VCE Outdoor and Environmental Studies – Units 1&2

UNIT PLAN

Devised by Ben Pocklington
VCE Outdoor and Environmental Studies aims to extend student knowledge about human interaction with outdoor environments. The subject consists of 4 units, each of which focuses on a different topic. The following Unit Plan for 2012 provides an example of how to structure components of units 1 and 2 into the VCE curriculum. Unit 1 is titled ‘exploring outdoor experiences’, which delves the different ways humans interact with the environment, the motivation for such interaction, and the responses generated from environmental interaction and outdoor experiences. Unit 2, titled ‘discovering outdoor experiences’ investigates the characteristics of different types of outdoor environments, the different ways in which these environments are perceived by humans, and the positive and negative impacts that human interaction has on the environment. To facilitate the learning of such content, the theory covered throughout these units will continually be related to practical experience, with a particular focus on Lake Pertobe. By using this local attraction as a central reference point for case studies and practical experience, students will be able to practically apply the theoretical concepts to their local environment.

The ‘Victorian Certificate of Education Study Design’ for Outdoor and Environmental Studies outlines a number of key knowledge points and key skills that should be covered throughout each unit. There are two Areas of Study (AOS) in each unit, all of which list the key knowledge and skills that should be attained on completion of the units. For the purposes of this assignment, the following Unit Plan will provide an example of lesson outlines for the following key knowledge in each AOS for units 1 and 2 (although there are several more key knowledge points):

**Unit 1**

**AOS 1:** ‘The variety of personal responses to risk in outdoor experiences, including the interplay between competence, perceived risk and real risk’.

**AOS 2:** ‘The factors that affect access to and kinds of outdoor experiences, including socioeconomic status, cultural background, age, gender and physical ability’.

**Unit 2**

**AOS 1:** ‘Characteristics of outdoor environments, including alpine, marine, coastal, wetlands, grassland, forest and arid’.

**AOS 2:** ‘Community-based environmental action to promote positive human impacts on outdoor environments’.

(Victorian Curriculum and Assessment Authority, 2011).

For each of these key knowledge points listed, students will be provided with a range of opportunities to further their knowledge of these topics. Providing responses to questions, readings, research, practical activities, video clips, guest speakers, experiments and class discussions are several examples of the class activities that will be conducted to cater for a variety of learning styles in the class. Many of these responses will be the method of assessment for student learning (which will be outlined in detailed in the Unit Plan). Additionally, the key knowledge points outlined will be integrated with contemporary issues of Lake Pertobe, as a basis for relating theory to their local environment and practical experience. This will be largely linked with the recreational aspects of the lake, including types of activities, the support of ‘risk taking’ activities, public access to activities, and the environmental impacts that such activities have on the lake.
Finally, as a means of practical application of theoretical concepts in the course, students will participate in two excursions to Lake Pertobe throughout the year. As with any excursion, taking a class of students to such an outdoor environment involves an element of risk of which the teacher/s must thoroughly consider and appropriately manage. As part of this risk management plan, there is a certain process that must be undertaken, involving the completion of documents administered by the Department of Education and the school itself. The completion of these documents is a legal requirement and the readings of further risk management information provided by the Department of Education are also strongly recommended in order to identify all potential risks and to ensure optimal security for the group. These documents have been completed for the excursions to Lake Pertobe and have been included in the Unit Plan as appendices.
## Unit 1 – AOS 1:

### Key Knowledge:

- *The variety of personal responses to risk in outdoor experiences, including the interplay between competence, perceived risk and real risk*.

### WEEK 1:

#### Lesson 1: (60min)

1. Introduce topic of risk in outdoor environments – define the term ‘risk’, identify possible motivations for engaging in risky activities in the outdoors. Use YouTube clip as an example of motivations for risk taking → ‘Wingsuit Base Jumping’ (url in ‘teaching resources’ section of table).

2. Find out students’ personal experiences of risks in the outdoors → as a class, brainstorm (teacher writing a concept map) all of the risks that were taken by the students on their last school camp (an experience they can all relate to).

3. Discuss and outline characteristics of different approaches to risk (i.e. ‘risk avoiding’, ‘risk reducing’ and ‘risk seeking/pursuing’). Again, identify different approaches to risk from students’ camp experiences.

4. Outline the importance of taking risks as well as the importance of minimising risks. Handout the poem ‘risk taking’ (appendix A) to provide clarity about why taking risks is important for personal development.

5. Administer homework task – students to engage in readings from textbook (*Outdoor & Environmental Studies VCE Units 1 - 4*; pages 18 to 30) and provide a summary of ‘perceived risk’ vs. ‘real risk’, so they have prior knowledge of this concept before attending the next class.

### Assessment

- Construction of glossary of key terms and concepts throughout the 2 units:

- Weekly textbook chapter readings: read pages 19-28 and provide summary of ‘perceived risk’ versus ‘real’ or ‘actual risk’. Summary to be checked at beginning of following class:

*Textbook: (Gough et al, 2006)*

### Teaching Resources

1. YouTube Clip - Wingsuit Base Jumping: http://www.youtube.com/watch?v=I4U6T_BB1N8

2. Handout/reading: - Appendix A

3. Text book - *Outdoor & Environmental Studies VCE Units 1 - 4*.
Lesson 2: (90min)

1. Identify different perspectives on risk (i.e. some students may rate activities of higher risk than others). Students to complete handout (appendix B) which asks students to rate the degree of risk in certain activities. Compare results with other students and discuss findings.

2. Explaining real and perceived risk in relation to competence: use last activity to explain how perceived risk and real risk are often completely different things (false perception of risk). I.e. greater competence results in greater likelihood to understand the real or actual risk.

3. Show YouTube clip of my own risk experiences in the outdoors (NSW camping/cliff jumping trip 2011 – see url in ‘teaching resources’). This clip will engage students and prompt thoughtful discussion because they will be interested in their own teacher’s experiences.

4. Handout news article ‘Daredevil divers in Blairgowrie risk paralysis jumping off cliffs’. This article is related to the footage in the previous YouTube clip, outlining the different perspectives (media portrayals in particular) of the risky activity of cliff jumping. A good article to demonstrate the difference between perceived and real risk, as the author of the article perceives the risk as being extremely high, when the real risk is quite low because the ‘risk takers’ have examined the real nature of the activity.

5. Risk-taking environments at Lake Pertobe – use Lake Pertobe as a case study for risk-taking activities. Research in pairs, identifying types of activities, how risks are evaluated and managed, and the changes that have occurred in this area as a result of risk consideration. Students to present findings to the class.
Unit 1 – AOS 2:

Key Knowledge:

- ‘The factors that affect access to and kinds of outdoor experiences, including socioeconomic status, cultural background, age, gender and physical ability’

WEEK 2:

Lesson 1: (60min)

1. Why accessibility to outdoor environments and activities/experiences is important for Australians? How does humanity benefit from such experiences? What factors need to be taken into account by the local council to aid accessibility for all walks of life?

2. Students identify a number of context-dependent considerations that determine accessibility to outdoor experiences, such as: distance, time, cost, motivation, mobility, risk, regulations, physical environments, safety, weather, and all of the possible determinants that are encompassed within these topics. Students should brainstorm determinants for each of these considerations, and then match their answers with those provided in ‘appendix C’.

3. Students identify factors of an individual that may affect their accessibility to an outdoor experience. E.g. socioeconomic status, cultural background, age, gender and physical ability. Students are given an accessibility spectrum for several outdoor activities, and they must determine the level of accessibility for different individuals in terms of ‘high access’ and ‘low access’.

4. In pairs, students construct a survey to conduct in the Lake Pertobe region in the following class (see ‘Assessment’).

5. Discuss particulars of the excursion to Lake Pertobe that will take place in the following class. Outline aim of the excursion, tasks that must be completed, student expectations, etc.

- Survey for Lake Pertobe locals:

* Students will survey the public about their perceptions of accessibility to certain environments, activities and experiences around the lake. Survey questions will consider factors that allow easy access to outdoor experiences, factors that limit access, groups or individuals that gain easier access than others, elements of risk in activities and why that inhibits/restricts, or allows for accessibility.

1. Determinants of accessibility:
   - Appendix C

2. Text book - ‘Outdoor & Environmental Studies VCE Units 1 - 4’:

3. Example accessibility spectrum: [http://www.sustainable-design.ie/arc/adapthouse.htm](http://www.sustainable-design.ie/arc/adapthouse.htm)
### Lesson 2: (90min)

1. In pairs, students are given the task of determining the level of accessibility for a certain individual (each pair is assigned to investigate accessibility for an age, gender, cultural background, etc. that they have been assigned to). For example, one pair may have to determine a 60-year-old Islamic female’s accessibility to outdoor experiences around Lake Pertobe.
2. Students will then conduct their survey (constructed in the previous class) with the public citizens local to Lake Pertobe.
3. Students will gather information on accessibility in this area, identifying limitations in order to form an ‘Increasing Accessibility Plan for Lake Pertobe from 2012-2016’. This is part of their assessment. This will focus particularly on increasing the amount and enjoyment of recreational activities and facilities at and surrounding the lake.

### Unit 2 – AOS 1:

#### Key Knowledge:

- ‘Characteristics of outdoor environments, including alpine, marine, coastal, wetlands, grassland, forest and arid’.

#### WEEK 3:

#### Lesson 1: (80min)

1. Types, characteristics, and examples of the range of different environments (alpine, marine, coastal, wetlands, grasslands, forest, desert, etc). Only brief description and explanation because students can conduct their own research to learn more.
2. Students (in groups of 3) allocated one specific environment each to study in detail. Students must consider the following points:
   - Interrelationships between abiotic and biotic (e.g. water and marine life)
   - Natural changes and their effects (day/night, seasons, tides, erosion, fire, drought, flooding, climate change, migration)
   - Land features – public vs. private land, accessibility, safety
   - Practical use of the environment – education, research, recreation.

#### Lesson 2: (90min)

1. Conducting the survey
2. Development of an ‘Increasing Accessibility Plan for Lake Pertobe from 2012-2016’. This is a graded task → task outline and criteria included in ‘Appendix F’.

#### WEEK 3:

- Weekly textbook chapter readings, pages 52-58.
  *Textbook: (Gough et al, 2006)*

- End of class quiz – see Appendix E

#### Notes:

1. First aid kit
2. School mobile phone (in cases of emergencies).
3. Text book - ‘Outdoor & Environmental Studies VCE Units 1 - 4’.
3. Information on each environmental example is presented to the class, while the class take note of this information in their notebooks. Once all groups have presented information, all class members should have a detailed record of the characteristics of each environment.

4. Identify similarities/differences between each of the environment types. Draw chart on whiteboard to present findings. Look at recreational use and facilities available at the different types of environments. Compare to Lake Pertobe? What characteristics does this lake exhibit? Why is recreation such a major focus of this environment?

5. Quiz that covers each of the different types of environments and considers all features and characteristics.

**Lesson 2: (Full day excursion)**

1. Excursion to 3 separate outdoor sites, each of which a completely different environment. Destinations include: Lake Pertobe (wetlands), Otway Ranges N.P. (forest), and the coastal regions of Warrnambool.

2. Students provided with worksheets to complete that demonstrate the unique differences between each ecosystem. Questions focus on areas of study from previous class – applying their theoretical knowledge to their own local environments to enhance understanding.

3. Students will also engage in one recreational activity at each location – Otway ranges’ tree top walk, Lake Pertobe’s adventure playground, and surfing at Warrnambool beach.

- Completion of worksheets is compulsory prior to engaging in recreational activities at each outdoor site. Worksheets ask students to investigate similarities and differences between each ecosystem visited.

1. First aid kit
2. School mobile phone
3. Surfboards (sufficient for 1 per student)
### WEEK 4:

#### Lesson 1: (60min)

1. **History of urbanisation in Australia.** Urbanisation and changes in human lifestyle since early settlement. Land clearing, building of infrastructure, waste disposal, road and housing development, energy sources/power supply, water system, sewage systems, agricultural demands, etc.

2. **Urbanisation in local area:** Guest speaker from the local council to present a lecture about urbanisation in Warrnambool and its impacts on outdoor environments, covering major factors:
   - Housing
   - Opportunities for work
   - Tourism
   - Recreational activities
   - Changing lifestyles – adapting to ‘new age’ while maintaining positive impacts on environment
   - Aesthetically friendly vs. ecologically/environmentally friendly
   - Sustainability of environment

3. **Students to develop 2 timelines:** one for urban expansion and development in Australia, and another of that in their local environment (Warrnambool).

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1. **Textbook** - *Outdoor & Environmental Studies VCE Units 1 - 4*.

2. **Books:**
   - “Urbanisation in Australian History, 1788-1900” by Sean Glynn

3. **Websites to assist timeline:**
APPENDIX A

Risk-Taking

To laugh is to risk being a fool.
To weep is to risk appearing sentimental.
To reach out to another is to risk involvement.
To express feelings is to risk exposing your true self.
To place your ideas and your dreams before a crowd is to risk their loss.
To love is to risk not being loved in return.
To live is to risk dying.
To hope is to risk despair.
To try is to risk failure.
The person who risks nothing – does nothing, has nothing and is nothing. They may avoid suffering and sorrow, but they simply cannot learn, feel, change, grow, love or live.
Risks must be taken because the greatest hazard in life is to risk nothing. Only a person who risks is free.

Author Unknown
APPENDIX B

Table 1.3 Activity risk rating

<table>
<thead>
<tr>
<th>RISK ACTIVITY</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain climbing</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Smoking marijuana</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Water skiing</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Eating fatty foods</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Parachute jumping</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Snowboarding fast down a mountain</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Being sexually promiscuous</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Scuba diving</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Driving recklessly</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Heavy drinking</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Rock climbing</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Hang gliding</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>White water kayaking</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Using illegal stimulants</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Smoking cigarettes</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Mountain biking</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Having unprotected sex</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Flying in a small plane</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Surfing</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Not exercising regularly</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Drink Driving</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Horse riding</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Ocean sailing</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Diving off a high board</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

Rating risk - Instructions

1. Rate the activities in Table 1.3 on a scale of 1 to 10 (1 = lowest risk, 10 = highest risk).
2. What factors did you consider in making your decisions? How did you determine how much risk is involved in each activity?
3. Discuss your ratings with your class.
## APPENDIX C

<table>
<thead>
<tr>
<th>ACCESSIBILITY CHARACTERISTIC</th>
<th>CONSIDERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance</td>
<td>How far do you have to travel?</td>
</tr>
<tr>
<td>Time</td>
<td>How long will it take to:</td>
</tr>
<tr>
<td></td>
<td>- Plan</td>
</tr>
<tr>
<td></td>
<td>- Participate</td>
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<tr>
<td></td>
<td>- Physically prepare</td>
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<tr>
<td></td>
<td>- Get there</td>
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<tr>
<td></td>
<td>- Acclimatise</td>
</tr>
<tr>
<td>Cost</td>
<td>How much will it cost to</td>
</tr>
<tr>
<td></td>
<td>- Travel</td>
</tr>
<tr>
<td></td>
<td>- Purchase special equipment</td>
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<tr>
<td></td>
<td>- Prepare</td>
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<tr>
<td></td>
<td>- Obtain permits</td>
</tr>
<tr>
<td></td>
<td>- Buy food and supplies</td>
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<tr>
<td></td>
<td>- Pay staff</td>
</tr>
<tr>
<td></td>
<td>- Take time off work</td>
</tr>
<tr>
<td>Scale</td>
<td>How many people are participating?</td>
</tr>
<tr>
<td></td>
<td>What and how much food your party needs?</td>
</tr>
<tr>
<td></td>
<td>How much equipment is required?</td>
</tr>
<tr>
<td>Fitness/Training/Instruction</td>
<td>Are there any qualifications/experience required for the trip?</td>
</tr>
<tr>
<td>Motivation</td>
<td>Why participate?</td>
</tr>
<tr>
<td></td>
<td>How much effort is required?</td>
</tr>
<tr>
<td></td>
<td>How much risk is involved?</td>
</tr>
<tr>
<td></td>
<td>Can you afford it?</td>
</tr>
<tr>
<td>Mobility</td>
<td>Different ability provision?</td>
</tr>
<tr>
<td></td>
<td>Is any modified equipment required?</td>
</tr>
<tr>
<td>Season</td>
<td>When is the best time of year to go? Weather, climate</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Regulations</td>
<td>Permits</td>
</tr>
<tr>
<td></td>
<td>Laws</td>
</tr>
<tr>
<td></td>
<td>Codes of conduct – e.g. Minimal Impact</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>Terrain</td>
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<tr>
<td></td>
<td>Water</td>
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<td></td>
<td>Tracks</td>
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<tr>
<td></td>
<td>Signposts</td>
</tr>
<tr>
<td></td>
<td>Safety</td>
</tr>
<tr>
<td></td>
<td>Emergency access</td>
</tr>
<tr>
<td>Risk</td>
<td>How much risk is involved?</td>
</tr>
<tr>
<td></td>
<td>Do you have the skills and competence required to participate safely?</td>
</tr>
<tr>
<td>Safety</td>
<td>Do you have the skills?</td>
</tr>
<tr>
<td></td>
<td>Appropriate first aid experience</td>
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<tr>
<td></td>
<td>First aid supplies</td>
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<tr>
<td></td>
<td>Evacuation plan</td>
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<tr>
<td></td>
<td>Risk management plan</td>
</tr>
<tr>
<td></td>
<td>Communications</td>
</tr>
<tr>
<td>Remoteness of Location</td>
<td>How far will you be from medical help or other assistance?</td>
</tr>
<tr>
<td></td>
<td>What form of communication will you use?</td>
</tr>
<tr>
<td></td>
<td>Evacuation procedures</td>
</tr>
</tbody>
</table>
APPENDIX D

Partner Activity:

In pairs, you are to research current recreational activities available to the public at Lake Pertobe. List at least 5 activities, who they are targeting, how the risks are evaluated and managed, and the changes that have occurred in these recreational activities over time as a result of risk consideration. Your findings are to be neatly structured on a sheet of butcher’s paper, before being presented to the class.
APPENDIX E

TYPES OF OUTDOOR ENVIRONMENTS – QUIZ!

1. Name 4 typical characteristics of a wetlands ecosystem.
   i.  
   ii.  
   iii. 
   iv.  

2. What is the major reason for human interaction in coastal environments?

   ________________________________

3. What is the biggest threat to the survival of forest ecosystems?

   ________________________________
4. Name 5 well known Alpine environments throughout Australia:
   i. _______________________________________________________
   ii. _______________________________________________________
   iii. _______________________________________________________
   iv. _______________________________________________________
   v. _______________________________________________________

5. What is a major cause of erosion in coastal ecosystems?

   _______________________________________________________

6. Discuss the interrelationship between abiotic and biotic elements of a grassland environment.

   _______________________________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

7. What percentage of beaches are privately owned around Australia’s coast?

   ____________________________ %
8. Name 3 species of wildlife you would expect to see in a desert environment. What makes these species unique?

   Species i. ______________________________
   Species ii. ______________________________
   Species iii. ______________________________

   Why are they unique? ________________________________________________________________
   __________________________________________________________________________________

9. Which type of environment is most commonly used for educational purposes?
   ____________________________________________________________

10. List are 5 common recreational activities that are available in alpine environments.

    i.   __________________________________________________________
    ii.  __________________________________________________________
    iii. __________________________________________________________
    iv.  __________________________________________________________
    v.   __________________________________________________________
VCE Outdoor and Environmental Studies – Unit 1

Assessment Task 2 – Accessibility Plan for Lake Pertobe

Your task is to develop a plan that is to be implemented by the Warrnambool City Council to increase accessibility to Lake Pertobe and its recreational activities between 2012 and 2016. While Lake Pertobe is already a popular local attraction, the numbers of visits by both locals and tourists have plateaued in the last 5 years. You are given the responsibility of devising a plan that will increase accessibility to the area for people of all backgrounds, ages, sex, and physical abilities. You are to consider all factors affecting accessibility to outdoor environments that have been discussed in class, including: distance, cost, motivation, mobility, risk, regulations, physical environments, safety, weather etc. Additionally, your plan must include a strategy for increasing accessibility for the following specific groups of people:

- Elderly (65 years +)
- Children (primary aged)
- Adolescents
- People of low socioeconomic status
- People in wheelchairs
- Mothers with prams

You are required to develop your plan in a Word document before converting the document to a pdf format as your official ‘Increasing Accessibility Plan for Lake Pertobe from 2012-2016’. The presentation and structure of your assignment is up to you, however all criteria listed below must be covered.

Word limit: 1,000 words
<table>
<thead>
<tr>
<th>Assignment Criteria</th>
<th>Excellent (5)</th>
<th>Very Good (4)</th>
<th>Good (3)</th>
<th>Satisfactory (2)</th>
<th>Below Satisfactory (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates understanding of the factors affecting accessibility through a range of strategies developed. Strategies are realistic, achievable, and target a diverse range of factors.</td>
<td></td>
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</tr>
<tr>
<td>Strategies are developed to increase the access of: Elderly, children, adolescents, people of low socioeconomic status, disabled people in wheelchairs and mothers with prams.</td>
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<tr>
<td>Plan demonstrates evidence of thorough research – strategies to be implemented are true to the current situation of Lake Pertobe.</td>
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<tr>
<td>Information is well presented, with clear structure and cohesive links being made.</td>
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<tr>
<td>References</td>
<td></td>
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</tbody>
</table>

Comments: -

__________________________________________________________________________________________

Students Name: ___________________________ Mark: ______/25 Grade: A+ A B+ B C+ C D+ D E+ E+ U/G
References:


