 Pre Interview ENG
T5 Pre Interview ENG
T4 Pre Interview ENG
T9 Pre Interview ENG
T6 Pre Interview ENG
T3 Pre Interview ENG
T7 Pre Interview ENG
Teacher reflection 1 ENG
RQ1. Teachers' understanding of outdoor learning
Teacher reflection 3 ENG
T8 Post Interview ENG
T6 Post Interview ENG
T2 Post Interview ENG
T9 Post Interview ENG
T4 Post Interview ENG
T1 Post Interview ENG
T3 Post Interview ENG
Teacher reflection 2 ENG
T5 Post Interview ENG
RQ4. Affordances and constraints on implementing PROL
Affordances of implementing outdoor learning
Challenges of implementing outdoor learning
T7 Post Interview ENG


The tension between individual contribution and collective responsibility
CLP as a professional development initiative
T3 Pre Interview ENG
T8 Pre Interview ENG
T9 Pre Interview ENG
T6 Post Interview ENG
T1 Pre Interview ENG
T2 Pre Interview ENG
T7 Pre Interview ENG
T4 Pre Interview ENG
T6 Pre Interview ENG
RQ2. Teachers' perceptions on collaborative lesson planning
T3 Post Interview ENG
T9 Post Interview ENG
T2 Post Interview ENG
T1 Post Interview ENG
T4 Post Interview ENG
T5 Post Interview ENG
T8 Post Interview ENG
Teacher reflection 1 ENG
Teacher reflection 2 ENG
RQ3. Knowledge, skills, attitudes gained from the workshops
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T2 Pre Interview ENG
T7 Pre Interview ENG
T4 Pre Interview ENG
T6 Pre Interview ENG
RQ2. Teachers' perceptions on collaborative lesson planning
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T4 Post Interview ENG
T5 Post Interview ENG
T6 Post Interview ENG
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RQ4. Affordances and constraints on implementing PROL
Affordances of implementing outdoor learning
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Teacher reflection 3 ENG
T7 Post Interview ENG


Workshops as a catalyst for cultivating new attitudes
New pedagogical content
Teacher reflection 1 ENG
T5 Pre Interview ENG
Child
Codes
RQ3. Knowledge, skills, attitudes gained from the workshops
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Teacher reflection 2 ENG
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