Design thinking

Overview

This activity supports students to use design thinking approach as part of their student leadership tools. Students also identify areas or topics for further discussion and development as projects or actions.

Learning intentions

 Following a design thinking process, students explore and share ideas and experiences about what matters or is of interest or concern, to collaboratively scope and assess ideas for action.

Resources

'Design thinking template' handouts (2 pages)

Instructions

- Ask the students to form into smaller groups (suggest no more than 5 students per group).
- Give each group the 'design thinking template'. Talk through each step, sharing the worked example over page, 'improving the school environment' to help explain the process.
- Ask students to spend a few minutes thinking about something they are passionate or curious about, or an issue they feel concerned about; this could be something in the school environment or wider community.
 - For example, someone might be passionate about basketball; a student might be curious about a recycle program in the community; another student might be concerned about some recent vandalism in the school toilets.
- Allow students another 5 minutes to share their passions/curiosities with the smaller group.
- Ask students to then use the design thinking template and work through the first five steps (up to 'Test') with their group. They may prefer to work together on one topic, or alternately, work through their own individual topic using the design thinking process.
- Create a gallery walk to share each group's design thinking.
 Display the design thinking templates for each group around the room and allow time for students to read and comment on each. Invite students to add suggestions or ask questions.



Improving the school environment – example using the design thinking process.

Step	Questions	Example: improving the school environment
Identify a passion or an issue	How do you feel about this? What value does it connect to? What frustrates/worries/inspires you?	Too much litter, everything goes into the same bin (no recycling bins) Value: Environmental awareness Frustrates: Lack of school pride Inspires: Opportunity to be more sustainable
Define the question	What are you trying to achieve? What are your goals? Can you refine this to a statement?	Goal: Have recycling bins Goal: Inspire students to recycle Goal: Inspire school pride Make our school environmentally friendly
Develop a focus	What can we focus on? What is the most important part? What else has worked? What challenges exist?	Educating and inspiring students to recycle Last year, students worked together to fundraise for a school garden. We had a competition for the design and the winning design was created.
Ideate	Brainstorm and come up with as many creative solutions as possible.	Get the council to fund the bins Someone from the council to speak to the students Have a poster competition Student leaders running sessions at Year Meetings Start an environment committee
Prototype	How can you show your ideas? Can you build a representation of your ideas?	Map of the playground with bins Make an example poster
Test	Share your prototype with others and get feedback. What worked? What could be improved?	Students and school staff are surveyed e.g. on the proposed location of the bins. Students provide feedback on poster designs.
Refine and implement	How can we integrate feedback to make the idea better? Whose approval do we need to implement it?	A working group is formed to analysis the survey results and refine the proposal. Feedback on the poster designs is shared with the 'design team' to make changes as needed.

Debriefing questions

- Did you find this design thinking template useful?
- Who were the ideas people? The designers?
- This is just one tool you can use to guide your thinking and map out a group or individual project. Can you think of another tool or process to use?



Concluding comments

Design thinking provides a solution-based approach to solving problems. It is important to note that the seven steps are not always sequential. This simply means that the design team continuously use their results to review, question and improve their initial ideas, assumptions, understandings and results, and possibly provide new insights so we can see any alternative solutions that might not have been available with our previous level of understanding.





Design thinking template

Identify a passion or an issue	 How do you feel about this? What value does it connect to? What frustrates/worries/inspires you?
Define the question	What are you trying to achieve?What are your goals?Can you refine this to a statement?
Develop a focus	What is the most important part?What else has worked?What challenges exist?
Ideate	Brainstorm and come up with as many creative solutions as possible.
Prototype	 How can you show your ideas? Can you build a representation or model to illustrate and test your ideas?
Test	 Share your prototype and get feedback. What worked? What's supported by others? What could be improved?
Refine and implement	 How can we integrate feedback to make the idea better? Whose approval do we need to implement it?





Design thinking template

Identify a passion or an issue	
Define the question	
Develop a focus	
Ideate	
Prototype	
Test	
Refine and implement	

