**Problem-Solving: Ideation and Innovation**

**Learning Objectives**

By the end of this module you will (be able to):

* Understand the innovation cycle and how to apply it to problem-solving
* Use innovation tools to problem solve
* Know how to evaluate your innovation

**Opening Reflection**

Take out your journal and spend some time reflecting and writing about the following questions:

* How do you problem-solve in your daily life?
* How difficult do you think it is to be innovative? Why?
* What are some challenges people face when they try to solve problems?

**Lesson Content**

**The Innovation Cycle**

[The video](https://youtu.be/W9CLexG3BF4) presents the first process in the innovation cycle from ‘Identifying the problem of opportunity’ to ‘Defining a specific objective’.

Activity: Reflect on the innovation cycle. Think of a problem you have been struggling with and use the innovation cycle to break it down into questions.

**The Chunking Tool**

[This video](https://www.youtube.com/watch?v=x8v5l6PB4qs) explains how to use the Chunking Tool to help define problems. Watch the video and try to use it yourself.

Activity: [The Chunking Tool](https://drive.google.com/file/d/17EDji7Y5U982x8JY63AvIHQJX5ZAapuQ/view)

Think about the bigger and smaller issues of getting more people in your community engaged in recycling more.

**Guidelines to Ideation**

[The video](https://youtu.be/yWXCdBosSL8) describes ideation guidelines and presents some ideation tools

**Flip It**

Flip It is one of the tools that can be used to ideate. Watch [the video](https://www.youtube.com/watch?v=2mNMaH7pWpA) and try to use it yourself.

Activity: [Flip It](https://drive.google.com/file/d/1KWVhC82JVaU9rjZJathKH8C0vIsvgnlk/view)

Think about a specific and clear objective. First, consider how would you normally approach this objective. Then, what would be the opposite or the extreme alternative for each of these approaches?

**Force Field Analysis**

*One way to evaluate our ideas is to use Force Field Analysis.* Watch [the video](https://www.youtube.com/watch?v=Li-7nSaObjs) and try to use it yourself.

Activity: [Force Field Analysis](https://drive.google.com/file/d/1vwu1jLbbgXn8BP-seAOOqBnXxZvtFY2D/view)

Think about an idea. Given the supportive and opposing arguments, rate this idea from 1 to 10. After summing up the results, what are the actions that should be taken to improve and implement your idea?

**Slide Deck**

[Learner Slide Deck](https://drive.google.com/file/d/1a-H759x0XKDtWG-BEZxXyu8KijNgHYBZ/view)

**Supplemental Resources**

[Ideation in Design Thinking](https://careerfoundry.com/en/blog/ux-design/what-is-ideation-in-design-thinking/) [Successful Innovation - How IKEA Innovates](https://paulshepherd.co/successful-innovation-case-study/) [Saving Product X – A Design Thinking Case Study](https://www.toptal.com/project-managers/digital/a-design-thinking-case-study) [Problem solving skills: definitions and examples](https://www.indeed.com/career-advice/resumes-cover-letters/problem-solving-skills)

**Assessment**

Creative activities:

* This picture of the innovation cycle poses questions that could help you understand the process and stages better.

[problem-solving-model-1.avif](https://s3-us-west-2.amazonaws.com/secure.notion-static.com/b344c8a7-140a-4349-8849-b091762cb562/problem-solving-model-1.avif)

* Think about a personal or professional issue where you can use the innovation cycle. Reflect upon it by drawing the diagram above in your journal, with notes, answering the questions asked on the cycle to solve your problem.
  + Your ideas/question/problem
  + How will you implement it?
  + How will you evaluate it?

**Closing Journal Reflection**

Think of a specific problem you are trying to solve in your education, career, or personal or community life, and reflect on how you might apply what you have learned in this module. Write a few paragraphs in response to the following questions:

* What strategies could you use to improve your approach to this problem?
* What barriers could prevent you from being successful in implementing these actions?
* What will you do to overcome these barriers?