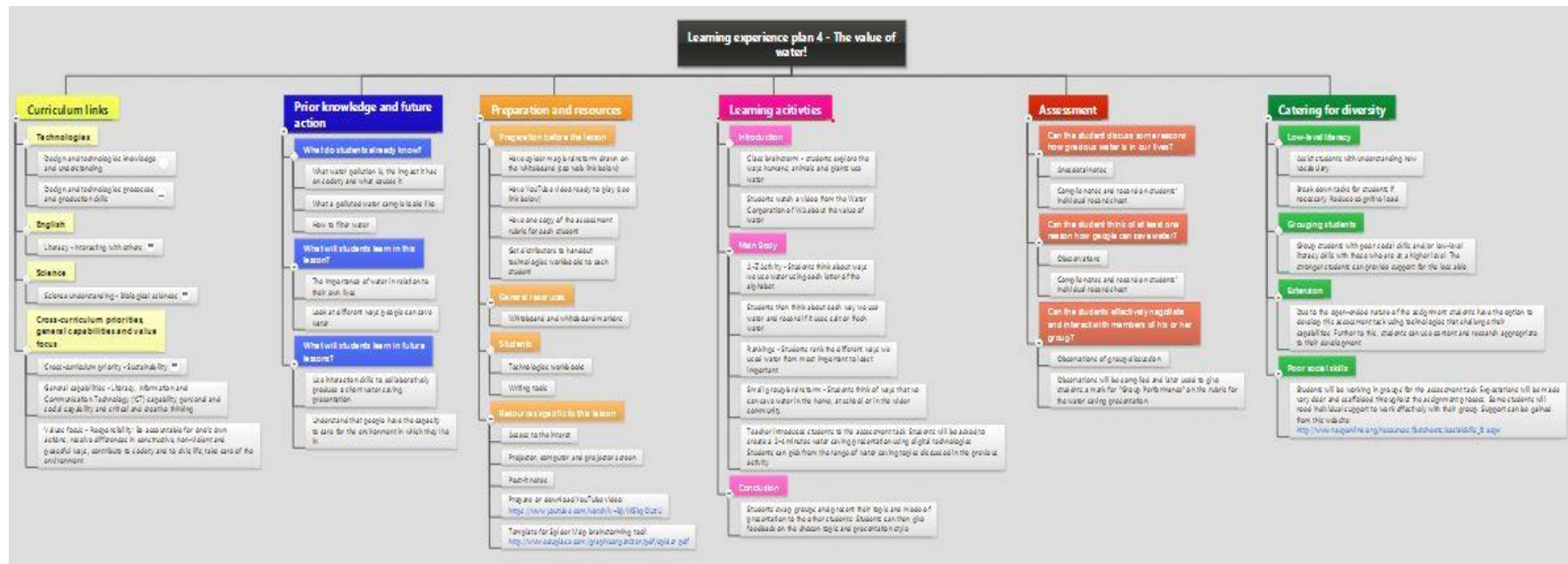
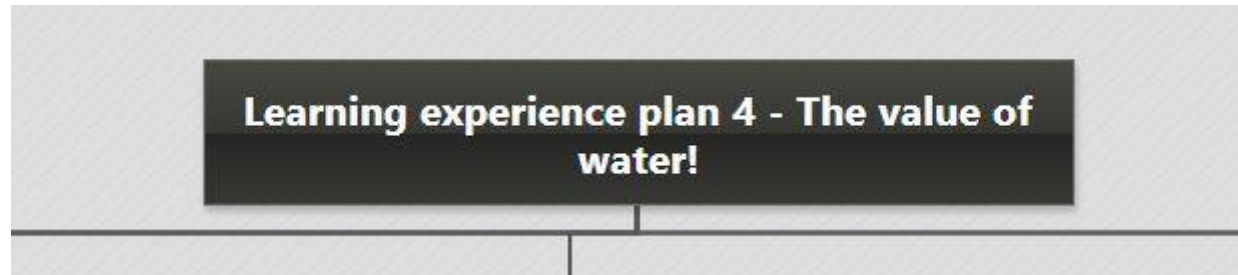


Appendix B – Mind map for learning experience 4 using MindMesiter

To access the mind map below, click on the link here: <http://www.mindmeister.com/444049836/learning-experience-plan-4-the-value-of-water>



Curriculum links

Technologies

Design and technologies knowledge and understanding

Design and technologies processes and production skills

English

Literacy - Interacting with others

Science

Science understanding - Biological sciences

Cross-curriculum priorities, general capabilities and value focus

Cross-curriculum priority - Sustainability

General capabilities - Literacy, Information and Communication Technology (ICT) capability, personal and social capability and critical and creative thinking.

Values focus - Responsibility: Be accountable for one's own actions, resolve differences in constructive, non-violent and peaceful ways, contribute to society and to civic life, take care of the environment

Prior knowledge and future action

What do students already know?

What water pollution is, the impact it has on society and what causes it.

What a polluted water sample looks like.

How to filter water

What will students learn in this lesson?

The importance of water in relation to their own lives

Look at different ways people can save water.

What will students learn in future lessons?

Use interaction skills to collaboratively produce a short water saving presentation.

Understand that people have the capacity to care for the environment in which they live in.

Preparation and resources

Preparation before the lesson

Have spider map brainstorm drawn on the whiteboard (see web link below)

Have YouTube video ready to play (see link below)

Have one copy of the assessment rubric for each student

Get distributors to handout technologies workbooks to each student

General resources

Whiteboard and whiteboard markers

Students

Technologies workbooks

Writing tools

Resources specific to this lesson

Access to the internet

Projector, computer and projector screen

Post-it notes

Prepare or download YouTube video:
<https://www.youtube.com/watch?v=BjvWGkqOUzU>

Template for Spider Map brainstorming tool:
<http://www.eduplace.com/graphicorganizer/pdf/spider.pdf>

Learning activities

Introduction

Class brainstorm - students explore the ways humans, animals and plants use water.

Students watch a video from the Water Corporation of WA about the value of water.

Main Body

A-Z Activity - Students think about ways we use water using each letter of the alphabet.

Students then think about each way we use water and record if it uses salt or fresh water.

Rankings - Students rank the different ways we used water from most important to least important.

Small group brainstorm - Students think of ways that we can save water in the home, at school or in the wider community.

Teacher introduces students to the assessment task. Students will be asked to create a 2-4 minutes water saving presentation using digital technologies. Students can pick from the range of water saving topics discussed in the previous activity.

Conclusion

Students swap groups and present their topic and mode of presentation to the other students. Students can then give feedback on the chosen topic and presentation style.

Assessment

Can the student discuss some reasons how precious water is in our lives?

Anecdotal notes

Compile notes and record on students' individual record sheet

Can the student think of at least one reason how people can save water?

Observations

Compile notes and record on students' individual record sheet

Can the students effectively negotiate and interact with members of his or her group?

Observations of group discussion.

Observations will be compiled and later used to give students a mark for "Group Performance" on the rubric for the water saving presentation.

Catering for diversity

Low-level literacy

Assist students with understanding new vocabulary

Break down tasks for students if necessary. Reduce cognitive load.

Grouping students

Group students with poor social skills and/or low-level literacy skills with those who are at a higher level. The stronger students can provide support for the less able.

Extension

Due to the open-ended nature of the assignment students have the option to develop this assessment task using technologies that challenge their capabilities. Further to this, students can use content and research appropriate to their development.

Poor social skills

Students will be working in groups for the assessment task. Expectations will be made very clear and scaffolded throughout the assignment process. Some students will need individual support to work effectively with their group. Support can be gained from this website:

http://www.nasponline.org/resources/factsheets/socialskills_fs.aspx