







Introduction

At the heart of all learning is the way we process our experiences, especially our critical reflections on our experiences. This module introduces experiential education as a key approach to student-centred learning for a sustainable future.

Experiential learning engages students in critical thinking, problem solving and decision making in contexts that are personally relevant to them. This approach to learning also involves making opportunities for debriefing and consolidation of ideas and skills through feedback, reflection, and the application of the ideas and skills to new situations.

Objectives

-  To appreciate the value of student-centred experiential learning;
-  To analyse the elements of experiential learning;
-  To develop guidelines for teaching through experiential approaches; and
-  To relate experiential learning to education for sustainable futures.

Activities

1. Characteristics of experiential learning
2. The experiential learning process
3. Analysing the experiential learning process
4. Understanding the importance of debriefing
5. Reflection

References

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Internet Sites

- [Association for Experiential Education - USA](#)
- [Community Development Resource Association \(CDRA\) - South Africa](#)
- [Council for Adult and Experiential Learning - USA](#)
- [Experiential Learning on the Web](#)
- [European Institute for Outdoor Adventure Education and Experiential Learning](#)
- [Experiential Education and Adventure-Based Learning - Germany](#)

Credits

This module was written for UNESCO by Bernard Cox, Margaret Calder and John Fien using material written by Barry Law in *Learning for a Sustainable Environment*, (UNESO - ACEID).





Begin by opening your [learning journal](#) for this activity.



Q1: Briefly describe a recent experience from which you learnt something significant.

Q2: What did you learn from the experience?

Q3: Do you think that you will remember this for a long time? Why or why not?

We learn from our experiences. In fact, there is no other way we can learn. For example, a child might learn to be wary of touching a stove after burning her fingers on a hot plate that had been used recently.

As we get older, our learning experiences become less 'concrete'. Indeed, many of the experiences from which we learn can be quite abstract, such as listening to a lecture or watching a television programme. However, at the heart of learning is an experience of some kind - and our, most importantly, reflection on it.



Reflection

Reflection is the key to learning from experience because it consciously focuses our attention on what we have learnt and thus consolidates it.



Q4: Indicate why you think this module began with three questions. What thinking skills did you use to answer them?

Q5: How would you define experiential learning at this stage of the module? [Include its purpose and what you think might be involved].

This will be your initial definition. You will have an opportunity to reflect on this definition - and your learning about experiential learning - as you progress through this module.





Begin by opening your [learning journal](#) for this activity.

This activity is based on a computer game called 'Possum Picnic'. The game has been designed to illustrate the relationship between experience and reflection in the experiential learning process.

The game might be used with a class when teaching the topic of 'introduced species'. The example in this game comes from New Zealand where possums are a very big problem.

Possums were brought to New Zealand from Australia, initially to establish a fur industry. However, once this industry collapsed and possum hunting ceased, possum numbers increased dramatically. Possums thrive in the forests of New Zealand where there is an abundant food supply and no natural predators (as there are in Australia). They now number in the many millions and are considered a major environmental pest in New Zealand's forests.

Possums have a very big appetite, and while they eat a wide range of foods, they just love to eat the soft leaves in the forest canopy. In fact, possums eat these leaves faster than they can regrow.

The bare trees and plants in the forest that result are a sign of an imbalanced and dying ecosystem.



Learning from Experience I

The Possum Picnic game is a simulation (or simplification) of the impact of possums in the forests of New Zealand. It is an educational game that students can play to experience some of the problems caused by introduced species.

Play the [Possum Picnic](#) game.

As you play the game, think about an example of introduced species that may have become a pest in your country and which could be used in an adaptation of this activity.



Interaction

Q6: Describe the damage done to the forest during the game.

Play the Possum Picnic game again (maybe several times) and see if you can reduce the rate of forest destruction.






Journal

Q7: What strategies did you learn work best for reducing the rate of forest destruction?



Learning from Experience II

Forest managers in New Zealand have been working on this problem for many years and have developed a number of strategies to control possums and limit their effects. These include:

-  Placing poison baits to kill possums
-  Setting traps to catch possums
-  Putting a special metallic band around trees to stop possums climbing.

These three strategies are included in a second version of the 'Possum Picnic' game.

Play the second version of [Possum Picnic](#).

Q8: Describe the damage done to the forest by the possums this time.

Play the game again (maybe several times) until you can achieve a sustainable balance in the forest.

Q9: What have you learnt from playing the two versions of 'Possum Picnic'?



Interaction





Journal



Reflecting on the Learning Experience




Reflecting on the game is very important to learning. Reflection helps us process the experience and make generalisations.

The next two tasks invite you to reflect on 'Possum Picnic' in two ways;

-  Its value as a learning experience for students.
-  Its value as a teaching strategy.



Q10: Use your experience in 'Possum Picnic' to identify what students could learn from the game about:

-  The possible effects of introducing a new species into an ecosystem.
-  The effects of trying to protect the ecosystem.
-  Effective approaches to sustaining the future of this ecosystem.

Q11: On the basis of your experience in the game, identify some advantages and disadvantages of using experiential learning in comparison with more teacher-centred approaches.

Q12: Summarise your reflections on the experience of playing and learning from 'Possum Picnic'.

Q13: Use the following definition to identify the main elements of experiential learning.

“ Experiential learning is a process that develops knowledge, skills and attitudes based on consciously thinking about an experience. Thus, it involves direct and active personal experience combined with reflection and feedback.

Experiential learning is personal and effective in nature, influencing both feelings and emotions as well as enhancing knowledge and skills. ”

Q14: Revise your original definition of experiential learning (Question 5) so that it includes these elements.

Q15: How could you use 'Possum Picnic' with a class you teach? What introduced species might be more relevant to use in your country?









Begin by opening your [learning journal](#) for this activity.

Experiential learning is often thought of as a learning cycle with experience and reflection being the first two phases.

The idea of experiential learning as a cycle was suggested by prominent educationalists such as Jean Piaget, John Dewey and David Kolb.

The experiential learning cycle involves four phases:

-  Experience: Engaging in an experience in a particular situation and then observing its effects.
-  Processing the experience: Understanding what we did, thought and felt during the experience.
-  Generalising: Understanding the general principle (called a 'generalisation') behind the relationship between the action and its effects.
-  Applying: Applying the principle or generalisation to a new situation.



Identify the [four phases](#) in the experiential learning cycle.



Q16: Reflect on 'Possum Picnic' and identify what you did in each of the four phases of the experiential learning cycle.

Q17: Suggest some guidelines for helping students learn in each of the four phases.

See some [suggested guidelines](#).








Guidelines for Experiential Learning




Stages

1. Experiencing




Guidelines for Teachers

-  Set up the activity and provide clear instructions.
 -  Disclose any risk.
 -  Provide a safe environment on both a physical and emotional level.
 -  Answer clarification questions before and during the activity.
 -  Move around the class actively directing learners, working co-operatively with them, and allowing self-directed learning to take over.
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2. Processing

-  Make sure you have provided interactions between learner/learner, learner/content, learner/facilitator and facilitator/content. Think of questions you can ask.
 -  Observe how students respond and act during the experience.
 -  Allow for students reflection time within the activity.
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3. Generalising

-  Ask individual students to describe what they have experienced and to analyse the implications for themselves.
 -  Provide feedback in a positive and open way.
 -  Ask students to identify what their concerns are rather than tell them what you expect.
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4. Applying

-  Ask students to identify ways they can use what they have learnt.
-  Lead students to identify any changes they could make to their behaviour after considering this experience.
-  Provide further opportunities to apply or discuss their learning with others.



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Begin by opening your [learning journal](#) for this activity.

Reflection is part of the debriefing process. Debriefing is the name given to what teachers do in class to help students process the information and make generalisations from their experiences.

Debriefing is an important phase of experiential learning because it helps students to:

- Learn through reflecting on what they have done;
- Consolidate their concepts and generalisations about the topic being studied through the process of reflection and with guidance by their teachers; and
- Apply what they have learnt in new situations.



Debriefing from 'Possum Picnic'

Question 15 in your learning journal was the beginning of a debriefing on the use of experiential learning as a teaching strategy. It asked you to think of a teaching situation when it might be possible to use 'Possum Picnic'.

'Possum Picnic' need not be played on the computer. For example, it can be played in an open space outside the classroom with students taking on the roles of trees and possums in the first round, and additional roles as the trapper, the poisoner who places baits, and the forester who bands trees in the second round.

Read a [description](#) of how to play 'Possum Picnic' with students in an open space.



Q18: What grade level and school subject or topic would be an appropriate place to play 'Possum Picnic', or an adaptation based on an introduced species that has become a pest in your country?

Q19: What questions would you ask to help students reflect on what they had learnt from 'Possum Picnic' or your adaptation?

Q20: How would you help your students make generalisations from their learning during 'Possum Picnic' or your adaptation?

Q21: How could you help students apply the knowledge learnt from 'Possum Picnic' or your adaptation to another topic? What teaching method could you use?



The Possum Picnic Game - Open Space Version

Preparation

Facilitator marks out an area using boundary markers (approximately 15 x 15 metres).

Two people are designated as possums.

The rest of the group are all trees, able to run anywhere they like to escape the possum - but must stay inside the boundary markers.

Playing the Game

The two possums are let loose among the trees and, holding hands, start running around tagging trees with their free out-stretched hands.

Tagged trees then 'die' and join the possums. Still holding hands in one big line, the possum group moves forward trying to catch the remaining trees. The two people on the end of the line are the only two possums able to tag trees.

As the line gets bigger and bigger and covers a larger area the trees decrease until none are left.

Processing the Experience

Ask the group to discuss:

- Why are the possums so destructive?
- What will happen if possums are not controlled?

Possible answers may indicate a lack of control - either by predators of the possum or by humans.

Ask members of the group how they might control the possum. Possible options include introducing:

- Trappers
- Shooters
- Poison baits
- Tree protection

Playing Again

Play the game again but this time introduce one of the above measures.

To do this a person who is designated as one of the above control measures is to run around the boundary markers. At a predetermined point, he/she enters the playing area and tries to reduce the possum numbers in the following ways:

- If the trapper tags a possum, he/she 'dies' and rejoins the game as a tree.
- The poisoner places small white disk in the playing area. If possums stand or run over the disks they 'die' and re-join the game as trees.
- The shooter throws a small ball at a possum. If it hits the possum, he/she 'dies' and re-joins the game as a tree.
- The forester places a small band on a tree's arm. This protects the tree from being caught by the possums.

Stop the game after 2-3 minutes to see what effect the measure has had.

Start playing again by introducing a second measure.

Stop, process, introduce a third measure, and so on.

Processing the Experience

Ask the group to discuss:

- What roles do the trapper, shooter, forester and poisoner play?
- How much energy do they expend in running around the boundary?
- Is that a necessary role? Why?



What are some of the problems we face with introduced species?



What would be effective ways of protecting forests for the future?



Print



Journal

Begin by opening your [learning journal](#) for this activity.



Completing the module: Look back through the activities and tasks to check that you have done them all and to change any that you think you can improve now that you have come to the end of the module.



Journal

Q21: Reflect on experiential learning

- I was surprised to find that . . .
- I really like . . .
- I did not like . . .
- I want to learn more about . . .

Q22: To what extent would you like to use experiential learning approaches in your teaching?

Q23: Identify some skills that you have that could be useful for teaching through experiential approaches.

Q24: Identify some skills that you have that may need to be developed further in order to use experiential approaches effectively.

Q25: How does experiential learning relate to education for a sustainable future?

Q26: What are the distinctive contributions that experiential learning can make to education for a sustainable future?

