Week 4 Workshop

COS10025 – Technology in an Indigenous context project

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Acknowledgement of Country

We respectfully acknowledge the Wurundjeri People of the Kulin Nation, who are the Traditional Owners of the land on which Swinburne's Australian campuses are located in Melbourne's east and outer-east, and pay our respect to their Elders past, present and emerging.

We are honoured to recognise our connection to Wurundjeri Country, history, culture, and spirituality through these locations, and strive to ensure that we operate in a manner that respects and honours the Elders and Ancestors of these lands.

We also respectfully acknowledge Swinburne's Aboriginal and Torres Strait Islander staff, students, alumni, partners and visitors.

We also acknowledge and respect the Traditional Owners of lands across Australia, their Elders, Ancestors, cultures, and heritage, and recognise the continuing sovereignties of all Aboriginal and Torres Strait Islander Nations.

Workshop 3 Check-ins

- Team Agreement (during facilitator meetings) – Discuss with your facilitator and work on the feedback
- Team - Check your names under team/group page in Canvas, if you missed last weeks Workshop, please request to join a team asap
- Meeting time availability – Check facilitators meeting time availability within your week 4 module (Excel sheet)

Workshop 4

The aim of today's class is to focus on Assessment 1 and continue working on individual learning issues within your team and how it builds your research problem.

Activity 1: Re-visit Topic tree with your project

Activity 2: Finalise individual learning issues related to the project

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Assessment #1: Research Report

- Summarise the outcomes of the discovery phase of your project
- Individual assessment
- **Due date:** 2nd Sep 2022, 23:59 pm
- **Marks allocated:** 20% of your final mark
- **Recommended word-count range:** 1500-2000 words
- **Aim of this task:**
  - show ability to find useful resources related to your project
  - show ability to convey this information in a written form

- Is there a template? YES!
- Should I use the template? YES!

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Assessment #1 – Part A – Literature review

Assignment 1 - Research report

The Part A of Assignment 1 is Literature Review

In regard to your project topic, Compare your viewpoints and arguments with your project scope, benefits, deliverables.

You need to find case studies, journals, conference papers, reports and reference those existing studies as an example in regard to

- Project Topic
- Indigenous communities around the world
- Digital connectivity infrastructure for remote Indigenous communication

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Assessment #1 – Part B

You will briefly write about the following

- Project description, goals, and objectives,
- Project outcomes, benefits, and deliverables
- Project management plan

Analyse the project description, goals, objectives, outcomes, benefits, scope, deliverables, and project management plan within your team

You have to write it in your research report as an individual (don't copy/plagiarise).

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Assessment #1 – Part B Learning issue

Part B Learning issue – Define and analyse the learning issue assigned to you in your team based on the challenges found in various community problems.

You have to write about your learning issue as an individual in part B of the report.

In order to define your individual learning issue, you need to be part of a team.

- The team will discuss and allocate their individual learning issue for each individual.
- Each individual will have a separate learning issue (so team members will not duplicate their learning issue).
- If you have 5 team members, then there will be 5 learning issues identified. Please finalise your learning issue by the end of the week 4 workshop.

Each individual will work on finding appropriate pieces of evidence (case studies, reports, papers, journals/conferences, websites) as references to support their learning issue (problem exists within the Township) and explain how this problem will explore digital connectivity infrastructure.

Please keep in mind the project requirements https://swinburne.instructure.com/courses/44367/pages/week-1-introduction-to-the-project?module_item_id=2737483 and address it properly when you are discussing your learning issue.

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Plagiarism

Plagiarism is the action or practice of taking and submitting or presenting the thoughts, writings or other work of someone else as though it is your own work.

Plagiarism includes any of the following, without full and appropriate acknowledgment to the original source(s):

- The use of the whole or part of a computer program written by another person;
- The use, in essays or other assessable work, of the whole or part of a written work from any source including but not limited to a book, journal, newspaper article, set of lecture notes, current or past student's work, any other person's work, a website or database;
- The paraphrasing of another's work;
- The use of musical composition, audio, visual, graphic and photographic models,

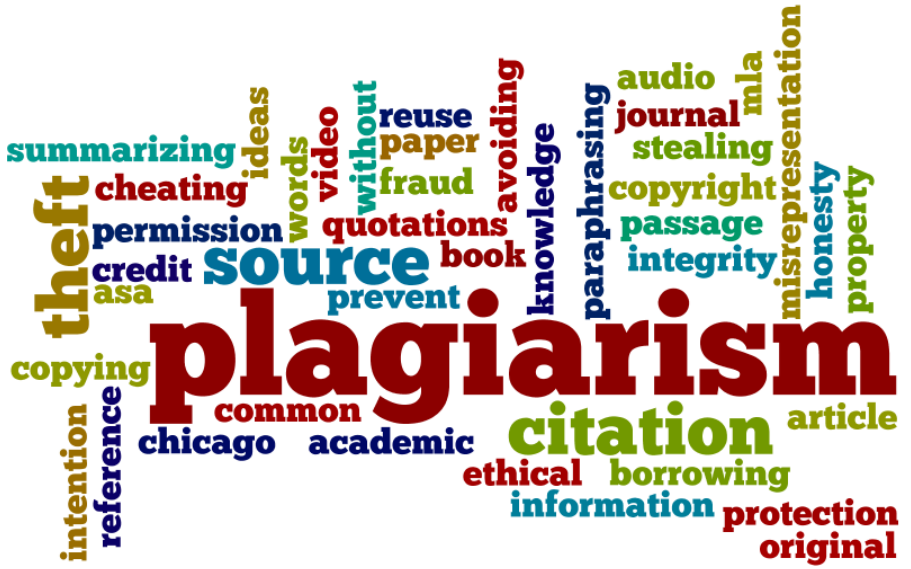

Image: https://savannahstate.libguides.com/plagiarism

Plagiarism

- The use of realia that is objects, artefacts, costumes, models and the like.
- Plagiarism includes the submission of assessments that have been developed by another person or service through contract, tender or online writing services.
- Plagiarism also includes the preparation or production and submission or presentation of assignments or other work in conjunction with another person or other people when that work should be your own independent work.

This remains plagiarism whether or not it is with the knowledge or consent of the other person or people. It should be noted that Swinburne encourages its students to talk to staff, fellow students and other people who may be able to contribute to a student's academic work but that where independent assignment is required, submitted or presented work must be the student's own.

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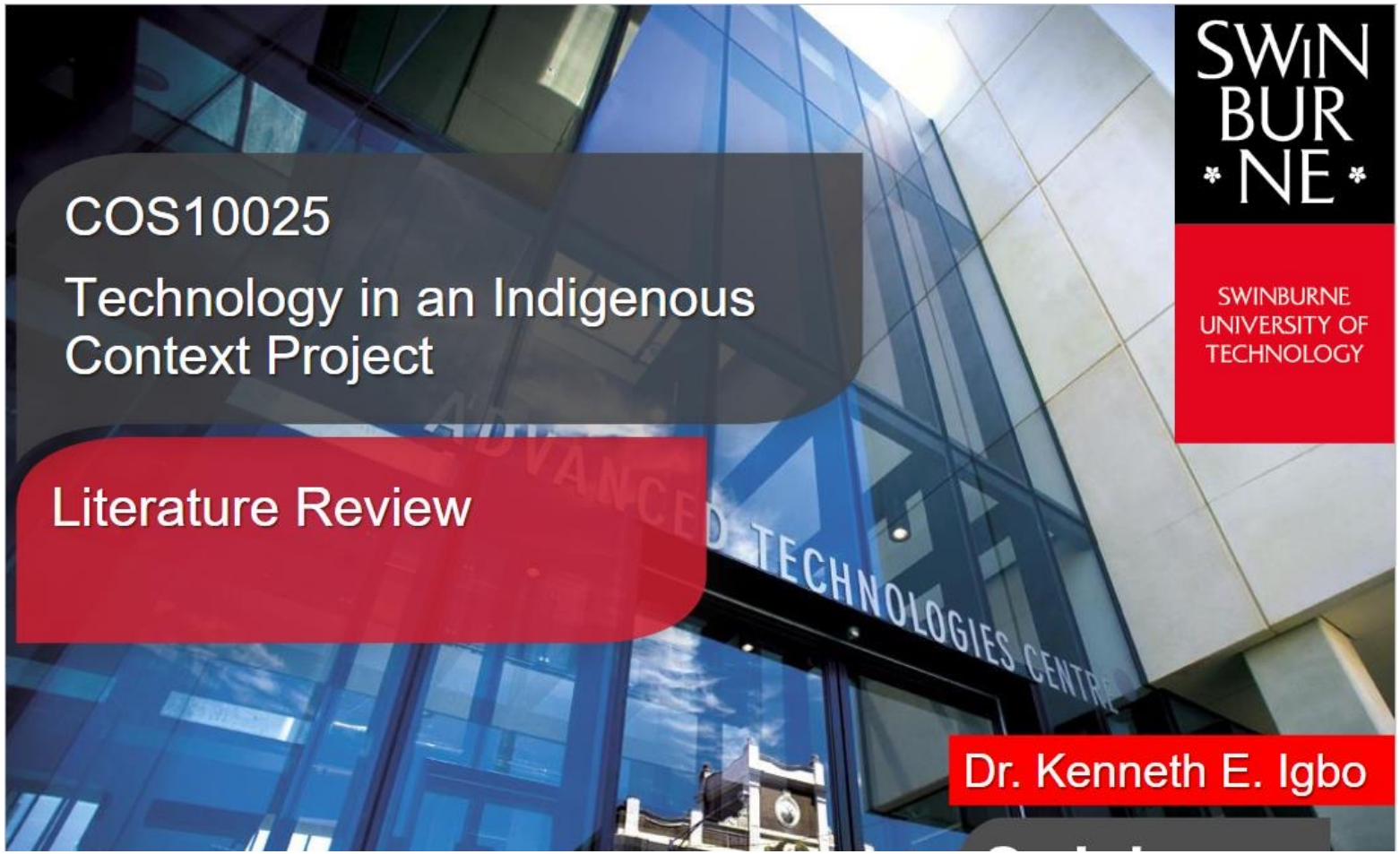
Literature review

Week 3 module of COS10025



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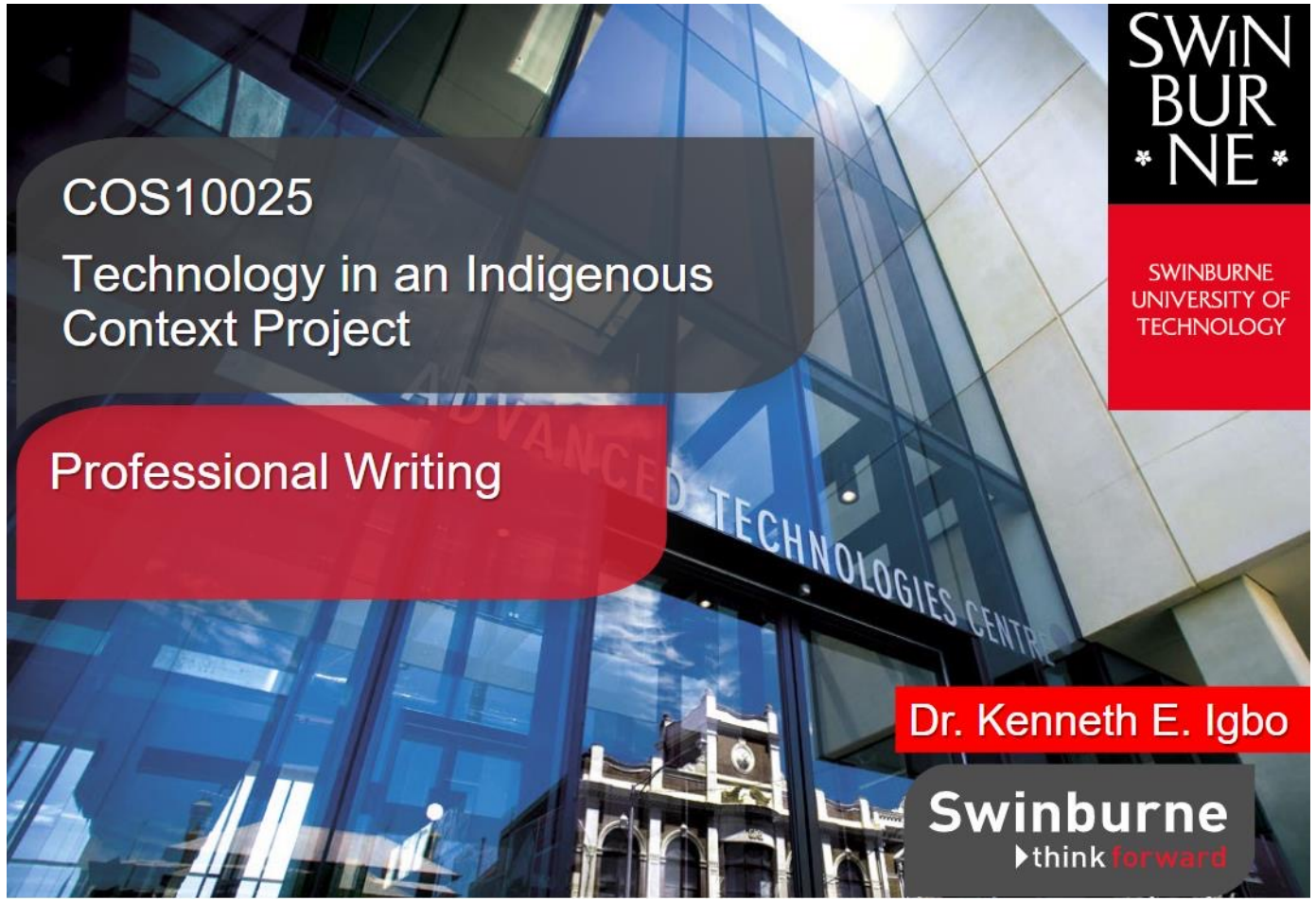
Report writing

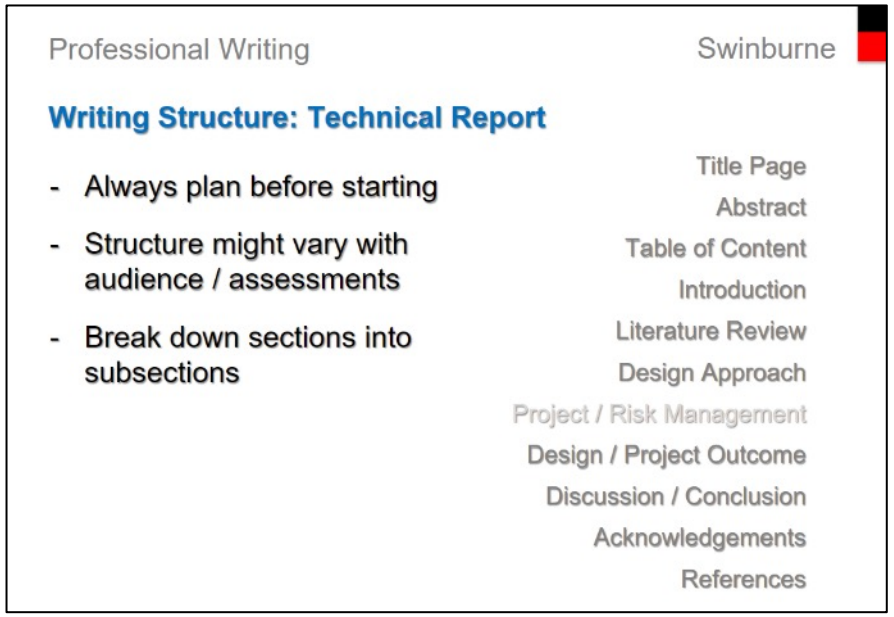
Week 4 module of COS10025 canvas site, includes info on referencing

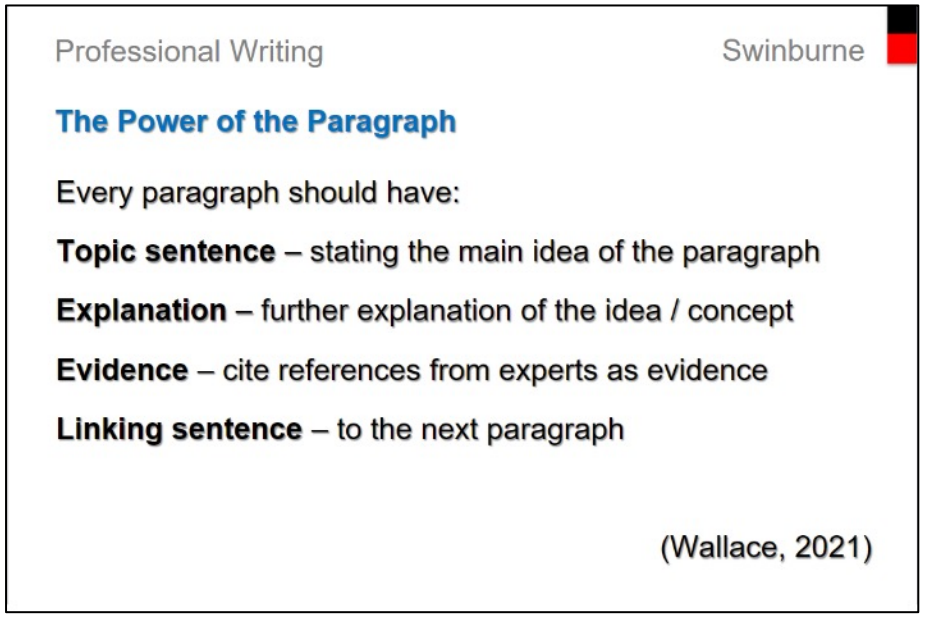


Writing styles

General info:

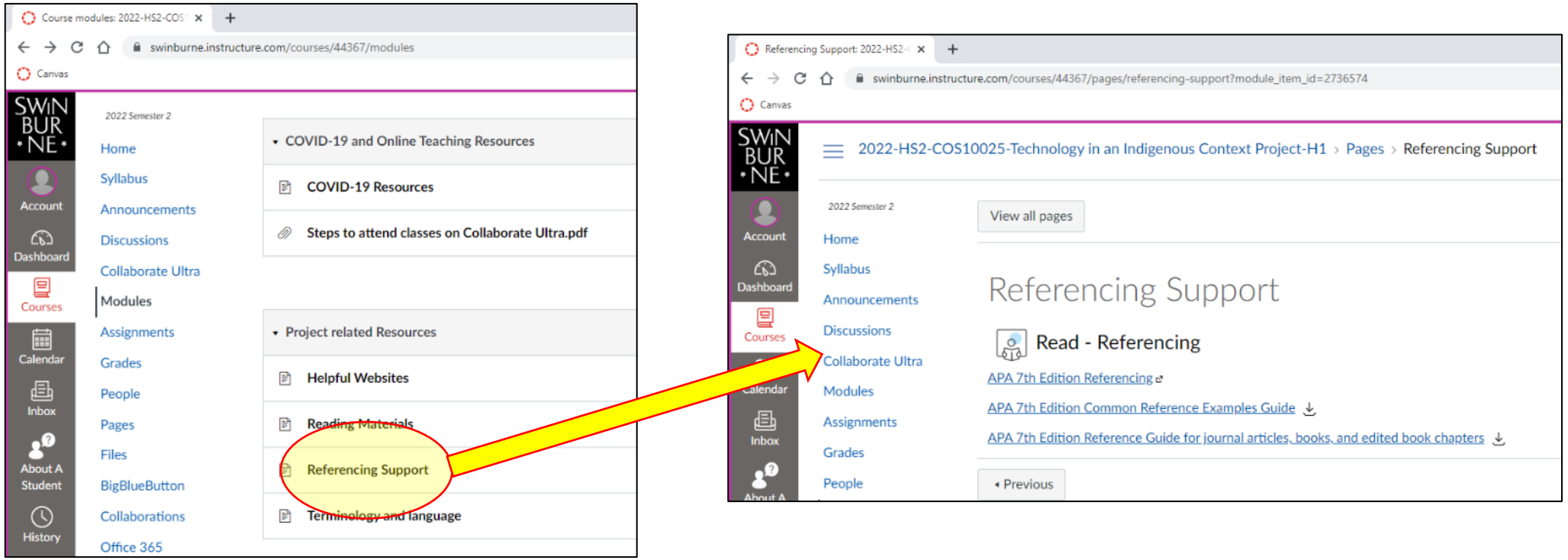
- Use third person tense
- Paragraph structure, length ~4-7 sentences
- One consistent overall topic per paragraph





Referencing

Project related resources in Modules section of COS10025 canvas site



Team/project management

- How well is you team working? Revisit the team agreement
  - What can be done to improve?
  - What might need to change (e.g. meeting times)
  - Be realistic, don't over promise and under deliver
- Self-reflection, should be done periodically
- Peer review:
  - Feedback based on evidence, what was committed to/agreed upon
  - Be respectful, be real
  - Remove emotion

- Project management tools:
  - Can be a fundamental part in achieving a successful outcome
  - Only good if they are actually used properly

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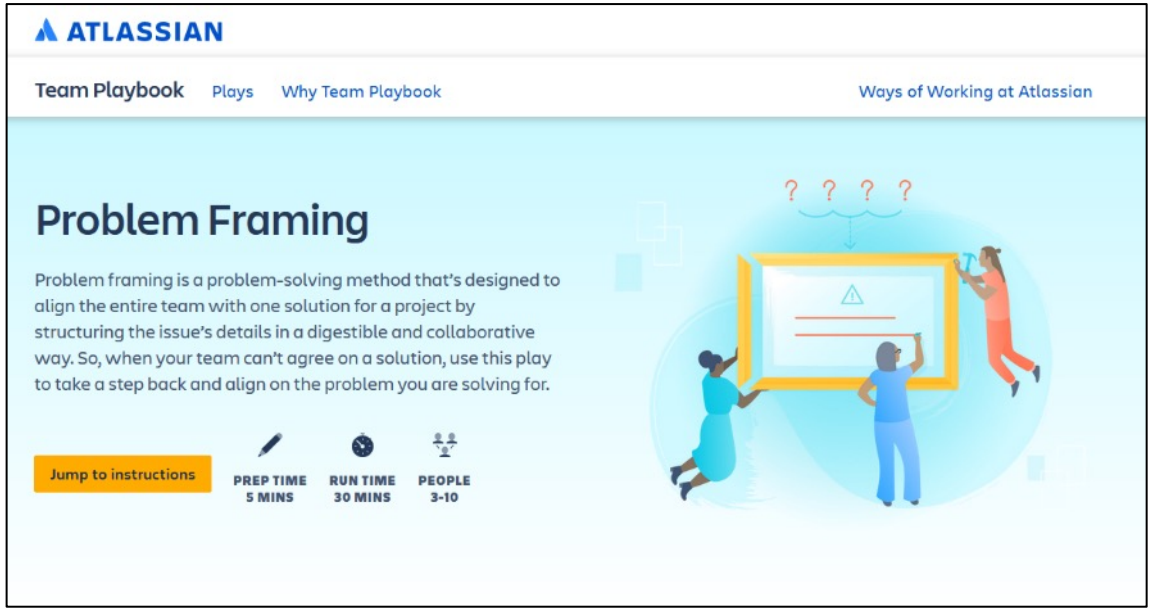
Problem descriptions

- There are many different ways of developing problem statements
- Critical first step in successful problem solving
- Solution independent
- Requires doing background research first!

Number of employees: 8,179 (2022)
Revenue: 2.8 billion USD (2022)



Example #1*

- Problem – define problem in one sentence
- Background - evidence to describe context of the problem
- Relevance - why the problem matters
- Objectives – what will be done to find a solution

*https://in.indeed.com/career-advice/career-development/problem-statement

Problem descriptions

Example #2*

1. Context
2. Issue
3. Relevance
4. Objective

"After exercising, the human body is depleted of hydration and electrolytes from sweating. **(Context)**

The person then needs to decide how best to rehydrate the body and replenish the lost electrolytes. (Issue)

Not all beverages are equally beneficial after exercise. The coach must decide what drink to offer volleyball players during a game or practice. **(Relevance)**

In this experiment, we will investigate the electrolyte content found in standard sports drink compared to what is found in plain coconut water. **(Objective)**

*https://examples.yourdictionary.com/problem-statement-examples.html

Problem descriptions

Example #3*

1. Need
2. Success criteria
3. Constraints

"The Facilities group at Swinburne need an app for their shared bike scheme to replace a manual process. (Need)
This should increase takeup of the program as well as decrease numbers of lost or faulty bikes. (Success criteria)
It needs to be maintainable by the group with limited development skill." (Constraints)

*Dr Nicole Ronald (Swinburne Uni)

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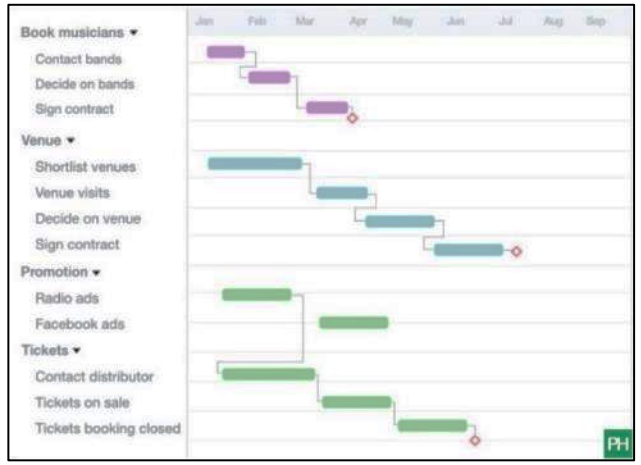
Gantt charts / project timelines

- Need way of project team to keep track of key timelines of project
- What should be included:
  - Key milestones
  - Stages of project
  - Assessments
- Can use tools (e.g. Microsoft Project, Excel, etc.)
- What to avoid:
  - Too much information, impossible to fit on a page
  - Too little information, need some clear details on steps to be achieved
  - Vague timelines, need to be realistic and specific



https://blog.proofhub.com/6-best-gantt-chart-examples-for-project-managers-d78b900c7d9

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Re-visit Topic tree with your project

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1st Activity (re-visit)

Aim : How to construct a Topic tree? (The topic tree concept will allow a team to break down the problem in to sub-topics)

Instructions :

1. Analyse and discuss your project/problem with the allocated Township?
2. List the relevant issues, challenges and needs of the local communities?
3. Order related issues or challenges into small groups?
4. Construct a topic tree for the allocated township?

Teamwork: 10-15 minutes

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Re-visit topic tree with your project

Digital Connectivity Infrastructure for Remote Indigenous Communications

- Analyse current challenges and needs of communication technologies and services for remote Indigenous communications in particular regions
  - Analysing Indigenous communities for remote communication coverage against the population of communities (major cities, regional, remote, very remote).
  - Estimating total communications infrastructure expenditure
- Explore user access, affordability, digital literacy, and Indigenous education rates in relation to the communication infrastructure
  - Analyse user access based on the Indigenous communities' need for day-to-day activities in remote areas
  - Ensure the affordability, digital literacy of typical applications used in an indigenous remote communities
- Access and equity, health and safety, environmental health, appropriateness, affordability, sustainable livelihoods

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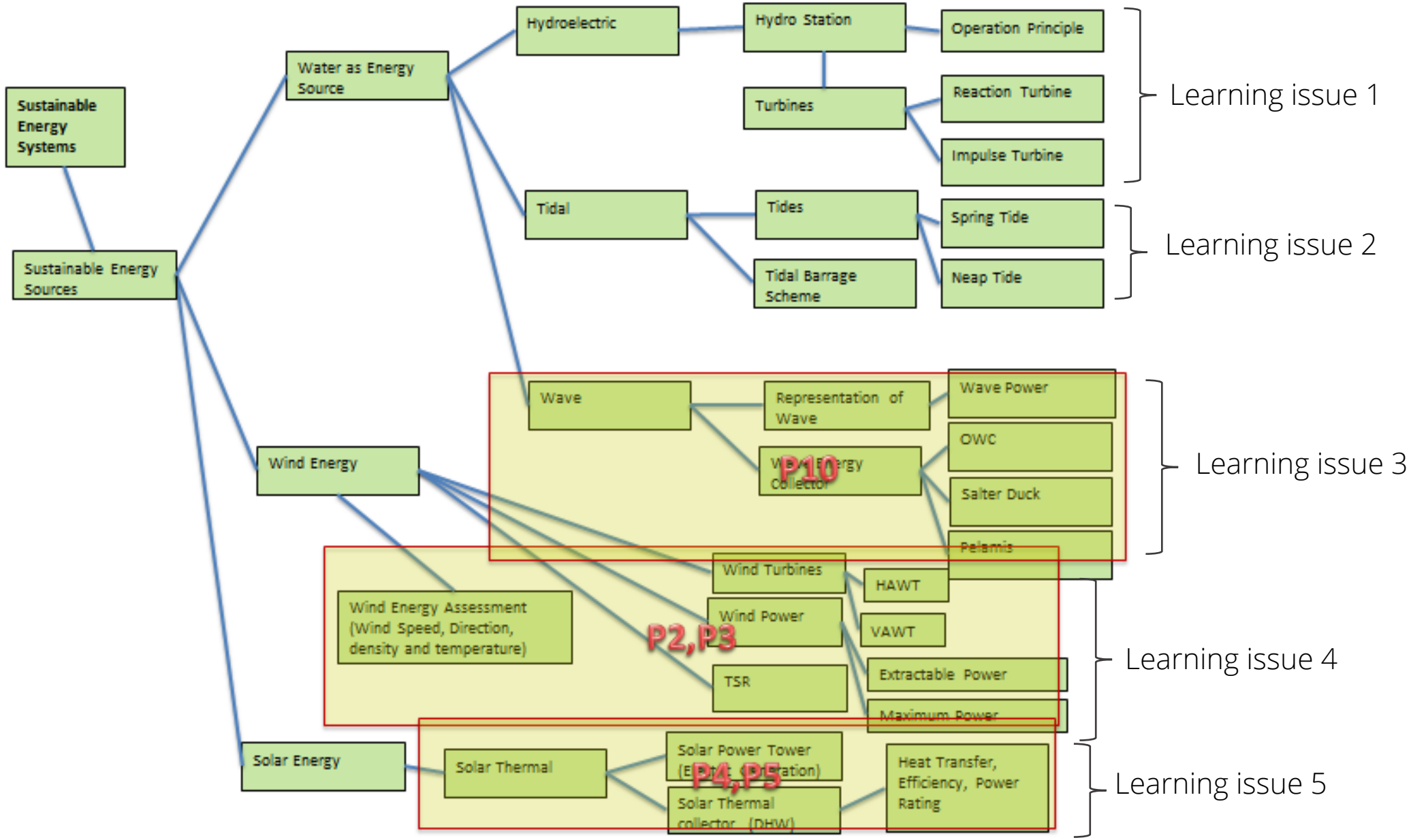
Re-visit Topic Tree with your project



Activity 2

Finalise individual learning issues related to the project

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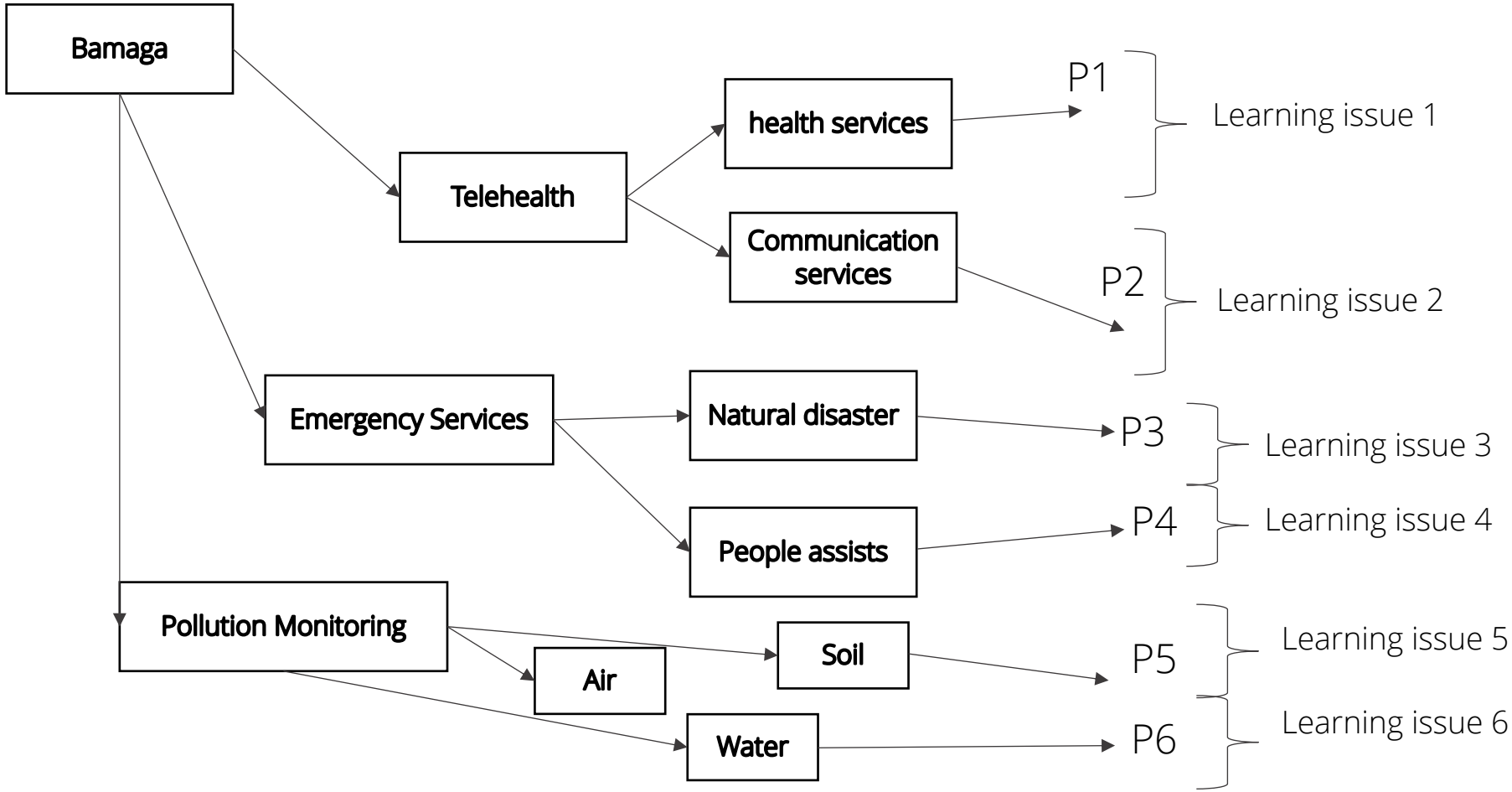
Re-visit Topic Tree with your project



The challenges, needs of community in terms of applications - telehealth, education, emergency services, pollution monitoring; Communications technologies suitable for remote areas - satellite, fiber optics, microwave, 5G, Internet of Things comms technologies.

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2nd Activity

Aim : Finalise learning issues - From the designed topic tree (with identified issues and challenges)

Instructions :

1. From those identified parts of the topic tree, list th problems P1, P2, P3.....
2. Try to group problems in to a learning issue.
3. Summarise the list of problems formed as learning issues (P1 + P2 = learning issue 1). A team should have 5-6 learning issues sorted.
4. Now check how those learning issues build towards your research problem.

Teamwork: 20-25 minutes

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Next week

- Finalising learning issues and start working on design ideas (design concepts)
- Explore on Assessment 2 Innovation concept