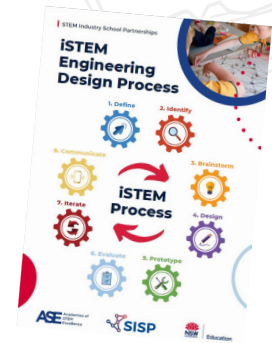


Define the problem



An integral part of the iSTEM Engineering Design process is the definition of a meaningful and actionable, mission statement. This is one of the most challenging parts of the process, as the definition of a problem also (known as the mission statement) will require careful consideration.

The mission statement will guide you and your team's work and will kickstart the ideation process.



What makes a good mission statement?

A good mission statement should have the following traits. It should be:

- **Human-centered.** This requires you to frame your mission statement according to specific users, their needs and the insights. The mission statement should be about the people the team is trying to assist, rather than focusing on aspects such as; technology, money or product details.
- **Broad enough to be creative.** This means that the mission problem statement should not focus too narrowly on a specifics regarding the implementation of the solution.
- **Narrow enough so it can be achieved.** On the other hand, a mission statement such as, "Solve World Hunger," is too broad and will likely cause team members to easily feel daunted. Mission statements should have sufficient constraints to make the project achievable.



How to produce a mission statement?

In order to produce a good mission statement you need to clearly define, 'What is the problem you are going to solve'? In the Australian Virtual Astronaut (AVA) challenge you have been given four different scenarios from which your team has selected one to develop into a design project.

In order to define the problem you must **first analyse the problem** then brainstorm potential problems to be solved related to that scenario and develop a better understanding of who you are designing the solution for.

