Ideation Strategy - SCAMPER

This strategy was developed as part of an Applied Technology CPD 2020/2021 workshop which took place during the 2020/2021 school year. All materials used during this workshop can be viewed in the Technologies section of www.jct.ie within the 'CPD Workshops' tile.

Who is this strategy for?

This strategy can be used with all Junior Cycle students to support the development of ideation skills. It can also be used to assess students' prior learning and understanding of a concept before a unit of learning or as a summative assessment strategy at the end of a unit.

What is this strategy?

This strategy encourages students to explore a range of concept design ideas quickly and without constraints. The strategy provides students with an opportunity to take an initial design idea or a familiar object and work it through a series of seven prompt questions to produce a range of alternative design ideas or concepts. It supports students in generating a broad range of concept design ideas and avoiding fixation. The seven SCAMPER sections are: S: *Substitute*, C: *Combine,* A: *Adapt,* M:*Modify,* P: *Put to another use,* E: *Eliminate* and R: *Reverse.*

When can students use this strategy?

This strategy can be used during a project to generate design ideas or to avoid fixation. It can also be used at the start and end of a unit of learning to assess students' learning and understanding. The prompt questions within each section can be adapted to a unit of learning or the student's context. The format is designed to be accessible and quick for students to complete.

Where can I find this strategy?

This strategy was used in the context of a unit of learning in the Applied Technology 2020/2021 CPD workshop which can be found here. It also features in **the Teaching and Learning Classroom Supports** in the **Resources** section of the JCT website, found here.

Why should I use this strategy?

This ideation strategy encourages students to be creative and to explore a range of divergent design ideas when responding to a design brief or a defined problem.

How can I apply this strategy?

It is encouraged to use this strategy as a starting point and adapt the questions to suit your students and your context. The prompt questions within each of the seven sections can be adapted to relate to the chosen learning outcomes or the development of specific skills which your unit of learning focuses on.

SCAMPER Activity

Instructions:

To start: Sketch the initial concept design or object as it looks now *(Think about the function and control aspects of the design or object)*

1. **Substitute** – Can you substitute one thing for another? Are there materials or features you can substitute to improve the design/object?
2. **Combine** – Can you combine the design/object with another product to improve its use or to create something new?
3. **Adapt** – How could you adapt the design/object to serve other users or a more diverse range of users?
4. **Modify** – What could you add to modify the design/object? How could you modify the shape, look or experience for its users?
5. **Put to Another Use** – Can you use the design/object in another setting? Could the function of the design/object be used elsewhere?
6. **Eliminate**– What features or parts of the design/object could you eliminate? How could you simplify it?
7. **Reverse**– What could happen if the design/object worked in the opposite way? Reverse, turn inside out or upside down.

Workspace