

A Teachers Guide to Outdoor Education Curriculum: Victorian Edition

A TEACHERS GUIDE TO OUTDOOR EDUCATION CURRICULUM: VICTORIAN EDITION

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- Victorian National Parks Association (n.d). *Lessons from the Little Desert*. <https://vnpa.org.au/lessons-little-desert/>

Recommended citation: Ambrosy, J. & Allen-Craig, S. (2023). *A Teachers Guide to Outdoor Education Curriculum: Victorian Edition*. Federation University. <https://oercollective.caul.edu.au/teachers-guide-outdoor-ed-vic>

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ACKNOWLEDGEMENT OF COUNTRY

We would like to begin this book by acknowledging the traditional owners of the lands, waters and seas on which we work, live, have written this book on, and refer to at times in various examples. Josh lives and works on the lands of the Wadawurrng. Sandy lives and works on the lands of the Boonwurrong. Through writing this book, we pay our respect to all elders and all First Nations people. By doing so, we acknowledge the continuing connection to Country of First Nations people and that sovereignty has never been ceded.

ACKNOWLEDGEMENTS

We would like to acknowledge the following people for their support in the writing and publication of this book.

Allison Hadfield – Federation University Australia, for your ongoing support in developing the proposal, securing the grant and project management of this book.

Helen Heawood – Federation University Australia, for your expertise in managing the copyright material and project management of this book.

Vanessa Tuckfield – Australian Catholic University for copyright support.

Karen Pruis – Federation University Australia, for your assistance in managing the project.

Adriana Pinder – ACHPER Victoria and Dan Hurrell – La Trobe University, for reviewing the book and providing feedback on the draft version.

Chris Clark – Victorian Curriculum and Assessment Authority, for being a sounding board for matters related to the curriculum.

Finally, we would like to thank the Council of Australian University Librarians for their financial support that enabled this book to be written.

ABOUT THE AUTHORS

Josh Ambrosy has significant expertise in the development and delivery of curriculum-based outdoor education programs. He has taught ITE (Initial Teacher Education) outdoor education units in higher education since 2018. Josh has 8 years of teaching experience in schools, including significant time teaching VCE OES, and other outdoor education subjects. He also coordinated a large outdoor education program at an independent school in Melbourne. Josh has been a VCAA examiner since 2016. He has written several commercial resources for both VCE OES and OE in general. He has been a regular PD facilitator in this area since 2014. Josh has also been an expert panel member for state and federal curriculum review and renewal projects. Josh is also part of the Outdoor Education in the Victorian Curriculum (OEVC) project, a collaborative effort between Victorian universities and peak bodies.

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PRE-RELEASE NOTE

A Teachers Guide to Outdoor Education Curriculum: Victorian Edition – Pre-Release December 2023

A Teachers Guide to Outdoor Education Curriculum: Victorian Edition is being released in two parts. The current version is a pre-release and contains 6 chapters that relate to the recently released Victorian Certificate of Education Outdoor and Environmental Studies Curriculum. Chapters 2-8 will be released in 2024, in line with the release of the new Victorian Curriculum F-10 that will underpin those sections. Please check back in late 2024 for the full version of the text.

NOTE FOR THE PDF VERSION

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CHAPTER 1: INTRODUCTION TO OUTDOOR EDUCATION CURRICULUM IN VICTORIA

Learning Objectives

- Describe the structure of this book and identify its purpose
- Analyse reasons for including outdoor education in the school curriculum
- Define outdoor education and outdoor learning within your own contexts
- Explain how Bloom's taxonomy underpins the curriculum in Victoria
- Describe how this book can be used to develop your knowledge of teaching outdoor education

1.1 Why Teach Outdoor Education as Part of the School Curriculum?

Outdoor Education offers students a unique opportunity to learn about themselves and the world around them. It develops resilience, criticality and other personal competencies in young people that are key to surviving the complexities of our ever-changing world. Through outdoor education, students develop a greater understanding of the natural world and the impacts that changing human lifestyles are having on the planet. Via direct outdoor experiences, along with theoretical lessons, students question their own and a range of other peoples' relationships with outdoor environments and how these relationships have changed over time.

Outdoor education, as a curriculum area, offers young people who partake in both experiences and the study of outdoor education more than simply the discipline-based knowledge that many would expect from other parts of the curriculum. It offers us, as teachers, an opportunity to engage with young people during some of their most significant developmental stages and equip them as resilient young people to manage the challenges they face now and into the future (Wattchow, 2023).

Victoria, Australia, has been at the forefront of outdoor education curriculum for over 40 years. Outdoor education in Victorian schools is both well-established and diverse in its take-up. Common articulations include the inclusion of specialist elective subjects and intensive experiences using a diverse range of outdoor environments. Despite the widespread uptake of outdoor education in Victoria and a significant body of research to support it, there is currently

a lack of literature specific to teaching outdoor education curricula in Victoria to guide teachers in the development and deployment of their programs.

This book has been written to support initial teacher education students and teachers who want to develop their skills and knowledge to develop and implement outdoor education curricula in schools. Through writing this book, we aim to empower you as a teacher to build confidence in planning outdoor education programs that align with the Victorian Curriculum F-10 (VCF-10) and VCE Outdoor and Environmental Studies (VCE OES). This book has been written to respond to a gap in the literature, being a practical guidebook for teachers of outdoor education in Victoria. We hope that it is of value to you, and we wish you well in your future endeavours teaching outdoor education.

1.2 Curricula in Victoria

Curriculum in Australia is a complex and often politically driven tool that is used to dictate what happens in schools. Governments, parents, policymakers, academics, the broader community, and teachers all share a common interest in what is included in our curriculum and what is left out. As a teacher or future teacher, reading this book, you may have—or possibly through reading this book, you will have—developed your own views about what should and shouldn't be included in the curriculum. Such thoughts are very worthwhile and should be part of your work as a teacher. This is because the curriculum is not, and should not, be treated as a stagnant or fixed apparatus. Rather, the curriculum is an ever-moving and continuously updated set of ideas that reflects society's broader social and political movements. To enforce this point, we echo (Yates et al., 2011) who offer that "Curriculum is a deceptively complicated topic" (p. 1). Through this book, we aim to help you feel more comfortable as a teacher working with the curriculum. In turn, we also hope it empowers you to understand that teachers can and should influence the curriculum in their classrooms, at schools and at a system level.

Australia is a federation of states. When you delve into the curriculum across the country, the impact of a federated system of government becomes prevalent. Historically, education, and in turn curriculum, was a state responsibility. A landmark decision in 2008 (Ministerial Council on Education, 2008) by all education ministers of the time led to the formation of ACARA (Australian Curriculum, Assessment and Reporting Authority), and the development of a national curriculum—The Australian Curriculum. Despite the newly formed body, the responsibility for the implementation of the curriculum was left to each of the individual states. This has resulted in Victoria, like some other states of Australia, creating its own version of the curriculum and retaining a unique senior secondary curriculum.

In Victoria, there are two parts to the school curriculum: the Victorian Curriculum F-10 (VCF-10) and the Victorian Certificate of Education (VCE)¹. The Victorian Curriculum F-10 is the state-based version of the Australian Curriculum F-10. It is an adaptation of ACARA's curriculum that embodies state-based priorities. The VCE is Victoria's senior secondary curriculum,

1. Most schools in Victoria use the VCF-10 and the VCE; however, a small number of schools have chosen to implement the various components of the International Baccalaureate (IB) programs instead.

through which students choose several subjects that are of interest to them. Through recent VCE reforms, students can also choose to study a vocationally focused VCE.

Outdoor Education is a significant part of many schools' curriculum. Despite this, it is not formally included in all aspects of the curriculum in Victoria. Outdoor education is explicitly included in Victoria through the inclusion of VCE OES. VCE students can also elect to undertake vocational Outdoor Recreation certificates from the 'Sport, Fitness and Recreation Training Package'. Despite this longstanding inclusion in the senior years' curriculum (see 9.2), outdoor education does not have a formal recognition within the VCF-10 curriculum. Rather, teachers of outdoor education working in the F-10 year levels have two current options to develop curriculum for their classes². The first is to use other learning areas, along with the general capabilities to develop integrated units of work, and the second is to deliver other areas of the curriculum through outdoor learning activities. In this book, we provide practical advice to help you develop a curriculum for your classes using both approaches, along with guidance on teaching VCE OES. This book does not focus on the teaching of vocational outdoor recreation certificates as the teaching of the content for those is heavily prescribed by the Sport, Fitness and Recreation Training Package.

1.3 Outdoor Education vs. Outdoor Learning

1.3.1 Outdoor Education

Outdoor education is a unique subject area. It has its own established curriculum, which in Victoria, is both formalised within the VCE and enacted (Marsh & Willis, 1999) within many schools at other year levels. Outdoor education differs from outdoor learning, which we return to at the bottom of this section. Although no single definition of outdoor education exists, it is important to preface this book with some common understandings of outdoor education. Outdoor education has been defined before as follows.

Outdoor Education focuses on personal development through the interaction with others and responsible use of the natural environment. It involves the acquisition of knowledge, values and skills that enhance safe access, understanding and aesthetic appreciation of the outdoors, often through adventure activities. (Victoria. Board of Studies (1995) Curriculum and Standards Framework (CSF). Melbourne: Board of Studies)

Through interaction with the natural world, outdoor education aims to develop an understanding of our relationship with the environment, others and ourselves. The ultimate goal of outdoor education

2. There have been longstanding calls for the inclusion of a formal outdoor education curriculum in Victoria. We discuss this further in chapter 6

is to contribute towards a sustainable community. (“Education Outdoors – Our Sense of Place.” 12th National OE Conference (2001) Bendigo, VIC)

Through interaction with the natural world Outdoor Education provides unique opportunities to develop relationships with the environment, others and ourselves. These relationships are essential for the well-being and future of individuals, society and our environment. (“The Human Face of Outdoor Education.” 11th National OE Conference (1999) Perth, WA.)

(S. Allen-Craig, personal communication, November 10, 2023)

1.3.2 Outdoor Learning

Outdoor learning is a pedagogical approach that can be used to deliver curriculum from other subjects. It is commonly used to teach curricula such as science, geography, health and physical education. Outdoor learning is not simply the process of taking students outside, rather, it is the delivery of curriculum through and with the outdoors as a site of learning. We discuss outdoor learning in detail in chapter 6-7.

Learning Activity 1.1

Outdoor education and outdoor learning are terms that are often used interchangeably. We argue that this is not helpful and that a better understanding of each term is needed by teachers. Furthermore, outdoor education and outdoor learning, like many parts of education, are not fixed terms. Rather, their meanings are continually socially constructed by those who use them. Complete the following activity to help you better understand these terms.

1. Define, in your own words, outdoor education and outdoor learning.
2. Provide an example that you have observed in schools, or your own education, of each outdoor education and outdoor learning.
3. Share your examples and definitions with a peer, and provide each other feedback on them.
4. Revise steps 1 and 2 as needed following the feedback.

1.4 Blooms Taxonomy

Understanding Bloom's Taxonomy as a teacher will help you to understand the underpinning structure of both state-level curricula and the curriculum you develop for your own classes. The following information by Armstrong (2010), as shown in the shaded (blue) box, has been reproduced under licence CC-BY-NC-4.0.

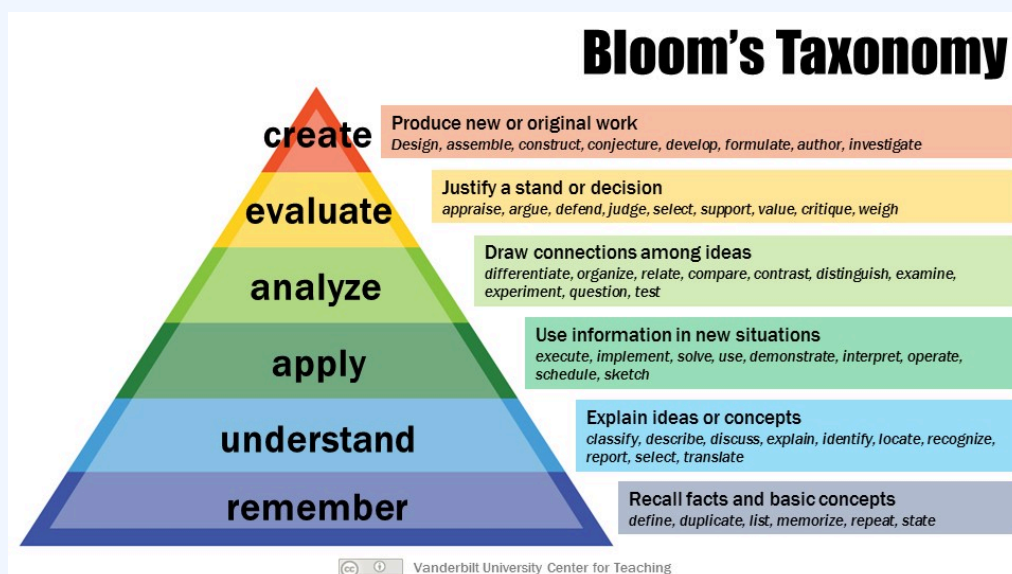


Image 1: Blooms Taxonomy (Armstrong, 2010) image reproduced under licence CC-BY-NC-4.0

Background Information

In 1956, Benjamin Bloom with collaborators Max Englehart, Edward Furst, Walter Hill, and David Krathwohl published a framework for categorising educational goals: Taxonomy of Educational Objectives. Familiarly known as Bloom's Taxonomy, this framework has been applied by generations of K-12 teachers and college instructors (or university lecturers) in their teaching.

The framework elaborated by Bloom and his collaborators consisted of six major categories: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. The categories after Knowledge were presented as "skills and abilities," with the understanding that knowledge was the necessary precondition for putting these skills and abilities into practice.

While each category contained subcategories, all lying along a continuum from simple to complex and concrete to abstract, the taxonomy is popularly remembered according to the six main categories.

The Original Taxonomy (1956)

Here are the authors' brief explanations of these main categories in from the appendix of *Taxonomy of Educational Objectives* (Handbook One, pp. 201-207):

- Knowledge “involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting.”
- Comprehension “refers to a type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications.”
- Application refers to the “use of abstractions in particular and concrete situations.”
- Analysis represents the “breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between ideas expressed are made explicit.”
- Synthesis involves the “putting together of elements and parts so as to form a whole.”
- Evaluation engenders “judgments about the value of material and methods for given purposes.”

The Revised Taxonomy (2001)

A group of cognitive psychologists, curriculum theorists and instructional researchers, and testing and assessment specialists published in 2001 a revision of Bloom's Taxonomy with the title *A Taxonomy for Teaching, Learning, and Assessment*. This title draws attention away from the somewhat static notion of “educational objectives” (in Bloom's original title) and points to a more dynamic conception of classification.

The authors of the revised taxonomy underscore this dynamism, using verbs and gerunds to label their categories and subcategories (rather than the nouns of the original taxonomy). These “action words” describe the cognitive processes by which thinkers encounter and work with knowledge:

Remember

- Recognizing
- Recalling

Understand

- Interpreting
- Exemplifying
- Classifying
- Summarizing

- Inferring
- Comparing
- Explaining

Apply

- Executing
- Implementing

Analyze

- Differentiating
- Organizing
- Attributing

Evaluate

- Checking
- Critiquing

Create

- Generating
- Planning
- Producing

In the revised taxonomy, knowledge is at the basis of these six cognitive processes, but its authors created a separate taxonomy of the types of knowledge used in cognition:

Factual Knowledge

- Knowledge of terminology
- Knowledge of specific details and elements

Conceptual Knowledge

- Knowledge of classifications and categories
- Knowledge of principles and generalizations
- Knowledge of theories, models, and structures

Procedural Knowledge

- Knowledge of subject-specific skills and algorithms
- Knowledge of subject-specific techniques and methods
- Knowledge of criteria for determining when to use appropriate procedures

Metacognitive Knowledge

- Strategic Knowledge
- Knowledge about cognitive tasks, including appropriate contextual and conditional knowledge
- Self-knowledge

Mary Forehand from the University of Georgia provides a guide to the revised version giving a brief summary of the revised taxonomy and a helpful table of the six cognitive processes and four types of knowledge.

Why Use Bloom's Taxonomy?

The authors of the revised taxonomy suggest a multi-layered answer to this question, to which the author of this teaching guide has added some clarifying points:

1. Objectives (learning goals) are important to establish in a pedagogical interchange so that teachers and students alike understand the purpose of that interchange.
2. Organizing objectives helps to clarify objectives for themselves and for students.
3. Having an organized set of objectives helps teachers to:
 - “plan and deliver appropriate instruction”;
 - “design valid assessment tasks and strategies”; and
 - “ensure that instruction and assessment are aligned with the objectives.”

(Armstrong, 2010, reproduced under licence CC-BY-NC-4.0)

1.4.1 Blooms Taxonomy and Outdoor Education Curriculum in Victoria

Bloom's Taxonomy underpins the organising structure for both the Victorian Curriculum F-10 and the VCE. Both curriculum documents present a series of constructs and levels of application. The constructs tell us as teachers what is to be taught, whilst the level of application (of skill) articulates the cognitive level. Although named differently, in the F-10 vs. VCE curriculum, they function similarly. We discuss the specifics of the structures of the VCF-10 and the VCE in their respective parts of this book.

The taxonomy shown in section 1.4 demonstrates one understanding of a taxonomy of the application of knowledge from relatively low order thinking skills (name, identify) to more complex processes (evaluate, create, etc.). Whilst debate exists between scholars, teachers and policymakers alike around the use of a single taxonomy of application to underpin the curriculum in Victoria—the above is still a useful tool for teachers as they plan their outdoor

curriculum as it prompts intentional planning beyond the question of ‘what is to be learnt?’ and furthers the planning process by encouraging us to think about ‘what level will this be learnt at?’ and ‘what level of achievement am I expecting from my students?’. As you undertake your planning for outdoor education curriculum, you should consider not only what is being taught but also the level of application that is desired.

1.5 Using this Book

This book has been written to assist both pre-service teachers and teachers of outdoor education to develop the skills and knowledge required to structure outdoor programs of study in Victoria. Pre-service teachers are emerging professionals, and hence, throughout this book, when we refer to the role of teacher, we collectively refer to both pre-service and qualified teachers. Each chapter begins with a series of learning outcomes to help frame the focus and learning of the chapter. As you work through the chapters, you should refer to and reflect on these outcomes. The learning outcomes are worded using Blooms terms in a similar way that they are articulated in both the VCE OES study design and the Victorian Curriculum F-10.

A series of learning activities for you to undertake are embedded within each chapter. These activities are designed to help you apply, in a practical manner, the skills and knowledge you are learning about. These activities range from analysing a case study to developing tools to use with your class. Each chapter concludes with a series of reflection questions. You might complete these in your own time or discuss them with others who are reading the book, such as your colleagues or university classmates. The book also contains a number of appendices through which we have provided examples, including unit planners and assessment tasks.

1.6 Overview of Book and Chapters

This book is divided into three parts, each with a distinct focus. Each contains a series of chapters offering practical advice about different aspects of the outdoor education curriculum in Victoria. The chapters are broken down as follows.

Chapters 2-5: Outdoor Education in the Middle Years. This section guides teachers in how to develop programs using the Victorian Curriculum F-10. This section explores how units of outdoor education can be developed using integrated curriculum structures drawing upon a range of learning areas in the Victorian Curriculum F-10 and the general capabilities. Part A concludes with information about advocating for outdoor education in the middle years at both a school and a broader level.

Chapter 6-7: Outdoor Learning as a Pedagogy. This section unpacks how outdoor learning as a pedagogical approach can be used to teach content from a range of learning areas in the Victorian Curriculum F-10. It explores how the outdoors can enliven and provide context to other curriculum areas.

Chapter 9-13: VCE Outdoor and Environmental Studies (VCE OES). This section unpacks the process for planning the curriculum for VCE OES. It has a significant focus on the development

of assessment tasks for students and preparation strategies that can be used to help students prepare for both school-assessed coursework (SAC) tasks and examinations.

1.7 Glossary of Terms

The following terms are useful for outdoor education teachers. The terms defined here align with the VCAA's use of these terms. They are useful for understanding the information in this book, the curriculum, and the associated curriculum support materials.

- Outdoor education: A field of study that teaches students about themselves, others and the environment through both study and experience of outdoor environments.
- Outdoor environments: refers to any outdoor places that students may visit or study as part of their curriculum. These vary from environments with minimal intervention by people to developed and urban areas.
- Outdoor experience: refers to a broad range of activities students undertake during outdoor education and outdoor learning programs. Activities during outdoor experiences vary from adventure activities to more passive pursuits.
- Outdoor learning: A pedagogical approach to teaching content and skills in other learning areas of the curriculum through outdoor experiences.

Reflection Questions

- What can you expect to learn in this book?
- Why would you include outdoor education in the school curriculum?
- How does Bloom's Taxonomy underpin the curriculum in Victoria?
- How can this book be used to develop your knowledge of teaching outdoor education?

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CHAPTER 9: INTRODUCTION TO VCE OES

Learning Objectives

- Describe the history of VCE OES
- Explain the structure and underpinning concepts within the new VCE OES study design
- Analyse why students may want to study VCE OES
- Evaluate a possible model of teaching cross-study specifications and relationships in VCE OES

9.1 Introduction to VCE OES

Victorian Certificate of Education Outdoor and Environmental Studies (VCE OES) is a world-leading example of a senior years outdoor education curriculum. This study introduces students to an array of environmental issues that help them to understand the relationships that they and other people have with outdoor environments. Via direct outdoor experiences, students experience a breadth of Victorian outdoor environments and study a range of environmental constructs through their experiences.

This chapter introduces you to some of the key concepts in VCE OES. It is designed as an introduction to the course of study. Through this chapter, we explore the structure of the VCE OES study design, the history of the course, the latest updates and some of the overarching ideas that underpin VCE OES teaching. Whilst this chapter tries to draw your attention to some of the key ideas behind the VCE OES curriculum, it is prudent in this and the other chapters in Part C of this book, to remind you that they should be read in conjunction with the VCE OES study design. The latest version of which can be downloaded from the VCAA website.

When teaching any VCE study, you should ensure you are using the latest version of the study design. In addition, due caution is required to ensure that resources used are either: published alongside and relevant to the current study design or audited by you as the teacher to ensure compliance. Part C of this book was written in 2023 following the release of the newly revised study design. Accordingly, the case studies and other information contained herein are an accurate reflection of the current VCE OES curriculum at the time of publication. However, it remains the sole responsibility of the teacher running the course to ensure that their practices align with the requirements of the VCAA. You should remember this when reading Part C of this text and stay abreast of any changes to the course through the VCAA communications.

In addition to the study design, the VCAA also publishes support materials for teachers.

Many publications such as this book, student textbooks and other commercial resources are available to support your teaching of the VCE OES curriculum. It is important to understand the respective role of the different publications.

- The VCE OES Study Design – Sets out the curriculum and dictates what can and cannot be assessed in the VCE OES examination and school-assessed coursework (SAC).
- The VCAA Support Material (Previously Advice for Teachers) – Guides how to interpret the study design.
- All other publications (Textbooks, Commercial SACs, etc.) – Are not endorsed by the VCAA. You should regularly audit publications other than those produced by the VCAA to ensure they align with the most recent study design. We further discuss strategies for adopting commercially produced assessment tasks in 12.4.

9.2 History of VCE OES

VCE OES, and outdoor education more broadly, has a long history as part of the senior secondary curriculum in Victoria. Outdoor Education, one of two predecessor subjects to the current VCE OES course, was introduced into the senior secondary curriculum in 1982 (Gough, 2007). The now outdated outdoor education course focused more on the individual student's participation in adventure-based activities centred around their own development (Preston, 2014). The other course of study, that was also an originally independent subject, was the now redundant VCE Environmental Studies.

In the late 90s, a reorganisation of the environmental-based curriculum in Victoria within the VCE was undertaken by the Board of Studies (now VCAA) (Gough, 2007). This reorganisation of environmental education in the VCE saw: a) the amalgamation of VCE Outdoor Education and VCE Environmental Studies to become VCE Outdoor and Environmental Studies; b) the inception of a new VCE course of Environmental Science; and c) the strengthening of the environmental components of other study designs (geography, biology, etc.) (Gough, 2007). The newly harmonised course of VCE OES introduced in 1997 has been marked as a significant greening (Martin, 2004) of the senior secondary outdoor curriculum in Victoria.

VCE OES has continued to evolve since this time. This has included two major revisions of the study. Implementation of the most recent major revisions happened in 2012 and in 2024. During this time, we observe that the study has continued to undergo processes of greening through which less emphasis is placed on student's own responses to outdoor experiences and, rather, their study of environmental constructs through their own experience. This is particularly the case in units 3 and 4 of the study. Although the newly published study design (Victorian Curriculum and Assessment Authority, 2023) helps strengthen the role and purpose of direct learning in the outdoors, it continues as an environmentally focused outdoor curriculum.

9.3 The Revised VCE OES curriculum

The VCAA, as the authority responsible for Victoria's curriculum, regularly reviews and updates the VCE OES curriculum to ensure it remains current. The newly released VCE OES curriculum was revised following a major review of the curriculum in 2021-2022 (Ambrosy, 2021). As stated above, this revised study design follows the ongoing trend toward a green outdoor education curriculum. In particular, the revisions follow the remarks about the prior VCE OES curriculum in the review benchmarking report that "Victorian Certificate of Education (VCE) Outdoor and Environmental Studies (VCE OES) is a unique offering both domestically and internationally. The nexus between different ways of experiencing and knowing outdoor environments from both socio-cultural, and at times, scientific perspectives results in a contemporary and timely subject for students undertaking their final years of secondary schooling." (Ambrosy, 2021, p. 3).

The latest VCE OES curriculum review saw significant structural and content reorganisation. When compared to the previous versions of the study design, the significant changes introduced in 2024 are:

- The introduction of the cross-study specifications that underpin the course.
- A revised push for direct outdoor experiences as part of the teaching of the course, including the introduction of Area of Study 3 (See 9.4.3) to better align the curriculum to these experiences.
- A stronger focus on Indigenous peoples' relationships with the outdoors is embedded across the course.
- A shift away from structured questions (test style) school-assessed coursework.

9.4 Structure of VCE OES

This section unpacks how VCE OES is structured. It discusses some of the key parts of the VCE OES curriculum and, through doing so, aims to develop your competence to work with the study design.

9.4.1 Units and Outcomes

The VCE OES curriculum comprises four units of study. Each unit has two or three outcomes (or Areas of Study). The first two outcomes per unit set out the key knowledge and skills (see 9.4.2) based on a series of constructs and associated cognitive levels. Units 1, 2 and 4 all have an additional area of study that articulates the key practical knowledge and skills to be embedded in outdoor experiences (see 9.4.3).

The units and outcomes are below:

- Unit 1: Connections with outdoor environments
 - Outcome 1 Our place in outdoor environments
 - Outcome 2 Exploring outdoor environments
 - Outcome 3 Safe and sustainable participation in outdoor experiences
- Unit 2: Discovering outdoor environments
 - Outcome 1 Understanding outdoor environments
 - Outcome 2 Observing impacts on outdoor environments
 - Outcome 3 Independent participation in outdoor environments
- Unit 3: Relationships with outdoor environments
 - Outcome 1 Changing human relationships with outdoor environments
 - Outcome 2 Relationships with Australian environments in the past decade
- Unit 4: Sustainable outdoor environments
 - Outcome 1 The importance of healthy outdoor environments
 - Outcome 2 The future of outdoor environments
 - Outcome 3 Investigating outdoor environments

(Victorian Curriculum and Assessment Authority, n.d.-b Reproduced with permission.)

9.4.2 Key Knowledge and Skills

The VCE OES study design is articulated through three broad mechanisms. The key knowledge (KK) and key skills (KS) and the cross-study specifications (addressed in 9.4.4). The key knowledge breaks down what is to be learnt within each outcome by students. The key skills articulate how the knowledge will be applied and at what cognitive level based on Bloom's verbs (Armstrong, 2010) (see 1.4).

Understanding the interplay between the KK and KS is imperative for successful VCE OES teaching. Whilst a focus on key knowledge is in many ways the driving force behind the development of a teacher's curriculum in VCE OES, it is vital that the planning and delivery of this KK aligns to the relevant cognitive levels articulated within the study design for two key reasons. Firstly, during both school-assessed coursework and exams, students demonstrate their knowledge of the key skills being assessed at, or up to, the required cognitive level (this idea is unpacked further in chapters 12 & 13). Secondly, and likely more importantly, education is and should be shifting toward a greater focus on teaching (21st century) skills within the curriculum (Martinez, 2022). This shift sees a greater focus by students and teachers on the application of, rather than simply the acquisition of knowledge. The VCE OES curriculum provides one such opportunity to embed such an approach due to the value placed on skills and knowledge throughout the course.

Assigning a number system for quick reference is often useful when working with the VCE OES curriculum. When discussing the curriculum with experienced teachers, you will often hear them discuss parts by number. The commonly used numbering system comprises two or three-digit numerals. For example:

Numbering style	Example	Meaning
2 digits	2.1	Unit 2, Area of Study 1.
3 digits	2.1.1	Unit 2, Area of Study 1, KK dot point 1 in the list.

It is uncommon for teachers to number the key skills as they are typically thought of alongside key knowledge points. Mostly, in VCE OES, each KK will have a corresponding KS. Unit 3 AoS 1 KK/KS are displayed as printed in the study design below. As you will observe below, each KK point matches a KS. In addition, the last KK in 3.1 has a second key skill.

Key knowledge

Australian outdoor environments before humans arrived, including characteristics of biological isolation, geological stability and climatic variations

relationships with outdoor environments expressed by specific Indigenous peoples' communities before and after European colonisation

relationships of non-Indigenous peoples with specific outdoor environments as influenced by and observed in local or visited outdoor environments during historical time periods:

- Early colonisation (1788–1859)
- Pre-Federation (1860–1900)
- Post-Federation (1901–1990)

the beginnings of environmentalism and the resulting influence on political party policy, as observed in one of the following historical campaigns:

- Lake Pedder
- Franklin River
- Little Desert

Key skills

- explain characteristics of Australian outdoor environments before humans arrived

- analyse the changing relationships with Victorian outdoor environments expressed by specific Indigenous peoples' communities before and after European colonisation
- analyse the changing relationships of non-Indigenous peoples with Victorian outdoor environments as observed during historical time periods
- describe the beginnings of environmentalism as observed in a historical campaign
- evaluate the influence of environmentalism on the development of a government policy or political party

(Victorian Curriculum and Assessment Authority, 2023, pp. 22-23 Reproduced with permission.)

When you read the above key skills, you should recognise that the Bloom's level varies across the outcome. For example, students are required to analyse the changing relationships of a specific Indigenous peoples' community. In contrast, they are required to evaluate the influence of environmentalism on the development of a government policy or political party. The latter is a higher-order cognitive skill. When developing courses of study and assessment for this area, you will be required to do so based on the cognitive levels detailed within the study design. This is particularly important when preparing students for their school-assessed coursework and the externally set VCE OES exam. Both assessment mechanisms align with the cognitive levels set out in the study design. In Chapter 10 we unpack further how you might plan a learning and teaching sequence based on the cognitive levels expressed in the key skills.

Interestingly, in the first two outcomes of the study design (Unit 1 Area of Study 1 and 2), additional key skills are taught concurrently with all listed key knowledge points. As shown in the table below, the additional key skill of 'interact sustainably with outdoor environments' does not have a specific KK point that it is associated with. When this is the case, you should teach it alongside as many KK points as is practicable.

Key Knowledge	Key Skill
<ul style="list-style-type: none">the influence of depictions of experiencing outdoor environments on personal responses, such as in the mainstream media, social media, music, art, writing and advertisingfactors that affect access to experiencing outdoor environments, including socioeconomic status, cultural background, age, gender and physical abilityrelevant technologies and their influences on outdoor experiencesthe variety of personal responses to risk when experiencing outdoor environments, including the interplay between competence, perceived risk and real risk	<ul style="list-style-type: none">analyse the depictions of experiencing outdoor environments on personal responsesexplain factors that affect access to experiencing outdoor environmentsexplain the influence of relevant technologies on experiencing outdoor environmentscompare a range of personal responses to risk when experiencing outdoor environmentsinteract sustainably with outdoor environments

Table 9.1 – Unit 1 – Area of Study 2 – Exploring Outdoor Environments (Victorian Curriculum and Assessment Authority, 2023, p. 15 Reproduced with permission.)

9.4.3 Area of Study 3

In the revised 2024-2028, VCE OES study design, three new Areas of Study (AoS) have been introduced. These are:

- Unit 1 – Area of Study 3 – Safe and sustainable participation in outdoor experiences
- Unit 2 – Area of Study 3 – Independent participation in outdoor environments
- Unit 4 – Area of Study 3 – Investigating outdoor environments

(Victorian Curriculum and Assessment Authority, 2023 Reproduced with permission.)

Structurally, the above represents an increase from eight to eleven areas of study and resulting outcomes to report on when compared to the previous study design. However, these outcomes do not introduce further content; they are a reorganisation and grading structure to support teaching outdoor experiences within the VCE OES curriculum.

Outdoor experiences are fundamental to the teaching of VCE OES (see chapter 11). Outdoor experiences as part of a course of VCE OES should relate to a broad range of key knowledge and skills likely across at least an entire AoS or unit. In addition, the new AoS 3 outcome provides information about the types of learning experiences and practical skills that should

be included in outdoor experiences. Thus, AoS 3 should not be taught in addition to the other AoS' within a given unit but through an integrated approach to outdoor experience and other curricula from AoS 1 and 2. The structure and function of AoS 3 differ at units 1 and 2 and units 3 and 4. We unpack this below.

Units 1 and 2 each have their own AoS 3. The KK and KS contained in each are inherently practical. These outcomes should be taught alongside the other outcomes within their respective units. In units 1 and 2, AoS 3 details the practical knowledge and skills that should be embedded within the VCE OES course. The majority of both outcomes should be taught and assessed as part of your chosen outdoor experiences, complimented by relevant activities that necessitate being done in class, for example, route planning for a walk before departure. In units 1 and 2, AoS 3 is assessed through a student-completed logbook that records the experiences undertaken and gathers evidence of learning. The structure and form of the logbook can vary based on the outdoor experience undertaken and the KK/KS being taught and assessed (see 11.4 and 12.6).

Unit 1 and 2, AoS 3 KK/KS are written to be taught as a scaffolded sequence of practical skills. In Unit 1, AoS 3, the focus is on the student's own personal preparation and participation in outdoor experiences. This includes selecting and using personal and group equipment and minimal impact strategies to ensure that their participation in outdoor experiences is safe and sustainable. In Unit 2, AoS 3, the focus shifts from the students' own participation to beginning to lead others. As part of this, students consider the role of external factors (weather, environment, etc.) on their own and others' participation in outdoor experiences. To demonstrate this outcome, students are required to lead peers as part of outdoor experiences. We provide a case study of peer leading in chapter 11 (see 11.3).

Unit 4, AoS 3 differs in structure and its KK/KS from the AoS 3s included in units 1 and 2. This outcome will be taught and assessed across units 3 and 4 using a selection of KK and KS drawn from units 3 and 4 (see an example in 12.6). Your role as the teacher is to decide which KK/KS from other outcomes you will teach and report on in unit 4, AoS 3. The KK/KS in this AoS 3 differs from its unit 1 and 2 equivalents. In unit 4 AoS 3, the focus shifts from practical skills and knowledge to the use of the outdoors as study sites for the teacher-chosen KK/KS.

9.4.4 Cross-study specifications

The revised 2024 study design introduced cross-study specifications that underpin all units and outcomes within the VCE OES. The specifications are broken down into three categories.

1. Key concepts
2. Outdoor experiences
3. Key practical skills

(Victorian Curriculum and Assessment Authority, 2023, pp. 10-12)

Four new key concepts have been introduced within the VCE OES study design, they are: Indigenous Australians' knowledge, culture and history; outdoor environments; environmental

citizenship; and sustainability. The study design explains each of these concepts. In addition to the information in the study design, the following points provide advice regarding implementing these key concepts. We discuss outdoor experiences and key practical skills in chapter 11.

Indigenous Australians' Knowledge, Culture and History

You should embed Indigenous peoples' perspectives within various parts of your course. To do so, it is important to follow cultural protocols when working with Indigenous people. An example protocol is as follows:

Cultural Interface Protocols for Engaging with Aboriginal Knowledge

1. Use Aboriginal processes to engage with Aboriginal knowledge.
2. Approach Aboriginal knowledge in gradual stages, not all at once.
3. Be grounded in your own cultural identity (not "colour") with integrity.
4. Bring your highest self to the knowledge and settle your fears and issues.
5. Share your own stories of relatedness and deepest knowledge.
6. See the shape of the knowledge and express it with images and objects.
7. Build your knowledge around real relationships with Aboriginal people.
8. Use this knowledge for the benefit of the Aboriginal community.
9. Bring your familiar understandings, but be willing to grow beyond these.
10. Respect the aspects of spirit and place that the knowledge is grounded in.

(8 Ways, n.d.)

In addition to operating within a cultural framework, consider how you can teach Indigenous peoples' perspectives and use Indigenous peoples' ways of communicating and knowing. The 8 Ways of Learning framework (below) provides a useful tool to achieve this. Further information can be found at www.8ways.online

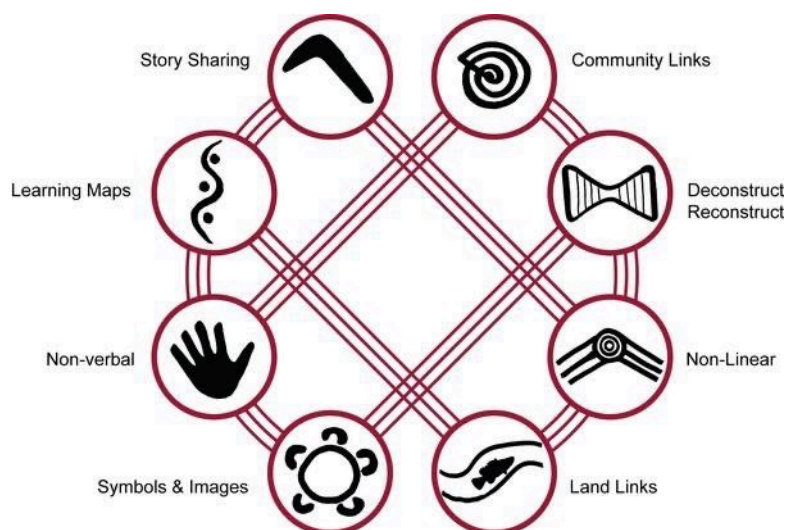


Image 9.1 – 8 Ways (8 Ways, (n.d.) <https://www.8ways.online/about>. is licenced under CC0)

Outdoor environments

Within your VCE OES course, you should plan to visit and teach about a range of outdoor environments. “A wide variety of outdoor environments could be studied, ranging from those that have experienced minimal human influence, through to those that have undergone significant human intervention” (Victorian Curriculum and Assessment Authority, 2023, p. 10). Accordingly, it is recommended that you plan your course around various outdoor environments. The VCE OES course should be delivered through diverse outdoor environments, including those local to your school. Local experiences often come at little cost yet enhance the theoretical teaching of your OES program.

Environmental citizenship

The VCE OES course has been written to encourage active environmental citizenship from students who complete/are undertaking the course. As part of this, consider how you can model positive environmental behaviours during your course. As Verlie et al. (2021) discuss, positive environmental actions are a way in which educators can empower students to learn about the environmental crises that we face. Some ways in which you could participate in positive environmental action through your VCE OES course include:

- Emphasising minimal impact strategies when conducting outdoor experiences.
- Participating in activities such as citizen science, rubbish clean-ups, weed removal or tree planting days.
- Have students write letters calling for environmental change by the school, government or local industries.

In addition to providing opportunities for your students to participate in positive environmental actions, you should also be aware of how your students engage in the content around issues such as climate change. Students showing signs of distress and anxiety surrounding these topics may need to be referred through your school process for additional support.

Sustainability

Sustainability is explicitly addressed in the KK/KS and is an underpinning concept in VCE OES. Like many constructs in the course, it is a complex and interwoven idea through which students can examine and make judgments about various relationships and interactions humans have with outdoor environments. The three pillars model (see image 9.2), sometimes called the triple bottom line model of sustainability, can help you to examine different actions and consider their sustainability. A good way of doing this is discussed in the case study below,

where students are asked to use the three pillars model to examine the technology they have used on a recent outdoor experience.



Image 9.2 – Pillars of Sustainability (Victorian Curriculum and Assessment Authority, n.d.-a)

Case Study 9.1 – Sustainability as a Thinking Tool

KK: 1.2.3 relevant technologies and their influences on outdoor experiences

KS: explain the influence of relevant technologies on experiencing outdoor environments

Outdoor environment: Surf Coast

A unit 1 VCE OES class has recently completed a four-day outdoor experience along the surf coast. The experience included surfing, stand-up paddle boarding, bird watching, sunset photography, visiting a local historical society and a bush walk. Back in class, the teacher has the students brainstorm different technologies they used on their trip. They came up with the following list:

- Trangia stoves
- Gore-tex rain jackets
- Foam surfboards
- Wet suits
- Stand-up paddle boards and paddles
- Lifejackets

- Maps and compasses
- Mobile phones
- Nylon tents and tarps

The teacher assigns pairs of students one piece of technology to think about. The students are then given a sheet and asked to think about the sustainability of their piece of technology from social, economic, and environmental perspectives. They do so by annotating the following diagram.

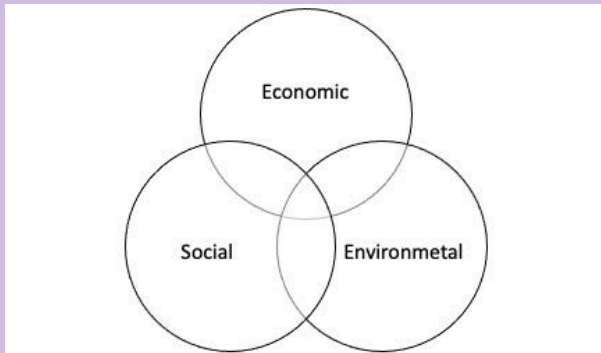


Image 9.3 – Venn diagram of three pillars sustainability model

9.5 Other Underpinning Concepts in VCE OES

Relationships with outdoor environments is a further underpinning concept in the VCE OES curriculum. This concept is the basis for unit 3, but is also helpful in other parts of the course. In unit three, students consider both historical and contemporary (defined as relationships occurring in the past decade) relationships with the outdoor environments they study. The VCAA provides the following information in the support material regarding relationships. This model is often referred to by teachers and students using the abbreviation P.I.I. (Perceptions, Interactions and Impacts).

Human-nature relationships are very complex. There are many types of relationships including social, cultural, spiritual and physical. The following diagram represents one way of studying relationships within Australian outdoor environments. Perceptions of, interactions with, and impacts on outdoor environments are part of an interconnected understanding of these relationships.

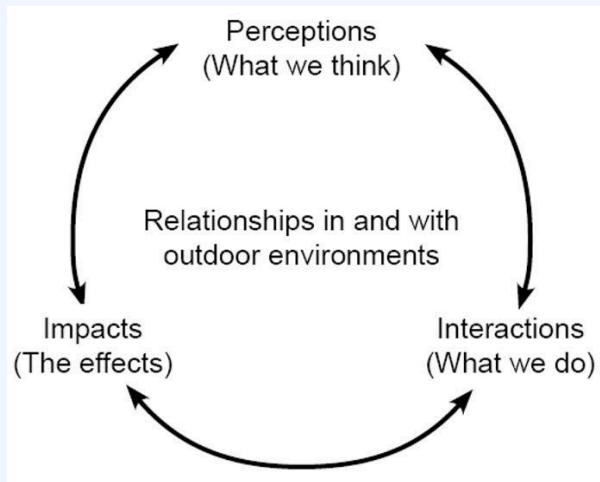


Image 9.4 – PII Model of Relationships (Victorian Curriculum and Assessment Authority. n.d.-a Reproduced with permission)

Students are encouraged to go beyond this simplified diagrammatic approach in their understanding of, and writing about, these relationships. One useful way of doing that is to consider the use of metaphors as useful descriptors of and analogues for these relationships. Some examples that can be helpful include:

- the outdoors as a mother
- the outdoors as an adversary
- the outdoors as a museum
- the outdoors as a gym
- the outdoors as a cathedral.

(Victorian Curriculum and Assessment Authority, n.d. Reproduced with permission.)

Case Study 9.2 – Teaching Relationships

KK: 3.2.2 conservation, recreation and economic relationships with outdoor environments

KS: compare different human relationships with outdoor environments, including Indigenous and non-Indigenous peoples' relationships

Outdoor environment: Canadian Corridor (Ballarat)

A VCE OES group is using the Canadian Corridor (the area around Canadian Creek on the east side of Ballarat) to study relationships with outdoor environments in the last decade. As part of this, the group goes on a bike ride that stops at key locations to study the relationships in the area. The teacher has the students record the relationships they observed in the following table (note, this table could be used as a logbook entry, see 12.6).

Location	Group	Perception	Interaction	Impact
Fed Uni Tree Planting Site	Fed Uni Staff and Students	<i>The environment as...a site for restoration, a place that needs protection to ensure a sustainable future.</i>	<i>Fed Uni staff and students have planted indigenous tube stock to rehabilitate the hill and water course at the top of the university.</i>	<i>Appropriate plants are being planted in a water course, which will help limit erosion during heavy rain as deeper roots of trees and shrubs can stabilise the dirt better than introduced grass.</i>
Mount Clear Loop	Club Mud Mountain Bikers	<i>The environment as...a gymnasium, a place to test and build your skills.</i>	<i>MTB riders come to the Mount Clear loop to ride the blue and green runs. These runs also play host to 'dirt crits'.</i>	<i>The impact of mountain biking is minimised as Parks Victoria has installed a wash station at the trailhead. MTBers wash their tyres to avoid spreading cinnamon fungus through the park.</i>
Ballarat Gold Mine	Miners	<i>The environment as...a resource, a commodity that can be bought and sold.</i>	<i>The Ballarat Gold Mine (company) run a deep mine through which they blast twice a day and bring rock to the surface that gets crushed and 'assayed' in search of gold.</i>	<i>The gold extraction process is very dependent on water and the use of chemicals. These are then discharged to be stored in a tailings dam with strict environmental controls to make sure it does not make it into the local catchments.</i>

This chapter has introduced some key ideas within the VCE OES study design. It has broken down some of the structure and function of the study. As stated in the introduction to the chapter, you must read this in conjunction with reading the latest available version of the study design from the VCAA. If you have not already done so, you should download it and read through the study's aims and rationale before completing the reflection questions below.

Reflection Questions

- When did VCE OES become part of the VCE? Which two previous studies amalgamated to make this course?
- How is VCE OES structured?
- What is the role of the cross-study specifications and area of study 3?
- Why might students want to undertake the VCE OES course?
- How might you teach the cross-study specifications and other underlying concepts, such as relationships within the VCE OES curriculum?

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CHAPTER 10: PLANNING FOR LEARNING IN VCE OES

Learning Objectives

- Describe the types of lessons and units of work that suit the VCE OES curriculum
- Describe strategies to develop student knowledge of key skills and literacy in the VCE OES classroom
- Analyse what effective VCE OES lessons look like
- Evaluate student-centred activities for the VCE OES curriculum
- Recommended resource types to support teaching and learning within the VCE OES curriculum

10.1 Introduction

In this chapter, we explore key ideas around planning to teach the VCE OES curriculum. Through doing so, we unpack how to structure VCE OES classes when delivering content, and preparing students for school-based and externally set assessment tasks. This chapter focuses on VCE OES teaching within the classroom. Many ideas presented here can also be used during outdoor experiences. This chapter starts by considering different strategies that will support your VCE OES teaching, focusing on teaching individual lessons. We do this by unpacking a series of examples. Following this, we explore strategies to assist in planning an entire outcome (or AoS). Due to the specific nature of planning for the various AoS 3 curricula, we address it in the following two chapters.

10.2 Structure of VCE OES lessons

Planning effective lessons is a skill and an art you develop over many years of teaching. Many books, policy documents, and articles are dedicated to planning effective lessons. Like many other texts, we do not claim that the advice in this and the following sections present a notion of 'ideal' lesson planning. That probably doesn't exist! Rather, we offer this and the next three

sections to provide ideas to help you think about how you will go about planning for your VCE OES classes to maximise your instructional time.

To begin with, we believe that the following checklist can help you in developing lessons. A high-quality VCE OES lesson will typically adhere to the following principles.

1. Have a clear focus for the lesson that is communicated to the students at the beginning and reiterated throughout.
2. Have a distinct beginning, middle and end.
3. Focus on students working with the knowledge they have learnt rather than large periods of time 'watching, note taking or listening'.
4. Emphasise and explicitly teach the relevant key skills from the study design.
5. Be responsive to the individual student's learning needs.

The below case study provides an example of a typical VCE OES lesson. The lesson below embodies some of the principles above. In this lesson, you will observe a focus on students working within the knowledge being taught—in this case, how the urban heat island effect (urbanised areas that may experience higher temperatures than nearby rural areas), is an example of the impact of urbanisation on outdoor environments. The sample lesson plan also focuses on students experiencing the curriculum (in this case, in the schoolyard) and then applying their knowledge throughout the lesson in line with the key skills of 'discuss and predict'.

Case Study 10.1 – A sample VCE OES Lesson

Lesson Title	The urban heat island effect (works best on a sunny day)	
KK	2.2.4 the impact of urbanisation on outdoor environments	
KS	discuss and predict impacts of urbanisation on outdoor environments	
Learning Intention	To discuss and predict the impact of the urbanisation including the urban heat island effect on outdoor environments	
Time and section	Teacher will...	Students will...
Introduction (15 minutes)	<p>1. Take students outside to an area and hand out infrared thermometers in pairs. Instruct students that they need to measure as many surfaces as possible in the school yard and record their results in their book.</p> <p>2. Discuss which materials had different readings. What patterns did the students observe between material types?</p>	<p>1. Use infrared thermometers to record the surface temperature of different materials. Possible surfaces include:</p> <ul style="list-style-type: none"> - Synthetic turf - Real turf - Asphalt - Bricks - Timber - Rubber - Under shrubs - Under tree canopies <p>2. Participate in class discussion.</p>

<p>Body (35 minutes)</p>	<p>Return to classroom.</p> <p>3. Recap – discussion using write, pair, share – from the previous lesson – What is urbanisation?</p> <p>4. Instruct students to find their house on the Google Timelapse site, have them:</p> <ul style="list-style-type: none"> – Pause at 1984 and observe their neighbourhood. – Play till 2000, then predict what will happen over time to today. – Watch and observe the rest of the time-lapse. <p>5. Instruct students to form pairs and complete the analysis of urbanisation activity. Reinforce that they should identify cause and effect for each observed impact. 'Because of x, y is happening'. Discuss as a class what groups have come up with.</p> <p>6. Play the clip about the urban heat island effect in Sydney. Discuss the impact of suburbs with high thermal mass, black roofs, and low areas of vegetation on the people who live there.</p>	<p>3. Participate in the write, pair, share activity.</p> <p>4. Visit https://earthengine.google.com/timelapse/ and complete the activity as instructed.</p> <p>5. In pairs, create a table of impacts of urbanisation based on their observations. For each observation, 'analyse' the observed impact showing cause and effect. Write down additional impacts and effects during discussion.</p> <p>6. Watch the clip about the urban heat island effect. Participate in class discussions.</p>
<p>Conclusion (10 minutes)</p>	<p>7. Instruct students to complete practice structured question about urban heat island effects. Collect question as a formative task.</p>	<p>7. Complete the following question.</p> <p>Increasingly dense growth suburbs that use high thermal mass materials and lack trees and other vegetation cause the urban heat island effect. This can result in temperatures reaching between 3-5°C hotter than neighbouring suburbs with higher levels of open space and canopy cover.</p> <p>a. Describe one impact of the urban heat island effect on an outdoor environment you have visited or studied (2 marks).</p> <p>b. Predict how the urban heat island effect may impact residents of the outdoor environment named in part a (4 marks).</p>

Activity 10.1 – Lesson Audit

The principles for effective lesson planning can be a useful reflection tool to audit lessons. Use the following table to audit both the lesson above and another VCE OES lesson you have planned or observed. As part of this, make recommendations for refining each lesson you audit.

Principle	Beginning to...	Achieving...	Mastering...	Recommended refinements
1. Clear focus.				
2. Beginning/Middle/End				
3. Students 'doing'				
4. Emphasis on skills				
5. Responsive to individual needs				

10.3 Using Case Studies within the VCE OES Classroom

The VCE OES curriculum is best approached as a framework of knowledge and skills that students will need to learn. One of the unique parts of this study design is that you, as the teacher, will contextualise your teaching of the course through the outdoor environments you will be visiting and teaching. In Chapter 11 we further unpack the selection of outdoor environments as part of building your VCE OES course.

When teaching about the different outdoor environments you have based your course around, it is best to teach the different KK/KS through case studies. Throughout teaching VCE OES, you will naturally start to build a resource bank of case studies relevant to the outdoor environments you choose to teach about. Case studies can come in many forms, these include:

- News articles
- Websites
- Videos
- Excerpts from academic articles
- Brochures and other materials collected during outdoor experiences
- Photos
- Podcasts

- Art
- Other written sources

In addition to the outdoor environments you have chosen to base your course around, you are also required, at times in specific outcomes, to also teach about named outdoor environments in the study design. For example, in 3.1.4, you must teach about the foundation of one of three environmental movements based on particular historical environmental campaigns: Lake Pedder; the Franklin River; or Little Desert National Park. Again, case studies collated from various sources are useful in teaching about these named environments across the study design.

When using case studies, it is important to do so in a structured and scaffolded manner. The below example provides an insight into teaching using case study material. This lesson is based on a timeline for the foundational environmental movement that surrounded the area now known as the Little Desert National Park. The VNPA (Victorian National Parks Association) has been reproduced here with permission. In addition to the timeline on the VNPA website, the VNPA has also published a podcast that delves deeper into the historical campaign that ultimately led to the establishment of the VNPA. The Little Desert podcast is available on the VNPA website along with major podcast players.

Case Study 10.2 – Little Desert National Park Historical Environmental Campaign Timeline

Little Desert Timeline

For tens of thousands of years, Aboriginal people hunted and gathered food in the Little Desert. The local Wotjobaluk people maintain a connection with the area even after their forebears were moved into the Antwerp mission near Dimboola in the 19th century.

July 1836: Assistant Surveyor Granville Stapylton, second in command of Major Mitchell's expedition through what is now western Victoria, crossed part of the Little Desert, reporting that the country was "dreadfully deep" (in sand and mud).

1840-1880s: The Little Desert became known as 'scrub country'. Settlers avoided it because of its infertile sandy soils and low rainfall, although there was some sheep and cattle grazing.

1870s to 1950s: Much of the natural vegetation of the Wimmera and Mallee districts was cleared for farming by selectors and soldier settlers (especially after World War I). The Little Desert, however, remained 'an island of biodiversity in a sea of agriculture'.

1946: Small conservation reserves were established near Dimboola.

1955: Kiata Lowan Sanctuary (218 hectares) was established to protect malleefowl (also called

lowans), which were in decline. The Sanctuary was incorporated into a 945 hectare Little Desert National Park in 1968.

1963: The AMP Society, a large insurance company, proposed to subdivide and clear the Little Desert for agricultural and pastoral development. However, declining wool and wheat prices, and government indecision, led to the scheme being abandoned in March 1967.

June 1967: Sir William McDonald, a local pastoralist and long-standing Victorian Member of Parliament, was appointed Minister of Lands by premier Henry Bolte.

Early 1968: McDonald announced the Little Desert Settlement Scheme, under which 48 wheat farms would be established. Agricultural experts, economists and conservationists opposed the scheme. Conservationists set up the Save our Bushlands Action Committee, representing eight conservation groups, including VNPA, and held two major public meetings in Melbourne in 1969, each attended by over 1000 people. Local Wimmera people also ran a campaign against the clearing scheme.

Mid 1969: McDonald scaled back the Little Desert Settlement Scheme to 12 sheep farms and also announced a larger national park to cover 35,300 hectares. But conservationists were not satisfied with this, believing that national parks must have 'ecological integrity'.

October 1969: Labor MP J.W. Galbally MLC set up a Select Committee to inquire into the Little Desert Settlement Scheme. Leading ecologists such as Malcolm Calder gave evidence about the natural values of the Little Desert. The Age newspaper ran articles suggesting that the scheme was proposed partly because a new road it included would benefit McDonald's brother-in-law.

December 1969: The Victorian Liberal government lost the Dandenong by-election, partly because of community opposition to the Little Desert scheme. The Legislative Council voted to block the scheme. Little Desert National Park was enlarged to 35,300 hectares and the clearing scheme was abandoned.

May 1970: In the Victorian election, the Liberals won with a slightly reduced vote, but McDonald lost his seat of Dundas after 15 years as member. During the election campaign Premier Bolte promised to create and extend national parks so that they covered five per cent of Victoria's area. He also promised to set up a new independent body, the Land Resources Council (later named the Land Conservation Council) which would encourage public involvement. The Council would study Victoria's public land and recommend how it should be used. It continues today as the Victorian Environmental Assessment Council (VEAC).

William Borthwick became Minister for Lands (later Minister for Conservation) in the new government.

1988: The western part of Little Desert was added to Little Desert National Park, roughly tripling it in size and making it the state's second largest national park at the time.

1991: An addition of seven hectares was donated to the park by a local family.

1997: 640 hectares was added to the park.

2005: Barengi Gadjin Land Council Aboriginal Corporation and the Victorian and Australian governments entered into the first Indigenous Land Use Agreement in Victoria. A cooperative agreement that includes Little Desert National Park ensures that the Traditional Owners will continue

to be able to care for country by being involved in the management of the areas where their native title rights have been recognised.

(Victorian National Parks Association, n.d. Reproduced with permission.)

Case Study 10.3 – Teaching with Case Studies Lesson Plan

Lesson Title	Little Desert Timeline	
KK	3.1.4 the beginnings of environmentalism and the resulting influence on political party policy, as observed in one of the following historical campaigns: – Lake Pedder – Franklin River – Little Desert	
KS	describe the beginnings of environmentalism as observed in a historical campaign	
Learning Intention	To describe the timeline of events at the historical Little Desert (LD) campaign To identify key events with the LD campaign timeline	
Time and section	Teacher will...	Students will...
Introduction (10 minutes)	1. Inform students that there is a proposal from a mining company to reclassify the area you have recently visited on a trip from a protected park to allow a mining company to explore the area for future mineral extraction. Have students break down their relationship with the area before and after the reclassification using PII. 2. Discuss student responses. Inform students that this example is hypothetical, but it wasn't that long ago that many areas were facing such changes. One such area is the Little Desert National Park.	1. In a pair, brainstorm PII for the area recently visited before and after the reclassification of use. 2. Participate in the discussion.
Body (30 minutes)	3. Instruct students that they are going to spend 10 minutes exploring the Little Desert National Park Area on Google Earth. 4. Discuss – What type of outdoor environment is it? What makes it unique? What areas surround the park? What is the park used for today? 5. Explain that there have been a number of changes to the LD and surrounding area over the last few hundred years. Tell students that they are going to identify key features of the timeline.	3. Explore the area, ensuring the photos are visible on Google Earth. Note down any interesting facts and figures about the park. 4. Participate in discussion, adding to notes about the park. 5. Identify the key features of the timeline by annotating it, and looking for key features to describe the campaign to save it from development. Ask students to highlight the timeline and annotate key examples they could use in a SAC.
Conclusion (20 minutes)	6. Set practice structured questions. Give students time to answer it. Work through an example response as a class. Then have students peer assess their attempts. Record peer marks. 7. Set homework, listen to Ep. 1 from the VNPA Little Desert Podcast taking notes of further key dates, people and events on their timeline from class.	6. Answer the question: Describe a historical environmental campaign using examples from an outdoor environment you have visited or studied (3 marks). Peer mark work. 7. Record homework in the calendar.

Activity 10.2 – Finding Case Studies

Choose a KK/KS you are planning to teach soon or are interested in. To support your teaching of this KK/KS, find three examples of case study material you could use to support the teaching of this. For each example found, answer the following questions.

1. How would you use this in your class?
2. What is good about the case study?
3. How could you use this to support teaching your chosen key skill?

10.4 Scaffolding Student-directed Research in the VCE OES Classroom

Significant research has called for an emphasis on student agency within the modern classroom. These calls are long-standing and were pioneered by influential educational theorists such as Dewey and Vygotsky (Vaughn, 2020). However, within the fast-paced and highly prescribed structure of the VCE, deploying pedagogies that encourage agentic approaches in the classroom are sometimes overlooked. An agentic learning approach develops higher-order cognitive and socio-emotional skills. It develops a strong sense of self-efficacy and resilience. It develops risk-taking, problem-solving, and critical thinking, to name a few.

Vaughn breaks down student agency in the classroom using a three-dimensional model.

- (a) dispositional dimensions of individuals who act and transform environments;
- (b) motivational dimensions of individuals who regulate their actions, exist within contexts, and make choices and decisions; and
- (c) positionality of individuals in that individuals negotiate and interact within complex social contexts (p. 110).

Although elements of all three dimensions of agency can be embedded within the VCE OES classroom, the ability of students to self-regulate and participate in complex situations, or their positionality, is the easiest to focus on. One mechanism for teaching with student agency in mind is through structured research tasks. Providing opportunities for students to engage in structured research can be an effective mechanism to develop students' knowledge of the

required KK/KS and allow students to engage in learning that encourages them to develop their positional agency skills, their abilities to self-regulate and participate in complex situations.

In outcome 4.3, students are required to learn and demonstrate skills in gathering both primary and secondary data. The data collected will relate to at least two outdoor environments visited and form the basis of a written report that assesses 4.3. We unpack further the selection of KK/KS for 3.4 in chapter 12. The following table demonstrates ways to scaffold your students to collect secondary data within your VCE OES course. Depending on the purpose of your research task, one or more of these strategies may be useful.

10.1 Table of Strategies to Support Student Research in the VCE OES Classroom

Strategy	Details
Identifying Quality Sources	<p>The CRAAP test provides a checklist to help students identify if the source they have found is accurate.</p> <p>Currency Is it up-to-date? Does it need to be? When was it published, or last updated (web page)?</p> <p>Relevancy Is the information useful and does it support your work? Does it cover your topic in enough depth and scope? e.g. Geography i.e. Australian? International? Does it meet your needs? – i.e. is it peer-reviewed if you are required to use a peer-reviewed journal?</p> <p>Authority Who is the author? Are they known in their field? Are they associated with reputable organisations? e.g. a university or official body For a web page: Is the author noted or is the organisation well known? e.g. government agency? do the links work? Does the site look well maintained? Is there advertising alongside the information?</p> <p>Accuracy Is it supported by reliable facts or statistics? References? Look at the URL for web pages. Is the site commercial (.com), government (.gov) or educational (.edu)?</p> <p>Purpose Why was it written? Is it to inform, teach, sell entertain or persuade? Is the work fact, opinion or propaganda? Does it contain extreme viewpoints? Is it biased? Does it contain emotive or derogatory language? Is there disclosure of author affiliations or funding for the research or study? Is there advertising alongside the information? (Adapted from Meriam Library (n.d.) Evaluating Information – Applying the CRAAP test. https://library.csuchico.edu/sites/default/files/craap-test.pdf. CC-BY 4.0)</p>
Development of Research Questions	<p>When students are researching a particular KK/KS, it can be useful first to have them develop a series of research questions to answer. After forming questions, students can then develop key search terms, and identify databases and the like to help with their search. For example, if a student was assigned a research task for 2.1.3, they could choose two of the listed professions, then write a career profile of someone who does that job. If a student chose to focus on natural resource management (NRM), the questions they might develop with your guidance could be:</p> <ul style="list-style-type: none"> – What organisations do people who work in NRM work for? – What qualifications are needed? – Where can you study the required qualification? – What does an NRM job look like day to day? – What is the pay like?
Databases	<p>Databases can help students to quickly locate relevant information that the owner of the database for accuracy has vetted. Some useful databases for VCE OES are:</p> <p>Trove https://trove.nla.gov.au/ is a database run by the National Library of Australia. It allows you to search the National Library and a range of institutional libraries for both physical and online collections.</p> <p>Victorian Collections https://victoriancollections.net.au/ allows you to search various collections from institutions based in Victoria. Most helpful for 3.1.</p> <p>Collection Explorer https://collectionsearch.nma.gov.au/ lets you search the National Museum of Australia's online collection.</p>

Providing sources/ templates	<p>When assigning a research task, assigning students a particular website or list of websites to use can be helpful. When teaching 2.1.1, have students identify biotic and abiotic components of the biome to be visited they might encounter on an upcoming outdoor experience. You could support this by providing them with relevant websites and also a template to use. In this example, relevant websites might include:</p> <p>Atlas of Living Australia https://www.ala.org.au/ MapShare Vic https://mapshare.vic.gov.au/mapsharevic/ GeoVic https://gsv.vic.gov.au/sd_weave/anonymous.html</p>
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Finally, it is important to ensure that when assigning research-based tasks to your students, you do so appropriately and in line with the VIT (Victorian Institute of Teaching) Code of Conduct, AITSL (Australian Institute for Teaching and School Leadership) standards, and school policies. For this reason, it may be better to avoid research tasks regarding certain parts of the course. As an example, the parts of the course relating to risk and risk-taking may not be appropriate as students may quickly come across news sources discussing fatalities that have not been vetted by you for appropriateness.

Activity 10.3 – Thinking About Student Research in VCE OES

As discussed above, scaffolded student research can be a useful pedagogical tool. In part, this is because it not only helps teach the relevant KK/KS being taught, but also, because learning to find and work with online sources is a transferable skill that all people will use after school.

- Choose an outcome within the VCE OES curriculum
- For each of the chosen KK/KS, consider if you could use scaffolded student research to help teach this.
- For each of your chosen KK/KS, identify which strategies might help with your teaching.

10.5 Teaching Literacy through the Key Skills

The explicit teaching of key skills is vital when teaching VCE OES. Like other subjects in the VCE, the key skills drive the assessment practices at school and through the externally set examination. Central to teaching the VCE OES course is that you do so at an appropriate cognitive level (see 1.4 & 9.4.2). As part of this, developing your students' subject-specific literacy using the task words (see 12.3), and other VCE OES-relevant terminology should be a regular part of your VCE OES pedagogy. The below lesson demonstrates the explicit teaching

of literacy and key skills within the VCE. This lesson would be toward the end of teaching 2.2.4 as it builds on student understanding of the KK taught in prior lessons. The next two chapters discuss assessing key skills based on their associated task words.

Case Study 10.4 – Teaching of Key Skills and VCE OES Literacy

Lesson Title	Comparative Language and Personal Responses to Risk	
KK	2.2.4 the variety of personal responses to risk when experiencing outdoor environments, including the interplay between competence, perceived risk and real risk	
KS	compare a range of personal responses to risk when experiencing outdoor environments	
Learning Intention	To use comparative language to describe different personal responses to risk	
Time and section	Teacher will...	Students will...
Introduction (20 minutes)	<p>1. Hang 5-7 photos of people participating in different outdoor activities around the room. Run a 1min round robin, where students are required to go and write how they think they would feel if they were in each photo.</p> <p>2. Discuss the different responses to fear depicted in the photos? How might the interplay between real and perceived risk influence these responses?</p>	<p>1. Write a personal response to each of the photos in the room. Example – Photo of free climbing big rock ‘rush and fear’.</p> <p>2. Participate in the discussion.</p>
Body (30 minutes)	<p>3. Introduce that today we are going to focus on the key skill of comparison. Brainstorm, what would a comparison question be asking you to do?</p> <p>4. Next we will begin by looking at a poor example (Example 1 – below) of comparative language. Can you identify why this is not an example of a high-scoring response?</p> <p>5. Ask students to create a marking scheme for this response in pairs. Show them the actual marking scheme.</p> <p>6. Workshop a better response using the same two examples with comparative language (Example 2).</p>	<p>3. Participate in the discussion.</p> <p>4. Discuss why this is not a high-scoring response.</p> <p>5. Work in pair to create a marking scheme. Compare your own scheme to the example.</p> <p>6. Participate in discussion and offer suggestions.</p>
Conclusion (10 minutes)	7. Exit pass: Instruct students that they are to write a list of strategies to help with writing comparative responses in their books.	7. Write a list of strategies for writing comparative tasks.

Worked Examples	<p>Question: Compare two different personal responses to risk that a person or group may experience when participating in two different outdoor activities (4 marks)</p> <p>Marking Scheme. 2x 1 mark is awarded for describing two different activities and two different responses to risk. 2 marks for the use of comparative language.</p> <p>Example 1. A person going rock climbing on a single pitch might feel anxious if they are not an experienced climber despite it being safe. In comparison, an experienced climber free climbing big rock might feel in control as they trust their abilities.</p> <p>Example 2. A beginner climbing a single-pitch roped is likely to feel anxious because they perceive the risk to be greater than it is. In comparison, a person climbing a big rock without a rope may have a feeling of cognitive reward, as, unlike the person on a single pitch, they have spent years developing their skill. However, the person on a big rock (without a rope) is likely taking on a larger risk, vs. the person on a single pitch, as if one hold fails, they could fall to their death.</p>	
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10.6 Developing a Unit Planner

Unit planners are an invaluable tool when designing your VCE OES curriculum. If you are a pre-service teacher, your course to date may have focused more on developing lesson plans. Although an important step, and yes, still mandated in some schools, lesson plans are often replaced by unit planners once you have graduated and are working in schools. Appendix 3.1 contains a sample unit planner to help you gauge the level of planning that experienced VCE OES teachers would work from.

To support you in developing your own VCE OES unit planners, we offer the following principles that we have used to develop effective unit planning. Some of these principles are universal to unit planning, whilst others are more specific to planning for VCE OES.

1. **Sequence learning.** A good unit planner will attend to what is being taught and the order of things being taught. As part of this, when developing a unit planner, please pay

attention to what key skills you are embedding and ensure they are presented logically.

2. **Use a variety of approaches.** Unit planners should include a variety of approaches to learning within the classroom. This will help to maintain student engagement. Even the most engaging activity can become disengaging when repeated too often.
3. **Provide sufficient detail.** Within your planner, consider what another experienced VCE OES teacher would need to teach your planner and try to include that. Likely, many pedagogical details you would include in lesson planning as a pre-service teacher are no longer needed. Instead, include a learning intention for the lesson (or series of lessons), an introductory activity, a body activity and a conclusion or reflection activity.
4. **Map formative and summative assessment tasks.** Your unit planner should include a variety of formative and summative assessment tasks. As a rough guide, VCE OES teachers typically aim for one formative task that is collected and marked each week.
5. **Base each outcome on a case study outdoor environment.** Your planner should be specific to the environment you are studying. This includes details of what is taught during outdoor experiences and other information about your focus outdoor environments.

Reflection Questions

- What would you include in an VCE OES lesson plan?
- Identify three strategies you could use to support the teaching of key skills and literacy in the VCE OES classroom.
- What does an effective VCE OES unit planner would look like? What key parts would you include in writing one?
- Why would you include a student-centred approach to teaching VCE OES?

References

- Vaughn, M. (2020). What is student agency and why is it needed now more than ever? *Theory Into Practice*, 59(2), 109-118. <https://doi.org/10.1080/00405841.2019.1702393>
- Victorian National Parks Association. (n.d.). *Lessons from the Little Desert*. <https://vnpa.org.au/lessons-little-desert/>

CHAPTER 11: OUTDOOR EXPERIENCES IN VCE OES

Learning Objectives

- Describe the role of outdoor experiences in VCE OES
- Identify suitable outdoor environments and describe the type of learning experiences suitable for the VCE OES curriculum
- Evaluate methods for assessing outdoor experiences, including the development and use of the logbook in VCE OES
- Create arguments to support the inclusion of outdoor experiences in schools and identify support available to help advocate for outdoor experiences

11.1 The Role of Outdoor Experiences in VCE OES

Outdoor experiences are central to the VCE OES course. Through direct experiences in various outdoor environments, students can experience the theoretical constructs or key knowledge they are studying through the VCE OES course. Outdoor experiences also play a key role in allowing students to gather primary data about their own experiences as part of a student-led investigation central to units 3 and 4 (10.4). These outdoor experiences allow students to develop their personal confidence and competence to engage in outdoor participation alongside the course and after completion.

As stated in the study design:

Outdoor experiences allow the development of understandings of outdoor environments from various perspectives. This includes geological and human history over the last 60,000 years, changes to human interactions with the outdoor environment, protocols and management of outdoor environments and strategies to care for, and goals for sustainable use of, outdoor environments.

Outdoor experiences provide opportunities for students to develop the observational knowledge and

theoretical application required to satisfactorily complete each outcome and collect primary data needed for School-assessed Coursework tasks.

(Victorian Curriculum and Assessment Authority, 2023, pp. 11-12. Reproduced with permission.)

Outdoor experiences in the VCE OES curriculum require the teaching of KK/KS from a particular part of the course through a carefully selected trip and outdoor environment. To do this, it is important to think about outdoor experiences in VCE OES and how they align with broader ideas around outdoor education. Two longstanding and often-cited definitions of outdoor education may help here. Being that outdoor education is about learning “in, about and for the outdoors” (Donaldson & Donaldson, 1958), and that through outdoor education, we learn about “relationships between self, others and the environment” (Priest, 1986, p. 13). Both of these definitions have relevance today and help many educators frame their outdoor teaching, particularly the students’ experience of your outdoor curriculum.

To design effective outdoor experiences within your VCE OES curriculum, moving beyond thinking purely about the students’ experience and considering the relationship between knowledge (what is being learnt) and process (how it is taught) is helpful. Quay (2016) offers that “(c)ontent is nothing without process, the process is nothing without content — both require each other.” (p. 48). When designing outdoor experiences for your course, you should consider not just what is being taught but also the process through which it is being taught. Although many VCE OES trips are rich and multilayered experiences that connect to multiple KK/KS from the outcome studied, the focus should not be solely on what is being taught (in particular examinable knowledge), but also how.

The combination of focusing on both process and knowledge can be done in many ways. By way of illustration, the below provides an example of combining the two. As shown in case study 11.1, many outdoor experiences can still focus on process and knowledge, even in local outdoor environments.

Case Study 11.1 – Teaching Technology

KK: 1.1.3 relevant technologies and their influences on outdoor experiences

KS: explain the influence of relevant technologies on experiencing outdoor environments

Outdoor Environment: Local Park/School Yard.

Activity: Students are to work in small groups to set up a shelter as a practice for their upcoming hike. They carry all equipment (shown below) to the park/school grounds and rotate through the different equipment options. After students experience putting up and taking down a shelter at each station, discuss the technology used and how it impacted their ability to participate in the activity.

Station 1	Station 2	Station 3
Canvas Tarp Natural Fibre Rope Large (Iron/Heavy)/Wooden Tent Pegs Timber Poles	Plastic Sheet (no eyelets) Nylon 3-strand Rope Steel Poles Tent Pegs Heavy Steel Tent Pegs	Modern Hiking Tarp with in-built Guy Lines and Plastic Tensioners 6mm Kernmantle Rope Aluminium Trekking Poles Light Weight Aluminium Stakes

Outdoor Experience Hours

In the revised VCE OES curriculum, the VCAA has introduced a recommended minimum number of hours that students spend on outdoor experiences in each of the four units of the VCE OES curriculum. This inclusion demonstrates the importance of outdoor experiences within the VCE. The study design suggests that students should spend between 25-50 hours learning through outdoor experiences per unit. A possible calculation of outdoor experiences is shown below for outcome 1.1. Note: This plan uses the maximum recommended 50 hours and is scalable depending on budget, location, etc. The activities below marked with a * would be completed in class time.

Table 11.1 – Hours of Outdoor Experiences for Unit 1

Activity	Target KK	Hours
Bike Ride Main Yarra Trail	1.1.1	4
Water Safety Session – Local Pool*	1.1.3	1
SUP Experience – St Kilda	1.1.1-3	2
Overnight Southern Peninsula Trip – Walk, Surf, Camp	1.1.1-3	16
Ways of Knowing Day Trip to Mornington Peninsula	1.1.4	4
Depictions – Local Park with Local Artist*	1.2.1	1
Technology Activity – Local Park*	1.2.3	1
Intercultural Experience – Local Park*	1.2.2	1
3-Day Hike/Climb – Gariwerd/Grampians	1.2.1-4	24

Student Safety

Student safety is vital during all outdoor experiences. As a teacher of VCE OES, you have legal obligations to ensure that you have adequately managed the risks for your chosen outdoor experiences and gained informed consent before activities are undertaken. The relevant safety guidelines in Victoria are:

- The Department of Education Excursion and Adventure Activity Guidelines
- The Australian Adventure Activity Standards

In addition, you must follow all relevant legislation (road safety, workplace health and safety, etc.) along with other school policies when planning outdoor experiences.

Outdoor Experience Outcomes

When planning outdoor experiences in your VCE OES curriculum, you should do so with all outcomes in mind. As discussed in Chapter 10, AoS 3 is the mechanism within the study design that articulates the types of outdoor experiences that might be relevant to your curriculum. In units 1 and 2, the AoS 3 KK/KS are inherently practical. As shown in the case studies and examples below, you should plan for these KK/KS along with the other KK/KS from the other outcomes within the unit taught. Unit 4, AoS 3 differs here in that it is a vessel for students to be assessed on their investigation of at least two outdoor environments visited. Although you will need to have this forefront of mind when planning your unit 3 and 4 outdoor experiences, Unit 4, AoS 3, is fundamentally a mechanism of assessing students' knowledge of outdoor experiences. Accordingly, we address this in the following chapter (12).

11.2 Selecting Outdoor Environments

Within your VCE OES course, students should have an opportunity to experience various outdoor environments suited to their studies. The term outdoor environment is used within the course, as it refers to “a wide variety of outdoor environments ... ranging from those that have experienced minimal human influence, through to those that have undergone significant human intervention” (Victorian Curriculum and Assessment Authority, 2023, p. 10). Thus, anywhere from your local park or school grounds to more remote places in Victoria, such as the Alpine area, can be included. The term outdoor environment is used in the study design as it encapsulates a diversity of environments. It also avoids using the term ‘nature’ as a problematic term (Quay & Jensen, 2018).

Outdoor environments form the basis of your VCE OES course. Most of the KK/KS is delivered through outdoor experiences and coursework that revolve around examples from the environment visited and studied. This helps students contextualise their learning about the relevant KK/KS whilst providing them with tangible examples to use within their assessment tasks (both school-assessed and external). Each outcome studied needs to relate fully to one outdoor environment within your program. You may also choose to relate all of a particular unit to one outdoor environment. In particular, towards the end of year 12, having students undertake outdoor experiences can be increasingly difficult to manage while managing competing school priorities. Accordingly, in unit 4, teaching both outcomes using one outdoor environment or by utilising local experiences, can be wise.

The following checklist is designed to assist you in thinking about and assessing outdoor environments suitable to teach the various outcomes.

1. Location: Is it accessible? How far away is it?
2. Transport: How can you get there? Are there any public transport options?
3. Cost: Are there any costs associated with visiting?
4. Activities: What activities are permitted? Do they suit the outcome being taught?
5. Suitable Case Studies: What can be taught in line with the chosen KK/KS?
6. Resources: What resources are available to help teach the KK/KS?
7. Locals: Can you build a relationship with any local educators or contacts?
8. Camping (if overnight): What camping or other accommodation is available?
9. Safety: Does the environment comply with your relevant policies and procedures?

Activity 11.1 – Choosing an Outdoor Environment for an Outcome

- Choose an outcome from the VCE OES curriculum that you will teach soon or are interested in teaching.
- Identify two possible outdoor environments that you could use to teach this environment.
- Complete the questions from the checklist above for both outdoor environments.
- After completing the checklist, compare the suitability of each environment and recommend which you would use to teach your chosen outcome.

11.3 Types of Outdoor Experiences

Within your VCE OES program, you should embed a range of different types of outdoor experiences. The VCAA defines outdoor experiences in the passage below from the 'scope of study' section within the study design. This section unpacks examples of different outdoor experiences to help you think about the experiences you might include in your VCE OES curriculum. When reading the examples below, you should remember that, as shown above (Table 11.1), your VCE OES program will likely end up encompassing a range of different types of outdoor experiences across a unit or the year.

Outdoor experiences suited to this study are a range of guided activities in areas such as farms,

mining/logging sites, interpretation centres, coastal areas, rivers, mountains, bushlands, forests, urban parks, cultural and historical sites, and state or national parks. Activities undertaken could include bushwalking, cross-country skiing, canoe touring, cycle touring, conservation and restoration activities, marine exploration, and participation in community projects. Outdoor experiences that use weapons or motorised devices to replace human effort are not suitable for this study. The duration of activities undertaken should include a range of multi-day/journey-based activities, half/whole-day activities and class-time activities on school campus grounds, or in the nearby local environment. (Victorian Curriculum and Assessment Authority, 2023, p. 4. Reproduced with permission.)

Multi-day – Journey-Based

Journey-based outdoor experiences involve students travelling through an outdoor environment with their own effort. This can be done using a variety of activities, including bushwalking, ski touring, canoeing, kayaking, and bike touring, combined with overnight camping using various equipment and sites. Wattchow & Brown (2011) state that “the journey or expedition has long been part of the staple diet of pedagogic approaches to outdoor education” (p. 137). The same can be said about VCE OES trips. Previous versions of the study design specified that most outdoor experiences would be conducted using a journey. Many VCE OES courses still use journeys as a staple in their program of outdoor experiences.

Jukes (personal communication, 27 July 2023) explains, “Journeys are conventionally defined as travel from a point to point. However, in outdoor education, the adage of ‘it’s the journey rather than the destination’ is often quoted.” He goes on to state, “This points to the fact that it is the journeying rather than the end destination that bring about meaningful experiences that have educative potential. This can happen in multiple formats”. In VCE OES, these potentials are typically explored via the explicit planning of experiences that align with the teaching of the specified KK/KS as part of the outdoor experience.

Journey-based programs more generally range as short as an overnight experience in a local outdoor environment to more extended multiple-week expeditions that sometimes feature in years 9 and 10 of outdoor education programs. Given the nature of the recommended hours in VCE OES, journeys are typically between 2-5 days. An example overview of an VCE OES journey-based outdoor experience that aligns with 2.1 & 2.3 is shown below for a snowshoe/cross-country ski tour on the Bogong High Plains.

Case Study 11.1 – Journey Based Outdoor Experience – Bogong High Plains Ski Tour

Route	Day 1 – Windy Corner to Cope Hut Day 2 – Cope Hut to Fitzgeralds Hut Day 3 – Fitzgeralds Hut to Windy Corner
Campground	Cope Hut Fitzgeralds Hut
KK	<p>2.1.1 scientific understandings of a range of outdoor environments including:</p> <ul style="list-style-type: none"> • the interrelationships between biotic and abiotic components • the effects of natural and human-induced changes on a range of outdoor environments, such as day to night, seasons, tides, flood, drought, fire, migration and climate change <p>2.1.3 understandings of vocational perspectives of outdoor environments, including at least two of the following:</p> <ul style="list-style-type: none"> • outdoor leading and guiding • environmental research and policy <p>2.3.1 how to conduct safe and sustainable peer-led outdoor activities, involving minimal impact strategies for groups, route planning, food and equipment planning, risk management planning and transport planning</p> <p>2.3.2 how to plan and adapt outdoor experiences due to weather, including weather patterns and extreme weather</p> <p>2.3.3 how to monitor observations of own and other groups' impacts on the outdoor environment during an outdoor experience</p>
Key Teaching Activities	<ul style="list-style-type: none"> • Pre-trip – Gear preparation for a winter alpine season • Peer co-leading during sleeping times • Peer teaching of a cooking circle – 2 students to lead each meal • Snow depth measuring activity • Day-night observation • Minimal impact strategies throughout • Cloud/weather observations

Note: The above assumes students have done an introductory cross-country ski day on the day before the journey starts or before the trip. Distances and campsites may need to be varied depending on student ability, conditions, etc.

Journey-based programs offer VCE OES students the opportunity to live and work in a small community of peers. As part of this, students and teachers often remark about the personal and social development such a trip offers them. Such development opportunities are likely what Marsh & Willis (1999) would label VCE OES's 'hidden' curriculum. Part of this hidden curriculum comes from the structure, in that students need to become responsible for their own needs (shelter, food, warmth, entertainment) and, through doing so, build additional personal skills outside of the VCE OES curriculum.

Case Study 11.2 – Peer Leading in 2.3

In outcome 2.3, students peer-lead aspects of an outdoor experience to demonstrate the outcome satisfactorily. Journey-based programs provide many opportunities for peer leadership. Peer leadership does not mean that students are required to conduct their own trips, nor does it mean that the normal burden of supervision from staff changes. The above case study demonstrates two possible ideas for student peer leadership during a cross-country ski touring trip. Further ideas for peer leadership are shown in the table below.

Table 11.2 – Peer Leadership in 2.3

Type of Peer Leadership	Examples
Navigation	Navigation can become a peer leadership task, either for the whole group working in leadership pairs, or if safe to do so, by setting students off in pairs or threes for a particular section of the track.
Camp Set Up	Students can be designated to be in charge of camp set up, including group shelter, tent site selection, toilet set up, etc.
Cooking Circles	Students can lead a cooking circle sharing a recipe with peers and monitoring for safety such as fuel bottle position.
Snow-sleeping	During snow sleeping, buddy systems are common. Students work in pairs to monitor tent buddies for thermal comfort and any early warning signs of hypothermia.
Peer Welfare	Peer welfare roles oversee their peers' physical and emotional welfare. They might assist in monitoring the groups' hydration, sunscreen use, hats, etc.
Logistics Officers	Group logistics roles can include managing equipment distribution, checking weather forecasts and communicating them to the leaders or group, and communicating with 24/7 contacts supervised by the teacher.

Multi-day – Base Camping

Multi-day base camping trips allow various outdoor experiences that complement the VCE OES curriculum to be taught in one outdoor environment. Base camping can be less physically demanding than journey-based programs, depending on the design of the outdoor experience. Base camping may involve students sleeping in tents or cabins at various sites, including dispersed camping, formal campgrounds, caravan parks and other prescribed accommodation (e.g., Scout Camps). For students with little or no prior outdoor experiences in their schooling, a base camp can also be a good way to build skills and scaffold their learning before a journey-based experience.

Base camping can still allow students to engage in personal development (the hidden curriculum of VCE OES) mentioned above. This can be done through structuring trips, whether they are at a formal site, an informal base, or even a residential facility, to enable such a program. A good way to do this is to have students take responsibility for their needs. In particular, cooking and sharing meals can help build community and responsibility within your VCE OES program. When designing programs that use a base camp for your trip, careful attention is required to ensure the program still 'looks' and 'feels' like an OES trip. For this

reason, tents and temporary sheets are normally preferred over permanent structures, and portable camping equipment (Trangia stoves, etc.) for meal preparation is encouraged.

A sample itinerary for a base camp is shown below that aligns with the 1.1 and 1.3 VCE OES curriculum. The itinerary is written so that groups could leave at lunchtime from closer by (Melbourne, Ballarat, Geelong) schools to minimise the impact on students learning in other subjects.

Case Study 11.3 – Base Camp – Anglesea and Surf Coast

Day	Itinerary and KK Link
Day 1	Depart School Drive to Pt Addis 1.1.1 En route – Students are to map using Indigenous peoples’ ways of knowing (symbols, pictures) the journey to Pt Addis in their Logbook 1.1.1 Student-led Acknowledgment of Country 1.1.1, 1.1.4 Point Addis Koori Cultural Walk 1.1.3 Bells Beach Walk 1.1.3 Night Beach Walk – Indigenous peoples’ Way Finding – Constellations 1.1.1, 1.1.4
Day 2	Beach Sunrise Yoga 1.1.2, 1.1.4 Surf Session Go Ride a Wave 1.1.2, 1.1.3 Estuary Walk – Impacts of Urbanisation 1.1.2 Alcoa Former Mine Visit 1.1.4 Bare Foot Lawn Bowls, Anglesea Bowling Club 1.1.1, 1.1.3
Day 3	SUP Session – Cosy Corner 1.1.1-2 Anglesea Heathland Biome Walk 1.1.2

Day Excursions – Outdoor Activity Focus

Outdoor activities allow students to experience first-hand how different groups of people participate in outdoor environments as described in the study design. Outdoor activities suitable for VCE OES are listed in the above excerpt from the VCAA (see 11.3). Your chosen activities should align with the teaching of selected KK/KS.

The use of day activities can help students to stay motivated within the VCE OES course. Although no formal research to date has looked at students’ motivations for choosing to study VCE OES, many teachers would state that based on their experiences, students often choose this course due to the practical nature, then become more environmentally focused as a result of learning the KK/KS within the course. In addition, many of the KK/KS included in the VCE OES can be taught directly through an activity rather than a more passive outdoor experience (lecture, talk, etc.).

Case Study 11.4 – Possible Activity Focused Day Excursions

KK: 4.1.4 the importance of healthy outdoor environments for individual physical and emotional wellbeing, and for society now and into the future

KS: justify the importance of healthy outdoor environments for individuals and society

Outdoor Environment: Buninyong Township/Mount Buninyong

Activity: Students participate in a strenuous 5.5km walk from the Botanical Gardens in Buninyong to the Summit of Mount Buninyong following the Goldfields Trail. At the top, they discuss why people might regularly participate in this type of activity and the importance of retaining the walking trail for locals' and visitors' health.



Image 11.1 – Map showing walking directions from the Buninyong Botanical Gardens to the top of Mount Buninyong via the Goldfields Trail. (Image Source: OpenStreetMap.org. CC BY-SA 2.0)

Activity 11.1 – Planning Day Excursions

- Identify the location of a school you would like to teach at or already work at.
- Search on Google Maps or similar for the location of the school.
- Create a list of possible outdoor environments within a 30min drive of your school.
- Choose three outdoor environments from your list and identify an outdoor activity that you could visit with an OES class the relevant KK/KS you would teach from the study design.

Day Trip – Guest Speaker/External Organisation/Visit

Your teaching of the VCE OES course can be enhanced by providing opportunities for students

to hear from or work with a range of people and groups through their course of OES studies. Using other people within your VCE OES course can teach different perspectives and help engage your students in learning by having a variety of voices delivering the course. Guest speakers and groups often come from the ongoing relationships you build in the outdoor environments you visit and teach as part of your VCE OES course. When approaching people and asking them to contribute to your VCE OES course, it is important to consider the benefits to them in doing so. This is particularly important when asking volunteers to be part of your course. Some ideas for guest speakers and organisations include:

- Historical Societies
- Friends of... Groups
- Regenerative Farmers
- Trust for Nature Landowners
- Education Rangers
- Museums
- Visitors Centres

11.4 Logbooks for VCE OES

Logbooks are a common tool within the outdoor sector and for outdoor enthusiasts to help document relevant experiences within outdoor activities. In the 2024 onward study design, the VCAA introduced a logbook as a compulsory assessment to help determine a student's satisfactory completion of units 1-4 of VCE OES. Students are required to complete a logbook that documents all aspects of outdoor experiences that they're participating in during their VCE OES course. In the next chapter, we discuss the two types of assessment tasks related to the logbook, those assessments tied to AoS 3 in units 1, 2 and 4.

Logbooks as part of the VCE OES curriculum, should be approached by teachers as a holistic tool, not simply an assessment task. Although similar to the highly structured logbooks that many outdoor educators are familiar with the VCE OES logbook should contain additional information that students record during outdoor experiences based on the KK/KS they engage in during an outdoor experience. When planning and conducting outdoor experiences as part of your VCE OES curriculum, you should consider how students will capture primary and secondary data about their experience within their logbook. Student logbooks should contain a variety of information within their entries. These include:

- location
- environment type
- flora and fauna
- outdoor activity(ies) undertaken


- sustainability measures
- observation of key knowledge relevant to the experience chosen by the teacher
- observation of key skills.

(Victorian Curriculum and Assessment Authority, 2023, p. 13. Reproduced with permission.)

Students can use a variety of techniques to make entries in their logbooks. This might include written entries (shorter and longer forms), pictures, drawings, diagrams and other sources. Teachers are responsible for the authentication of the logbook entries. In addition, as they relate directly to the outdoor experiences they participate in and the outdoor environments visited, it is practical that students complete most entries during outdoor experiences. For this reason, hardcopy logbooks are preferred and should be included on booklists. Students can also use their logbooks to collate photos and other material collected on a trip, including handouts and completed worksheets. If you plan for students to collate a large number of documents in their logbook, an A5 display folder may be a good inclusion on your booklist. To assist with authentication, tamper-proof stickers can seal pages once completed. Based on the above activity case study 11.3, a sample student logbook entry is below. This template has been pre-filled with the KK/KS to assist students with their logbook entry.

Case Study 11.5 – Sample Student Logbook Entry

Time and Dates	26/7/24 – 1200-1600
Location	<i>Buninyong and Mount Buninyong</i>
Environment Type Visited	<i>Urban and Managed Park</i>
Flora and Fauna Identified	<i>Koala</i> <i>Eucalyptus – Native Peppermint</i> <i>Eucalyptus – Messmate</i> <i>Acacia – Prickly Mosses</i>
Description of Outdoor Activity	<i>Walk for personal fitness from Buninyong Botanical Gardens to Summit via the Goldfields Track</i>
Observations of KK/KS	<p>KK: the importance of healthy outdoor environments for individual physical and emotional wellbeing, and for society now and into the future</p> <p>KS: justify the importance of healthy outdoor environments for individuals and society</p> <ul style="list-style-type: none"> – <i>The Goldfields Track heading up Mount Buninyong weaves from urban parkland through farmland then finally to the top of Mount Buninyong an old Volcano.</i> – <i>The track is steep and challenging, but by undertaking this walk, locals and visitors can participate in active outdoor recreation which has both health and emotional benefits (positives).</i> – <i>The track is rough in some sections, meaning it is not universally accessible. You also have to cross the Midland Hwy, which could put some off, but this can be done safely in small groups and with patience to wait for gaps in the traffic (negatives).</i> – <i>The track should be maintained as it helps current and future society stay emotionally and physically healthy (justify).</i>
Minimal Impact Strategies	<ul style="list-style-type: none"> – <i>Stay on the defined path.</i> – <i>Walk through wet sections rather than widening the path.</i> – <i>Be aware of Flora/Fauna and minimise disruption.</i> – <i>Remove all Rubbish.</i>

<p>Photos</p>	 <p>Goldfields Track at the Gong. Photograph by the author.</p>
<p>Justify the health of your chosen outdoor environment for individuals now and into the future (4 marks).</p>	<p><i>The health of the Goldfields Track at Mount Buninyong is important for the people of Buninyong and its surroundings now and into the future, as it is a key enabler of movement-based activities. By locals participating in walking up this steep track through a range of environments, they will feel more connected to the environment and, in turn, take steps to protect it. For example, through a connection to the place, the local teachers might take their year 6 class walking up the track, which will, in turn, build the future generations' connection to the place. If the track were to become overgrown with weeds (like blackberries seen on nearby farmland), it might mean that the track is unpassable, leading to people not using it and not developing a connection to the place either now or in the future. Ultimately, the health of this environment will promote a healthy population in Buninyong for generations to come.</i></p>

11.5 Advocating for Outdoor Experiences

The VCE OES curriculum requires students to spend time away from school to deliver outdoor experiences. As a teacher, you will sometimes be called upon to provide arguments as to the need for these experiences. Often, the scrutiny from leadership that necessitates these comes from the additional costs (both financial and human) to safely and effectively run your outdoor experiences. As this chapter has shown, there are a variety of local experiences that can help complement your VCE OES program. However, these should be in addition to broader multi-day experiences in various outdoor environments. School leadership are sometimes also concerned about the perceived impact of VCE OES experiences on students' overall attainment within the VCE. Although no direct research found to date has explicitly studied the impact of students undertaking VCE OES outdoor experiences, several empirical studies, as summarised in the table below, demonstrate positive outcomes for students undertaking outdoor experiences as part of their schooling.

Study	Summary
Fägerstam (2014)	This longitudinal study examined teachers' perceptions of an outdoor learning program in a secondary school setting. One finding is that teachers identified following learning outdoors, that students were more motivated, engaged in school and had better communication skills.
Mygind (2007)	This study examined students' physical activities when learning outside. They found that students doubled their physical activity levels on scheduled days of outdoor instruction.
Ritchie (2018)	This study found that participation in co-curricular activities as part of secondary schooling positively affected students' overall academic achievement.

Table 11.2 – Summary of Selected Literature

The letter below is a template you could adopt when writing to your school leadership to advocate for VCE OES's continuation, expansion or inception. *Outdoors Victoria* has published this template, the peak body for outdoor education, which can also assist in advocating for your program.

Sample Advocacy Letter

Example advocacy letter to principals – VCE OES programs.

Instructions. Please update all [fields] marked by square brackets.

Dear [Name],

Re: Proposed changes to year VCE OES outdoor experiences

[I/we] write regarding the decision to [reduce outdoor experiences/cease offering VCE OES due to outdoor experiences]. [I/We] take the firm stance that VCE Outdoor and Environmental Studies (OES) should proceed in its entirety for the following reasons.

- VCE OES is a world-leading curriculum through which students learn about their own and others' relationships with the outdoors. Through this, they directly engage in contemporary political and global issues to consider how human lifestyles must change for a sustainable future.
- VCE OES [in our school/in many schools] sees students achieve excellence in the VCE through consistently high study scores.
- VCE OES is a course that assists to keep many students engaged and connected to schooling. This has been a significant challenge for us and others since returning from the remote learning necessitated by COVID-19.
- The revised VCE OES curriculum has a renewed and significant focus on teaching about Indigenous peoples' culture and issues. This should be a matter of priority for all our graduating students to learn about, given the current political issues of reconciliation, closing the gap and

the voice.

- The revised VCE OES study design recommends 25-50 hours of outdoor experience per unit of study, excluding time sleeping or traveling. This roughly equates to 3 days and 2 nights per unit. These figures have been accepted by the VCAA board as they recognise the importance and benefits of outdoor experiences for students.

In addition, access to the types of experiences undertaken through VCE OES should be open to all students, regardless of cultural and socioeconomic background.

- The Department of Education recognises the significant benefits of outdoor learning. This has been evidenced through the recent \$80m investment in the positive start program and policy guidance regarding outdoor education schools.
- Teacher Time in Lieu should not be a barrier to student learning, given the recent announcement of funding for government schools. In addition, many schools have found amicable and creative solutions when they value and prioritise student learning through the outdoors.
- Finally, no research or evidence suggests that students undertaking curriculum-based outdoor experiences harms their overall academic achievement or other curriculum-based activities. On the contrary, several publications have linked time out of school experiences to an increase in overall achievement.

Finally, I would like to draw your attention to the CEO, Andrew Knight and his team at Outdoors Victoria. Andrew would be more than happy to be provided with further information about the benefits of outdoor experiences as part of the VCE OES curriculum. You can contact him via info@outdoorsvictoria.org.au or stay up to date with outdoor education and recreation news by subscribing to Outdoors Victoria's Newsletter.

We await your timely and hopefully positive response soon,

Regards, [Your teams name(s) here]

Reflection Questions

- Why should you include outdoor experiences in your VCE OES curriculum?
- What outdoor environments and types of learning experiences are suitable for the VCE OES curriculum?
- What would a student include in a logbook?

- Where could you get support in advocating for your VCE OES program? What arguments might help convince school leaders about the need for your students to be out of school?

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CHAPTER 12: ASSESSMENT IN VCE OES

Learning Objectives

- Describe the role of assessment in the VCE OES course
- Design formative and summative assessment tasks
- Explain the use of marking schemes, performance descriptors and rubrics for marking VCE OES tasks
- Analyse the use of commercial tasks and the teacher requirements when using commercial tasks
- Evaluate quality summative tasks

12.1 Assessment in VCE OES

Assessment in VCE is a complex set of processes through which you as the teacher, and other teachers acting as assessors, determine a student's overall attainment level within their chosen study. In our context, the VCE OES curriculum. As Collins (2011) states, "Assessment tends to drive curriculum, to decide what teachers and students will emphasise and choose to study, and to define what scope of freedom schools might have in their day-to-day activities" (p. 200). This statement is often correct within the VCE and individual subjects like VCE OES. Accordingly, when developing an assessment program as part of your VCE OES course, it is important that you do so intentionally and with a holistic view that balances how much time is spent on assessment tasks with other aspects of teaching and learning in your VCE OES course.

When teaching VCE OES, it is vital that you align your assessment practices to both the requirements of the study design and the mandatory processes around assessment from the (VCAA) Victorian Curriculum and Assessment Authority. The VCAA, publishes a handbook (Victorian Curriculum and Assessment Authority, 2022) which provides advice for teachers and VCE coordinators about implementing assessment within the VCE. In particular, the sections within the handbook about authentication, moderation, equity and the satisfactory completion of outcomes can be invaluable to you as an VCE OES teacher.

This chapter provides advice to you as an OES teacher based on both the handbook and the study design. In addition to reading this, you should also take the time to familiarise yourself

with the handbook and the assessment sections of the study design and regularly refer to both when designing and deploying assessment tasks in the VCE OES classroom.

12.2 Types and Functions of Assessment in VCE OES

Assessment in VCE OES can be grouped into three categories. Formative assessment tasks, school-assessed coursework (SAC), and externally set examinations are part of unit 3 and 4 courses. Chapter 13 addresses the VCE OES exam, including strategies for preparing students to complete this assessment. As a teacher of VCE OES, you are required to use a range of assessment processes and practices to determine your students' completion of the VCE OES course. This differs between units 1 and 2, and units 3 and 4 of the course. Table 12.1 outlines the types of assessment tasks typical in an VCE OES course. Some of these are mandated by the study design (SAC), whilst others are commonplace.

Units Studied	Typical Assessment Tasks
Units 1 and 2	<ul style="list-style-type: none"> • A variety of formative assessment tasks • At least one SAC from the specified list of tasks to assess 1.1, 1.2, 2.1 and 2.2. <ul style="list-style-type: none"> • A logbook of outdoor experiences to assess 1.3 and 2.3 • A school-set examination at the end of each unit
Units 3 and 4	<ul style="list-style-type: none"> • A variety of formative assessment tasks • A logbook of outdoor experiences • At least one SAC from the specified list of tasks to assess 3.1, 3.2, 4.1 and 4.3* • A written report on outdoor experiences to assess 4.1 (see 12.6)* • An externally set examination

Table 12.1 – Types of VCE OES Assessment

Assessment results from your VCE OES course must be reported to the VCAA in two formats, being: the satisfactory or not-satisfactory completion of each of the outcomes from units 1-4; and the reporting of scores based on school-assessed coursework for all assessed outcomes in units 3 and 4 (shown in Table 12.1 as marked with a *).

For a student to be assessed as satisfactory you as the teacher are required to certify they have “produced work that demonstrates achievement of the outcomes (and) submitted work that is clearly their own” (Victorian Curriculum and Assessment Authority, 2022, p. 89). Furthermore, the handbook clarifies that a student will receive an unsatisfactory grade as follows.

The student will receive an N (not satisfactory) for the unit when one or more of the following occurs:

- the work does not demonstrate achievement of the outcomes

- the student has failed to meet a school deadline for the assessment task (which can include time granted through an extension for any reason or a special provision or both)
- the work cannot be authenticated, for example, through lack of attendance
- there has been a substantial breach of the VCAA's rules and the school's rules and procedures.

(Victorian Curriculum and Assessment Authority, 2022, p. 90. Reproduced with permission.)

You should note that the above criteria does not mean that the completion of SACs or a certain level of attainment within a SAC (e.g., above 50%) is required to receive a satisfactory result. Although SACs can and often do, contribute to you being able to determine a student as having satisfied the requirement of a particular outcome. In addition, the handbook specifies that students who do not demonstrate a satisfactory understanding of an outcome through a SAC should be given additional opportunities to demonstrate their learning (either through previously completed tasks or additional ones). SACs are also used in units 3 and 4 to determine a student's level of attainment, which contributes to their VCE OES study score. If a student is given an additional task to demonstrate the satisfactory completion of an outcome, this must not allow them to gain additional marks; rather further tasks can be used to deem a student as having a satisfactory understanding of the outcome.

Formative assessment should be a regular part of your VCE OES course. You should aim to use various types of assessment tasks to allow students to demonstrate their knowledge of the course in different mediums. Regardless of your chosen type of task, assessing both the KK/KS as articulated within the study design is important. Additionally, using a variety of mechanisms to provide feedback (teacher feedback, student feedback, peer feedback, etc.) to students can assist in the overall teaching and learning processes within your VCE OES classroom. Possible types of formative assessment include:

- Practice structured (exam) questions
- Online quizzes
- Class discussions
- Worksheets
- Student made infographics, posters, etc.
- Annotated photos
- Videos
- Podcasts
- Participation in activities such as Padlets and other online collaboration tools.

When using tools that enable collaboration and are open-book, these tasks may not meet the requirements for authentication to be used toward an S/N grade. However, they can be useful tools to assist you in measuring the level of student attainment of a KK/KS to help guide your teaching.

Over-assessing is commonplace in education, including in the VCE OES classroom more

specifically—this is partly due to the current influence of large-scale standardised testing, which drives many aspects of education (Reid, 2020). You should be aware of the phenomenon of over-assessing in your course and ensure that your formative and summative assessments are balanced in frequency and scale so they do not overtly dominate your classroom. The sample unit planner (see Appendix 3.1) demonstrates a possible assessment map for 3.1.

12.3 Developing Quality SAC Tasks

Developing quality assessment tasks is a skill that you will be continuously working on as a VCE teacher. Developing tasks that meet the requirements set out in the VCAA handbook and the study design is pivotal to ensuring that your course complies with the VCAA requirements and that your SACs adequately prepare your students to complete their externally set examination. When developing SACs, you should consider the following principles of quality assessment tasks.

Alignment to Key Knowledge and Skills

When developing SACs, you must ensure you align your tasks to the KK/KS as displayed in the study design. SACs should use command terms that align with the key skills you are assessing. The VCAA publishes a glossary of command terms, which can be found online. In addition, there are subject-specific meanings of each command term, as shown in Table 12.3 below. This list has been collaborated on by expert teachers over many years.

Term	Meaning
Identify	Simply list the required information. No elaboration required
Outline	A brief description with the essential elements detailed
Describe	Give information displaying what you know about something
Explain	Give information and tell the examiner why, how, etc. <i>"because of this, this is happening"</i>
Discuss	Go into detail with information displaying what you know about something
Compare	show the similarities and differences, must use comparative language e.g., <i>"whereas, however, compared to, in comparison"</i>
Predict	Make a prediction based on information at hand
Analyse	Give information as to why something is happening. Can be considered cause + effect e.g., <i>"therefore, as a result, thus"</i>
Assess	Make a judgement call about the value, quality, outcome of something
Justify	provide reasons or evidence to support a given position
Evaluate	Discussion surrounding positives, negatives and summarise with a value adding overall judgement call
Propose	Recommend a well-considered solution, idea, or plan, supported by reasons

Table 12.3 – VCE OES Task Words (A. Hipwell, personal communication. November 28, 2023
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You can assess students based on the task word listed in the study design or up to that cognitive level. For example, if you were creating a set of structured questions to assess 4.1.2 you could ask students questions that align to any cognitive level up to and including evaluate. As shown in the example below, it is common in VCE OES for multiple-part questions to work through various cognitive levels. Additionally, as you will observe in the example below, the prompts used in the question are concise and easy to follow; they also mimic the style of questions and language used in the end-of-year VCAA set exams.

Example of A Multiple-Part Question

KK: 4.1.2 observable characteristics to assess the health of outdoor environments, including:

- quality of water, air and soil
- species and ecosystem biodiversity

KS: evaluate the health of outdoor environments and create possible solutions to improve environmental health

Question 1 (12 marks)

- Outline two observable characteristics that can be used to assess the health of outdoor environments (2 marks).
- Describe how you could observe the health of an outdoor environment using the two characteristics outlined in **part a.** (4 marks).
- Evaluate the health of an outdoor environment you have visited or studied this year using the two processes outlined in **part b.** (6 marks).

Establish a Marking Scheme

When developing tasks, you should develop a marking scheme for each task. To assist with this in units 3 and 4, the VCAA publishes a set of sample performance descriptors. These are an excellent starting point when developing different types of marking schemes. Marking schemes can be broken down question by question, or in some cases, through a rubric. The type of marking scheme used is likely dependent on the type of task being assessed. For example, structured questions, a case study, or other written formats will often use a marking scheme that breaks down the marks for each question. In comparison, SACs such as multimedia tasks, oral presentations, and concept maps may use a rubric to assess the task. In addition, rubrics may be used for certain questions within a marking scheme such as an extended response included in a case study or structured questions task.

All marking schemes, regardless of the type, should:

- break down how the task is to be marked, including the distribution;
- be established and used for all students in the same manner;
- guide you to look for key terminology and other key points; and
- include a sample student answer.

The following is an example of a possible marking scheme that could be used to assess part c. from the above response.

Question 1c.
Evaluate the health of an outdoor environment you have visited or studied this year using the two processes outlined in part b. (6 marks).
<p>Marking breakdown: (4 marks)</p> <p>2 x 2 marks for a discussion of the positives/negatives of environmental health based on two observable characteristics</p> <p>1 mark for an overall judgment about the health of the named outdoor environment</p> <p>1 mark is awarded for a specific link to an outdoor environment</p>
<p>Key points/terminology:</p> <p>Possible characteristics include quality of water, air and soil, species and ecosystem biodiversity</p> <p>Responses must use two different characteristics</p> <p>Responses must link to the environment not just name it</p> <p>Re-entry is allowed; students do not have to use their characteristics from part a/b.</p>
<p>Possible Student Response:</p> <p><i>Along the Yarrowee River in Ballarat, the water quality is poor. The water is turbid and often has a foul odour which indicates that the water is not healthy as you cannot see the bottom. There are also stagnate pools which would have low levels of oxygen in the water, meaning it would be hard for native fish to live there. The species diversity along the Yarrowee's banks contains many monocrops of introduced grasses and other species, such as pine trees. There are some areas where revegetation of native flora and fauna such as Silver and Black Wattles have been planted, which are native species to the area. Overall, the health of the Yarrowee is poor, as indicated by the health of the water and the lack of species diversity.</i></p>

Holistic Marking

Some SAC tasks, or some sections of SAC tasks are better suited to the use of a holistic marking scheme. Such schemes are often formatted as a rubric, or other similar tool. Holistic marking is encouraged for tasks with creative elements, such as podcasts or visual representations of knowledge. In addition, the use of holistic marking can be used to help mark extended responses in different SAC types, including case studies and structured questions. To develop holistic marking schemes for tasks in units 3 and 4, the VCAA-published performance descriptors contained within the support materials can be of use. Although the VCAA does not publish unit 1 and 2 performance descriptors, the development of holistic marking schemes can be modelled from the unit 3 and 4 ones. Table 12.4 below shows an example of a holistic marking scheme for the 4.3 written report task contained in Appendix 3.2

Holistic Marking Rubric – Written Report on Outdoor Experience

Prompt	Very Low	Low	Medium	High	Very high
3.1	Limited identification of characteristics associated with the beginnings of environmentalism	Identification of characteristics associated with the beginnings of environmentalism	Outline of environmentalism through reference to one of the prescribed historical campaigns	Description of the beginnings of environmentalism with specific references to one of the prescribed historical campaigns	Description of the beginnings of environmentalism and the resulting influence on political party policy, with specific references to one of the prescribed historical campaigns
3.2	Limited identification of the different relationships (conservation, recreation and economic) with Victorian outdoor environments	Identification of the different relationships (conservation, recreation and economic) with Victorian outdoor environments	Outline of the different relationships (conservation, recreation and economic) with Victorian outdoor environments	Description of the different relationships (conservation, recreation and economic) with Victorian outdoor environments	Compare the significance and implications of the different relationships (conservation, recreation and economic) with Victorian outdoor environments
4.1	Identification of the importance of healthy outdoor environments for individuals and society now and into the future	Outline the importance of healthy outdoor environments for individuals and society now and into the future	Explanation of the importance of healthy outdoor environments for individuals and society now and into the future	Analyse the importance of healthy outdoor environments for individuals and society now and into the future	Justify the importance of healthy outdoor environments for individuals and society now and into the future
4.1	Insufficient evidence of the impacts of threats to society and outdoor environments	Outline the impacts of threats to society and outdoor environments	Describe the impacts of threats to society and outdoor environments	Explain the threats and impacts to society and outdoor environments	Analysis of threats and impacts to society and outdoor environments
4.3	Insufficient evidence of references to primary and secondary data.	Limited references to primary and secondary data.	Multiple references to primary and secondary data authenticated by logbook.	Multiple references to primary and secondary data with selected key knowledge points authenticated by logbook.	Multiple references to primary and secondary data with selected key knowledge points with explicit links with two different environments authenticated by logbook.
4.3	Insufficient evidence of report structure; introduction, body and conclusion	Report has elements of appropriate structure; introduction, body and conclusion including findings and implications	Report includes appropriate structure; introduction, body and conclusion including explanation of findings and implications	Report includes appropriate structure; introduction, body and conclusion including analysis of findings and implications	Report includes appropriate structure; introduction, body and conclusion including evaluation of findings and implications

KEY to marking scale based on the outcome contributing 40 marks

Very Low 1–8	Low 9–16	Medium 17–24	High 25–32	Very High 33–40
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Modified with permission from: Victorian Curriculum and Assessment Authority (n.d.)

Table 12.4 – Holistic Marking Scheme

The 25/50/25 Rule

When developing a SAC you should ensure that a range of students can access the questions on the task. A rule of thumb that helps with this is the 25/50/25 rule. This refers to the overall breakdown of marks being distributed as follows:

- 25% of marks are low-order questions (identity, outline)
- 50% of marks are medium-order questions (describe, explain)
- 25% of marks are higher-order (analyse, evaluate)

When developing tasks, you should add up your proportion of low/medium/high order tasks to check the overall cognitive distribution of your task. It is important to note that questions can be varied in difficulty through their command words and what is being asked within the question.

12.4 Teacher Requirements

As a VCE OES teacher, there are several requirements to ensure that your assessment practice aligns to the processes set out by the VCAA. This section briefly introduces four key components of administering VCE OES assessments.

Equitable Tasks and Processes

When developing assessment programs for your VCE OES class, you must create fair, equitable, and balanced tasks. This ensures that all students can demonstrate their gained knowledge and skills within a particular part of the curriculum. Practices to ensure equitable assessment include:

- Using the same task for all students
- Having students work with the same set of conditions (time, use of logbooks, etc.)
- Adhering to any reasonable adjustments that some students have been granted by the school or the VCAA (additional time, a separate space, etc.)

Moderation

Moderation of assessment is vital to ensure that students are marked fairly and in line with the VCAA requirements. When you are new to marking for this study, moderation of your

SAC tasks must take place. Furthermore, suppose you are teaching at a school with multiple VCE OES classes. In that case, there are additional burdens on you as a teacher to ensure that tasks across the different classes are moderated and marked consistently across your cohort. It is common for a VCE OES teacher to work in isolation in your school. Accordingly, you may need to seek a moderation partner from a neighbouring school or through other networks. One person moderating the tasks should be experienced in teaching and assessing VCE OES. Ideally, the experienced marker will also have experience marking external VCAA examinations. Although many moderation methods exist, a sample of work will typically be marked by multiple teachers in the moderation meeting. Then, a discussion will follow to establish an agreed level of achievement for a particular task. The sample of moderated tasks normally consists of 10-20% of students work, but this will change depending on the size of the cohort.

Commercial Tasks

A range of commercially produced SAC tasks are available each year. These tasks vary in quality depending on the authorship and the organisation producing them. Regardless of whether you have purchased tasks or not, your obligations as a teacher remain unchanged. You are required to ensure that your tasks meet the VCE assessment principles of the VCAA. When working with commercial tasks to develop school assessed coursework (SAC) tasks, they must undergo significant change. Teachers are required to:

1. Ensure the task is compliant with the study design and VCE assessment principles of the VCAA; and
2. Modify the task so that it is unique, and if your students were to obtain a copy of the commercial task (for example, from peers at another school), they would not be advantaged in the SAC.

When working with commercial tasks, we recommend using them as an example and template to create your unique version. Commercial tasks can be used without modification as practice tasks.

VCAA Audit

The VCAA regularly audits the delivery of school-assessed coursework (SAC) used by schools that deliver the VCE. The audit focuses on assessment in units 3 and 4. The audit has multiple stages to ensure that you comply with the requirements within the study design and other assessment processes described here. If you are new to teaching VCE OES or new to a school, the audit can seem overwhelming. However, the audit should be approached as a mechanism of continuous improvement that will help both your individual and the broader collective practice of OES teachers.

It is recommended that you do not complete this task alone your first time completing the audit. Should your school not have other VCE OES teachers, drawing on the expertise of experienced VCE teachers in the learning area (Health and Human Development and Physical Education) or your school's VCE coordinator can assist you in navigating the audit process.

12.5 Types of School-Assessed Coursework

Many types of SAC tasks can be used within your VCE OES course. These include:

- a case study
- an oral presentation which can include the use of multimedia and podcast
- data analysis
- a written response to an issue
- a visual presentation such as a graphic organiser, concept/mind map, annotated poster or presentation file
- structured questions

The study design outlines the type of task suitable for assessing each outcome. For example, structured questions are only to be used within unit 4. When choosing the types of SAC tasks that you will be using from the list within the study design, you should ensure a balanced approach is used, and a variety of tasks are selected. Regardless of the task type used, you are required to develop tasks with clearly established student instructions and marking criteria or rubrics. Appendix 3.2 contains some examples of SAC tasks to help you develop your own task.

Activity 12.1 – SAC Tasks

- Choose one of the SAC tasks contained within Appendix 3.2.
- Complete the task as if you were a student.
- Develop a marking scheme or rubric using the above advice and mark your work based on your marking scheme or rubric.
- Compare your marking scheme to the examples supplied in this chapter and Appendix 3.3.
- Ask a peer to moderate your marks and provide feedback on your marking scheme. In the below section, we further unpack how to assess the logbook.

12.6 Assessing Logbooks and the Written Report on Outdoor Experiences

The logbook is a key mechanism to assess students' learning during outdoor experiences. The use of the logbook varies throughout the study. It is used to:

- Assess the students as satisfactory or not satisfactory for outcomes 1.3 and 2.3;
- As a way to gather visual media to assist in the completion of a SAC (for example, for unit 3 one assessment option is “a visual presentation such as a graphic organiser, concept/ mind map, annotated poster that includes both text and still images collected through the outdoor experience logbook” (Victorian Curriculum and Assessment Authority, 2023, p. 25); and
- To capture information relevant to completing the written report for 4.3.

Assessing S/N for 1.3 and 2.3

To assess students' satisfactory understanding of area of study three in both units 1 and 2, you are required to have students complete several logbook entries through which they demonstrate their understanding of the KK and KS from the respective outcome (1.3 and 2.3) being assessed. It is also likely that logbook entries for units 1 and 2 will also cover KK/KS from the other outcomes—these entries, focus on 1.1, 1.2, 2.1, and 2.2, can be used as both formative assessment tasks, and to help students develop their skills in completing logbook entries in preparation for the unit 3 and 4 logbook entries (in particular for the written report task). The below example shows how the logbook can be used to assess students' knowledge of the hazards and risks associated with surfing.

Case Study 12.1 – Pre-Activity Check Surfing

Activity: Surfing – Pt Leo

Date: 10/3/2024

Time of check: 0945

RISK ASSESSMENT

Risks relating to the following have been considered:

RISK	OBSERVATIONS AND CONTROLS
Conditions The current weather, warnings and forecast conditions	– Calm (9knot) onshore wind with a small 2ft swell – 24°C and Sunny, heading for a high of 29°C and a UV index of 8. All staff and students to apply sunscreen prior to entry in the water.
Fire Danger The fire danger rating and current fire conditions and warnings	– Low-moderate – No further action required.
Environment Conditions and nature of the environment in which the activity is being undertaken and the impact on the activity	– Rocks seen in the surf area, students and staff to wear booties provided by the surf school and be aware of own safety in the water. – Beach checked for glass and other hazards prior to use (clean and safe to walk with booties). – Small rip to the side of the surf area. Students shown the rip by surf instructors.
Participants The psychological and physical health and wellbeing of participants and staff on the activity	– All rested as it is a day activity. Staff and students are excited to surf.
Equipment Condition of the activity specific safety equipment being used in conducting the activity eg. helmets, life jackets, bikes This also includes communication equipment	– Leg ropes and helmets were checked and in good order prior to the session.

Adapted from: Department of Education Pre-activity check (2023) CC BY 4.0

Collecting Data for the Written Report and Other SAC Tasks

The logbook is used to collect data in preparation for the written report used as the substantive assessment for 4.3, and similarly for other tasks at the teachers' discretion. Entries in the logbook can contain both primary and secondary data. Primary data is information that your students collect during outdoor experiences. This might include observations, photos, and numerical data related to the KK/KS being studied. Secondary data comes from research and other sources; this can be added during outdoor experiences through documents and other sources studied during the experience or afterwards through student-conducted research (see 10.4). You must authenticate logbooks as the teacher (see 11.4). Accordingly, secondary data should be gathered in class and within a fixed time period and with other parameters to ensure that the logbook is an equitable, fair and balanced part of the assessment process.

Students are required to take their logbook into the written report SAC task for 4.3. This could be certain pages or the entire book, depending on how detailed their entries are and the moderation processes used. Any material taken into a SAC must be authenticated by you to

ensure they are original work. You may also permit students to take their logbook, or excerpts from it, into other tasks. Using a logbook in a task is best reserved for tasks that require it, for example, when students need to refer to images and other data from their logbook. The logbook should be used sparingly as students need to practice writing SAC tasks without material with them to prepare for the external examination.

Written Report on Outdoor Experiences for 4.3

The written report on outdoor experiences is used to assess outcome 4.3. You will notice that there is no AoS 3 reported in unit 3. As discussed in section 9.4.3, 4.3 is a mechanism for assessing students' outdoor experiences across units 3 and 4. As part of this, you must select four KK points from units 3 and 4 to underpin a written report based on the students' outdoor experience. The four KK points selected are up to you as the teacher. They should relate explicitly to the two outdoor environments that your students have visited. Selecting your four KK points from the other outcomes surrounding a broad theme is advisable. These themes would likely come from the cross-study specifications of Indigenous peoples' relationships with outdoor environments, environmental citizenship, or sustainability. A possible selection of KK aligned to two outdoor environments is shown below. You will note that the selected KK points cover both units, but a focus on 4.1 is used. This allows the written report SAC to be delivered in early term 3 of the program.

Outcome	Outdoor Environment	KK
3.1	Lal Lal	the beginnings of environmentalism and the resulting influence on political party policy, as observed in one of the following historical campaigns: <ul style="list-style-type: none"> • Little Desert
3.2	Lal Lal	conservation, recreation and economic relationships with outdoor environments
4.1	Falls Creek and Bogong High Plains	the importance of healthy outdoor environments for individual physical and emotional wellbeing, and for society now and into the future
4.1	Falls Creek and Bogong High Plains	the impact of threats on society and outdoor environments, including two of the following: <ul style="list-style-type: none"> • land degradation • introduced species • climate change • urbanisation • flood • fire

Students would make a series of entries into their logbooks during outdoor experiences in

both of your chosen outdoor environments. These entries, once authenticated, would then be taken into the written report SAC task and used by the student to help develop their written report. Due to the nature of this task, a holistic marking approach is required, a rubric developed based on the VCAA performance descriptors should be used. Appendix 3.2: Sample SAC Tasks, contains a sample written report task.

Reflection Questions

- What is the role of assessment in the VCE OES course?
- What types of tasks might be suitable as formative and summative tasks?
- How would you establish a marking scheme?
- What do you need to remember when working with commercial tasks?
- How can you ensure your assessment practices are fair, balanced and equitable?

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CHAPTER 13: OES EXAMS

Learning Objectives

- Describe the role of examinations as part of the VCE OES course
- Explain the structure of the externally set VCAA exam
- Analyse the type of questions used in VCE OES exams
- Evaluate strategies to help prepare students for internal and external examinations, including the extended response

13.1 Exams in VCE OES

This chapter explores the current use of exams in the VCE OES curriculum, including strategies to assist you as a teacher in helping your students prepare for their exams. The role and place of examinations in VCE OES include: externally set examinations at the end of units 3 and 4; other school-set exams in units 1, 2 and 3; and preparation tasks that teachers embedded throughout the course. The inclusion of the externally set examination is largely due to the system of ‘statistical moderation’ processes that Victoria uses to derive overall study and tertiary entry scores (Victorian Curriculum and Assessment Authority, n.d.). This chapter explores the current use of exams in the VCE OES curriculum, including strategies to assist you as a teacher in helping your students prepare for their exams.

The impact of using examinations to determine student achievement has been widely critiqued in literature. For example, Cairns (2021), examined how VCE examinations disproportionately impacted History classrooms and shifted the focus from the overall learning and teaching of the subject to the ultimate examination of it. Although due importance to the preparation for examinations is important, this must be balanced with the overall teaching of the course and should not become the only purpose of the VCE OES curriculum. Two claims are worth noting to back this point. First, the latest VCE OES curriculum has moved away from structured questions as a school-assessed coursework (SAC) task within units 1-3 of the OVCE ES course (Victorian Curriculum and Assessment Authority, 2023). This emphasises the need to accept different representations of key knowledge and key skills within VCE OES.

Second, compared to other jurisdictions (interstate and overseas), Victoria's senior secondary outdoor education course has a much greater emphasis on examinations (Ambrosy, 2021). To summarise, although the VCE OES exam is a pivotal component of the VCE OES course, a substantial component of a student's overall study score is derived from it. A balanced approach to teaching and assessment should be taken throughout your program to ensure the student experience is not overly focused on examination results only.

It would be unusual for a school delivering the VCE not to have its own set of internally set and marked examinations. Typically, students will sit an exam at the end of units 1, 2 and 3. The school sets these exams, and are akin to other formative assessment tasks. These examinations are two-fold, to help prepare students for the end of unit 3 and 4 exams and assess students' satisfactory/not-satisfactory (S/N) completion of the VCE OES course. If you use internally set exams to assess the S/N grade, it is important not to assign a numerical value that constitutes satisfactory results (e.g., 50%). Rather, students should be assessed based on their response to the individual KK/KS throughout the paper.

The use of commercial tasks is commonplace for internally set examinations. Although, as a teacher, it is ultimately your responsibility to ensure that all assessment tasks align with the curriculum, using commercial tasks that have been audited but not necessarily adjusted is acceptable as they are not used to derive a numeric score that contributes to a study score. Although the burden of uniqueness is lessened in internal examinations, you should still try to make the task 'new' to the students like you would within a SAC task.

The VCAA sets an external examination at the end of units 3 and 4. This written examination contributes 50% to a student's overall study score in VCE OES. The examination is also used to statistically moderate the students' school-assessed coursework tasks to ensure they have been marked fairly and consistently.

13.2 The Structure of VCE OES Exams

VCE OES exams typically follow a standard structure. They contain a series of short answer questions and an extended response. Multiple choice questions requiring comprehension of the KK/KS (name or recall style questions) are not used within VCE OES exams. Questions with multiple parts are common within the VCE OES exam, and these questions often assess students' knowledge across multiple course outcomes. Likewise, the extended response will focus on multiple KK/KS and even multiple outcomes.

The externally set VCE OES exam will adhere to current specifications published by the VCAA. The externally set examination typically consists of short answer questions with multiple parts and an extended response. The total marks and time allocation are published in the specifications. You should check the specifications each year and prepare your students accordingly so they are aware of the structure of the exam.

Activity 13.1 – Current Examination Specifications

- Locate a copy of the current examination specifications on the VCAA VCE OES webpage
- Locate a copy of either last year's exam or the sample exam prepared by the VCAA
- Read the exam specifications alongside the exam and answer the following questions
 - What types of questions are common in the VCE OES exam?
 - What types of questions might require additional preparation by students?

13.3 Preparing Students for Exams

As a VCE OES teacher, it is imperative that you adequately prepare your students to undertake written examinations. As discussed above, this preparation should be done holistically and not overshadow the general teaching and learning within the VCE OES course. The following are examples of strategies that can be used to help your students prepare for their exams.

Managing Time

Students in the VCE OES exam normally have 120 minutes to respond to 90 marks worth of questions. Additionally, students will need some time for planning responses, a toilet/handwriting/drink break, reviewing the paper at the end and adding additional information as required. Thus, students must be prepared to answer their exam at approximately a ratio—1 mark: 1 minute of writing time. To help students write at this pace, you should use a timer when your students undertake practice responses during class time. To help them work toward the 1 mark: 1-minute writing ratio, the following times can be used when completing practice questions:

Unit	Mark: Minute
1	1 mark: 2 minutes
2	1 mark: 1 minute and 30 seconds
3	1 mark: 1 minute and 15 seconds
4	1 mark: 1 minute

Table 13.1 – Adjusted times for practice questions across units 1-4.

Unpacking Examiners Reports

The VCAA publishes an examiner's report each year that unpacks how questions from the previous year's examinations have been answered. This report gives a high-level overview of the examination process and a question-by-question breakdown. As a teacher, the high-level overview is imperative for you to read, reflect upon and act within your VCE OES teaching. The question-by-question breakdown is useful for both teachers and students.

For each question, the report provides:

- The distribution of student marks for the question.
- A qualitative description of how the question was responded to and any common errors observed.
- A sample of a high-scoring student's response for each question.

Case Study 13.1 – A Sequence of Learning to Unpack the Examiners' Reports

A possible sequence for unpacking a question(s) from the examiners' report is as follows:

1. Select a question from a past VCAA exam and have the students attempt it within a set timeframe.
2. Discuss the following prompts as a class:
 - What was the question asking?
 - What key knowledge was being examined?
 - What key skill is being assessed?
 - What type of language is needed based on the key skill?
 - What outdoor environment that we have studied would you use to answer this question?
3. Read the examiners report as a class and focus on:
 - Where marks would be allocated for the question.
 - Common mistakes to avoid.
 - The strategies used and the strength of the sample response.
4. In pairs, have students mark their own, and then each other's work. While marking, have students offer suggestions to improve their and their peers' work.
5. Discuss, as a class, the suggestions offered to improve their own and others' work.

DIY Questions

Having students develop their own exam-style questions can help them understand how various KK/KS might be assessed in an VCE OES exam. This can happen using one of two strategies.

Case Study 13.2 – DIY Questions

Strategy 1: From KK/KS

1. Assign students in groups of three a KK/KS from the outcome you are studying.
2. Have students work as a group to develop.
 - A multiple part question that aligns to the KK/KS assigned.
 - A marking break down for each question.
 - A sample high-scoring student response to their question.
3. Have two groups work together to peer review the question/marking scheme/response.
4. Based on the peer review feedback, have students refine their work.
5. Collect, edit and collate the students' questions into a practice task.
6. Set the student-developed questions as a revision task.

Strategy 2: From a sample response

1. Students are given a sample response to an identified KK/KS.
 - The following response relates to 3.1.1
 - *Biological isolation has helped shape the fauna of many Australian outdoor environments. For example, the Koala population that is found on French Island. Thousands of years ago, the ancient ancestors of Koalas were ground-dwelling marsupials that fed on the abundant flora of the time due to a much wetter climate and more vegetation. As Australia dried out, Koalas filled a feeding niche by climbing trees and eating eucalyptus leaves. This has resulted in Koalas having very small brains, despite their heads being the size of humans.*
 - Have students develop a possible question and a marking break down based on the provided answer.
 - Question: *Explain how fauna was influenced by a characteristic of Australian outdoor environments before humans arrived using an example from an outdoor environment you have visited or studied (3 marks)*
 - Marking break down:
 - 2 marks are awarded for explaining how an example of fauna was influenced by

- biological isolation, geological stability and climatic variations before human arrival.
- 1 mark for a specific example of fauna from an outdoor environment visited or studied.

13.4 Extended Responses

The extended response is a prominent feature of VCE OES exams, both internally set and those run by the VCAA. Extended response questions have a significant mark allocation (circa 15% of total paper marks). Accordingly, students who do not attempt or are not adequately prepared to undertake these questions are unlikely to do well in their exams. Thus, it is imperative to the success of your VCE OES students when completing both school-set and externally set examinations that you spend time preparing your students to undertake these tasks.

This section aims to help you better understand the types of extended responses that could be used for VCE OES and introduce strategies to help you develop your students' abilities to complete these tasks.

Understanding the Extended Response

The extended response assesses a student's ability to respond to a selected number of key knowledge and key skills drawn from across the curriculum. Such responses can come in many forms, for example, asking students to write a report, develop a timeline, or discuss a broader issue. Students may need to respond to stimulus material or other prompts within the VCE OES extended response. An extended response in VCE OES will often set students a meta task (write a report, etc.) and provide them with a series of prompts they should include as part of their response. Extended responses can be marked using either a holistic marking scheme or a marking guide; these are normally formatted in the same way as discussed in Chapter 12 (see 12.3). The below case study demonstrates the style of question that could be included in as an VCE OES extended response.

Case Study 13.3 – Sample Extended Response Question

Question 10 (15 marks)

Outdoor environments in Victoria vary from those with minimal human interaction to those significantly

impacted since the arrival of humans. All environments have been impacted to a degree since the arrival of Australia's first people thousands of years ago.

You are required to construct a timeline of events that details how two outdoor environments you have visited or studied have been and could be impacted by changing human relationships now and into the future.

In your timeline:

- describe the changing relationship with one of your outdoor environments held by a specific Indigenous peoples' community before and after European Colonisation
- compare Indigenous peoples' custodianship of one of your outdoor environments with another relationship with your outdoor environment since 1990
- describe how one Indigenous people's and one non-indigenous people's management strategy could be used to manage the health of both of your outdoor environments
- propose how changing an act or convention could help manage both outdoor environments' ongoing sustainability.

Strategies for Answering the Extended Response

When teaching students about the extended response, there are several strategies that you can teach them to help them be successful in their exams.

Planning for the Extended Response

Clear and concise writing skills are essential to demonstrate the achievement of learning outcomes. In the case of an exam, students who write clear and well-structured responses can better convey their knowledge of the key skills being assessed. In particular, through a planning phase, a student can ensure that their response addresses all components of the question. Planning the extended response can be a good strategy for students to employ in the last part of the reading time. The following checklist can be used to help plan an extended response.

1. Read and re-read the question.
2. What KK/KS is the question asking about?
3. Where are the marks distributed?
4. Is there a stimulus? How will you respond to it?
5. What outdoor environment(s) will you base your response on?
6. What key examples (names, dates, places) will you use in your response?

Activity 13.2 – Planning an Extended Response

- Use the above planning checklist to make a mental plan for the extended response above (case study 13.3). You should do this in your head as if you are a student completing this at the end of reading time.
- Based on your mental planning, jot down 4-5 dot points to help you remember your plan.
- Write out a response to the above using your plan.
- Reflect on how your plan helped you structure your response.

13.5 Strategies of High-Scoring VCE OES Students

Students who write high-scoring responses in their VCE OES exams commonly use the following strategies. These strategies can be used in both the extended response questions and in other VCE OES exam questions.

Signposting and Subheadings

Signposting and subheadings help students demonstrate how their longer responses address different parts of the required criteria. Signposting is the process of underlining key terms or components of an answer to demonstrate their importance. Students should be taught to use a ruled line under certain words. Although signposting can be an effective strategy, a less is more approach should be used to avoid overcrowding the page. Subheadings help break up a longer task. Again, these should be used sparingly and to signal to the person marking the paper where certain components of a response are.

Legibility

Most students handwrite exams, other than those deemed to require an adjustment to use a computer. To ensure that a response is examinable, students should pay attention to the legibility of their response. To help students write legible responses, they should experiment with different pens and find a type that suits their handwriting. In addition, students should be coached to use sufficient space between words to not overcrowd the page. Additional pages at the rear of the exam book or additional booklets should be used for students with larger fonts

or additional ideas to respond to. Students must ensure all responses are clearly labelled when using additional pages and booklets.

Proofreading

Students should be taught to re-read their responses and ensure all criteria have been addressed. When re-reading, they may want to use the expanded dot points of inclusions as a checklist to ensure all KK/KS in the question have been responded to. Students can add further details during this time or re-write if time permits and they are not happy with parts of a response.

Reflection questions

- Where are exams used as part of the VCE OES curriculum?
- How do exams constitute to a student's marks and overall completion of the course?
- How is the VCAA exam structured? What types of questions does it contain?
- What strategies can you use to help students prepare for internal and external exams?
- Which strategies would be the most effective and why?

References

- Ambrosy, J. (2021). *Benchmarking Report: Senior Secondary Outdoor and Environmental Studies 2022*. Victorian Curriculum and Assessment Authority.
- Cairns, R. (2021). Exams tested by Covid-19: An opportunity to rethink standardized senior secondary examinations. *PROSPECTS*, 51(1), 331-345. <https://doi.org/10.1007/s11125-020-09515-9>
- Victorian Curriculum and Assessment Authority. (2023). *Outdoor and Environmental Studies – Study Design*. <https://www.vcaa.vic.edu.au/Documents/vce/outdoor/2024OutdoorEnviroSD.docx>
- Victorian Curriculum and Assessment Authority. (n.d.). *Statistical Moderation*. <https://www.vcaa.vic.edu.au/assessment/vce-assessment/how-vce-assess/how-pages/Pages/StatisticalModeration.aspx>

NOTE ON APPENDICES

A Teachers Guide to Outdoor Education Curriculum: Victorian Edition has been written as an eBook and is available through the CAUL (Council of Australian University Librarians) OER (Open Educational Resource) Collective. Due to the formatting of the appendices, they are only available via the online version available: **<https://oercollective.caul.edu.au/teachers-guide-outdoor-ed-vic>**

REVIEW STATEMENT

A Teachers Guide to Outdoor Education Curriculum: Victorian Edition was produced by Federation University Australia through the Council of Australian University Libraries (CAUL) Open Access Collective. As part of this process, the book went through a review process with expert reviewers. As part of this process, reviewers were provided with extensive review criteria to ensure the accuracy of information and suitability of the text for the intended audience of Initial Teacher Education Students and Teachers' of Outdoor Education.

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