

Appendix H - Sample Project Learning Contract

PROJECT LEARNING CONTRACT

Name: *Ella Thomas*

Class: *G15 Environmental Science B*

Name of Enterprise Project: *Co-op Green & Clean*

Advising and Assessing Teacher: *Amal Scheweti*

Project time: *10 weeks*

Signed: *Ella Thomas*

Signed: *Amal Scheweti*

Sample

Agreed Learning Outcomes — Subject Curriculum

As members of the co-op Clean & Green we agree to achieve the following learning outcomes from modules 2 & 4 in our Environmental Science L.D. course:

- a) Identify the basic chemicals used in cleaning agents.
- b) Describe and categorise the molecular make-up of the chemicals compounds listed in module 2.
- c) Explain and rate their ecological impact upon:
 - * soils
 - * water: fresh and marine
 - * fauna and flora
 - * human beings
- d) Illustrate two entry and exit food chain relationships for two of the categories above.
- e) Summarise the key research on the influence of domestic chemical waste on genetic change in adjacent urban waterways, as set out in the reading for module 4.
- f) Demonstrate basic chemical analysis techniques for soluble chemical compounds listed in unit 4, excepting the three acidic compounds.
- g) Discriminate between low, medium and high-risk concentrations in soluble chemical compounds listed in module 4.
- h) Explain the theories of leaching and residual concentration.
- i) List the standard neutralising chemical combinations and demonstrate correct formulae for 3 combinations chosen by the teacher.
- j) Describe the gaps and conflicts between municipal regulations governing effluent management and state environmental laws governing the discharge of cleaning agents through household water outlets.
- k) Describe practical ways to reduce the detrimental impact of domestic cleaning agents that the average householder can adopt.
- l) List four alternative, non-commercial cleaning agents which are less detrimental; use chemical compound tables and ecological cause and effect techniques to justify your choice.

Agreed Evidences — Subject Curriculum

I will submit the following evidences for assessment to prove that I have achieved the agreed learning outcomes above:

- a) Labels from our products which detail chemicals and safe soluble levels.
- b) Labels from our products which also warn customers of the detrimental side-effects of our products on:
 - * soils
 - * water, fresh and marine
 - * fauna and flora
 - * human beings
- c) The free 'Down the Drain' brochure, which we will circulate to local households (as an insert in the Conningham Express). It will be a six-page brochure detailing food chain relationships and the State Environmental Bureau's findings on residual concentration and genetic changes to North West Bay marine life.
- d) A set demonstration of chemical analysis techniques to be observed at the school laboratories in late June. I have agreed to do two of the tests (one not repeated by other team members) and will be ready to answer questions.
- e) A newspaper article by the Co-op will detail the problems arising from differences between municipal regulations and state environmental laws.
- f) Our products will demonstrate less detrimental alternatives available to householders.
- g) Our Project Launch and Final Presentation will be used, along with debriefing sessions, to fill in gaps in knowledge related to these two modules.
- h) We have agreed that two of my peers will assess my contribution in an interview with the teacher.
- i) I will also produce an individual project report to demonstrate my knowledge and establish my contribution to the project.

Agreed Evidences — Enterprise Skills

We have agreed to be assessed against Venture High's Enterprise Skills list.

- a) I have read Performance Indicators for the Enterprise Skills below and agree to present three examples of my applying each in an Enterprise Log Book:
- Generating, identifying and assessing opportunities
 - Identifying, assessing and managing risks
 - Collecting, organising and analysing information
 - Generating and using creative ideas and processes
 - Solving problems
 - Planning and organising
 - Using initiative and drive
 - Recruiting and managing resources
 - Matching personal goals and capabilities to an undertaking
 - Working with others and in teams
 - Being flexible and dealing with change
 - Negotiating and influencing
 - Monitoring and evaluating
 - Communicating ideas and information
- b) As the team's secretary I will present the minutes of meetings, correspondence and other documents as evidence of my enterprising behaviour.
- c) I will present a witness testimony from one team member and one from an AOT.
- d) I would also like my contribution to project events to be assessed.

My Personal Learning Goals

I would like to use the project to:

- overcome my fear of public speaking
- improve my use of database software packages
- learn about careers in Environmental Science.

Resources and Support Agreements

We will have the following to help us complete our project.

- a) We have negotiated to spend two periods a week from our Environmental Science course on this project. This gives us a total of 20 periods to complete the project and assessments.
- b) We have agreed to attend only eight class lessons on modules 2 and 4.
- c) Ms Scheweti will provide us with 14 hours of science advice over the ten weeks.
- d) Ms Lopez (lab technician) has agreed to provide us with 10 hours of technical advice, to be negotiated as we need it.
- e) Ms Lopez has also agreed to accompany us on out-of-school grounds activities for a maximum of 6 hours. Mr Hudson, G15's home class teacher, has agreed to donate 4 hours.
- f) We have agreed that we will negotiate with AOTs to accompany us on other out-of-school grounds activities and this will be approved by Ms Scheweti.
- g) We will have access to Ms Scheweti's teaching and learning materials for modules 2 and 4.
- h) We have agreed that Ms Scheweti will help us to negotiate access to the university laboratories for three two-hour sessions and to arrange for a postgraduate student to be our AOT.
- i) We have negotiated access to the school science laboratory:
Tuesday each week 9.00 to 10.30 a.m.
Thursdays each fortnight 3.00 to 4.30 p.m.
Fridays at lunchtime.
- j) Ms Lopez has agreed to let us use a space in Lab Preparation Room (E6) as our home base.
- k) We have agreed to buy all our own consumable materials, except paper.
- l) We have negotiated access to the school's telephones, photocopier and electric stapling machine (lab area only). All use will be itemised and we will pay the science department half cost.