

Introduction

The Units of Work created to support the Ollie Saves the Planet Program are housed within the Educators section on the CD ROM and Website. The Units of Work supplement learning from the CD ROM and provide a curriculum structure for teachers to plan classes based on these Units of Work.

These units are integrated with the activities found on the Ollie Saves the Planet CD ROM and Website and include the following:

- Unit 1 Sustainability
- Unit 2 Waste (1)
- Unit 3 Waste (2)
- Unit 4 Water
- Unit 5 Energy
- Unit 6 Air
- Unit 7 Biodiversity

Process of Learning

“The development of thinking and problem solving skills is an important objective of education for a sustainable future, especially given the urgency of problems facing the world today. These skills can be taught and enhanced through enquiry learning”.
(UNESCO, Teaching and Learning for a Sustainable Future, 2002)

The Units of Work are designed on the enquiry learning process and incorporate a range of forms - including analysis, problem solving, discovery and creative activities - both in the classroom and in the community. Throughout the Units of Work, students are initially presented with relevant background data to enable them to explore a local issue. The investigation of a local issue encourages students to process the data they are working with in order to reach their own conclusions.

Problem solving provides students with an opportunity to practice the skills needed to find solutions to the local issues that concern them. This helps to develop the important citizenship objectives of learning for a sustainable future and integrates skills - for both students and teachers - of using experiential and enquiry-based strategies. It also integrates skills in the planning of values clarification and values analysis with the possible solutions, so students can take action to help work towards a sustainable future.

The Units of Work will fit into a number of teaching styles, enabling teachers with access to only 2 or 3 computers to have all the students working on the unit simultaneously (See below for further details on classroom set-ups). The units lend themselves to student directed learning and the role of the teacher in the units is to facilitate the learning process.

How to Use the Units of Work

Each Unit of Work is structured in the following way:

Section A: Background Information

This section will provide background information for the Unit of Work. The information will allow teachers to plan and organize learning opportunities for their class and provide suggested ways to present the information in the Unit of Work. The Background Information is comprised of:

- Part 1: Goals & Objectives
- Part 2: Links to Curriculum
- Part 3: Preparation Checklist
- Part 4: Assessment
- Part 5: Locating information on the Ollie Saves the Planet CD ROM
- Part 6: Resources and Links

Section B: Unit of Work

Each Unit of Work is designed to promote enquiry-based learning and encourage students to change behaviour to reduce their impact upon that particular issue. The Unit's of Work are designed so that:

1. Teachers lead *Part 1: Introduction* and *Part 2: Scene Setters* to provide students with the skills and knowledge to explore a local issue.
2. Having completed the Introduction teachers are encouraged to facilitate the learner centred process provided from *Part 3: Identifying a Local Issue* through to *Part 8: Reflection*.

Each Unit of Work is comprised of:

- Part 1: Introduction
- Part 2: Scene Setters
- Part 3: Identifying a Local Issue
- Part 4: Investigate
- Part 5: Vision
- Part 6: What Can We Do?
- Part 7: Lets Do It?
- Part 8: Reflection
- Part 9: Additional Activities
- Part 10: Appendix
 - Blooms Taxonomy, Multiple Intelligence Activity Grid
 - Integrated Unit Planner

Alternative Classroom Set-ups

Alternative One – Most work completed within a computer room

One way to use *Ollie Saves the Planet* is to have the students complete only the activities on the CD. The CD contains activities and projects for students to complete in each section. There are many info screens to assist in research and some suggested websites to refer to. Teachers should consider completing the prior learning activities in *Part 1: Introduction* and *Part 2: Scene Setters* with the students before beginning a topic on the CD. Student's learning experiences can be brought together at the end by doing the concluding activities in *Part 8: Reflection*.

Alternative Two – Alternating between a computer room and classroom

Each unit of work provides many additional classroom activities that support the activities on the CD. Book your students into the computer room to complete the CD activities. Use the additional activities in one of the following ways:

1. Select activities and have all students work together through these activities.
2. Set up activity stations with different activities around the classroom and have students progressively work through each activity.
3. Allow students to select a number of activities offered in each unit of work and assist them to set up and complete the activities.

Alternative Three – Complete work in a classroom that has several permanent computers

Set up activity stations with different activities around the classroom and have students progressively work through each activity. The three or four computers become one of the activity stations. If more computer time is required to complete the projects, consider sending students to the library computers or completing the projects without using a computer. For some units of work you may like students to choose which activities they do.

Links to Curriculum

These Units of Work have been developed for teachers at Level 3, 4 and 5 in Australia. Although they are based on the Australian school curriculum they are still suitable for educators in community groups or parents to use to facilitate learning in the area of the environment.

“Teaching about sustainability emphasises critical and creative thinking, problem solving, decision making, analysis, co-operative learning, leadership, and communication skills. As a result, it is a very good way of achieving educational objectives without adding to the problem of curriculum overload”.

(UNESCO, Teaching and Learning for a Sustainable Future, 2002)

Units of Work Overview

Ollie Saves the Planet Program, Australia

Draft 1, July 2002.

The Units of Work have been designed so they can be *integrated* into the existing curriculum rather than creating a new subject area. The Units of Work should be viewed and used as *interdisciplinary* in nature and therefore meet the needs of the following subject areas:

- Science
- English
- Maths
- Geography
- Social Science
- Information Technology
- Art
- Personal Development: group work and critical thinking.

Each Unit of Work will have a large language component and will set the scene for using the Ollie Saves the Planet CD ROM, working on the units, exploring the internet and designing web pages.

A range of Additional Activities will be included at the end of each Unit of Work. This section is a useful resource for teachers keen to explore the particular issue further or provide additional learning opportunities for the students.

Preparation Checklist

Use this checklist as a guide to ensure that the students' involvement in actions to help the environment meet local regulations and all health and safety guidelines.

- Does the Principal or School Council need to be informed prior to the activity?
- What information may they require?
- Do local authorities, landowners, neighbours, etc need to be informed or to be part of the process?
- Is permission from parents required?
- Have all health and safety issues been addressed?
- Are the relevant health and safety issues fully understood by all students?
- Do students understand and comply with the school's code of conduct?
- Do you need further advice in setting up the projects?
- Do you need to discuss any issues with a second educator?

Assessment

Each Unit of Work contains examples of where teachers can assess the students' understanding and interpretation of the material being explored. A Blooms Taxonomy and Multiple Intelligence Activity Grid has been provided for each Unit of Work as a guide to the types of learning that aim to take place during each activity. This could be used as a guide to assessing the learning achieved by students throughout the Unit of Work.

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Ollie Saves the Planet Program, Australia

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“...assessment (is) an integral part of students' day-to-day schooling rather than a series of end-of-course tests. This goal is especially important in education for a sustainable future because of the wide range of objectives concerned with knowledge, skills, values/attitudes, and action”.

(UNESCO, Teaching and Learning for a Sustainable Future, 2002)

Each Unit of Work provides suggested assessment pieces that take place throughout the learning process rather than at the end of the Unit in the form a written test. Use these as an ongoing guide to gauge the students' level of understanding and knowledge of the Unit of Work.

Curriculum Standard Frameworks (CSF)

To further enhance the usability of the Ollie Saves the Planet Program, links will be made to the Curriculum Standard Framework for different states around Australia.

To ensure that these links are up to date and in line with the current Curriculum Standard Framework, this information will be posted on the Ollie Saves the Planet Website so that it can be updated whenever needed.

Go to the Educators section at www.olliesworld.com/planet/aus to view these links.

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