

6. Creating a New Design from Patterns

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6.1 Entering the Course Information

6.1 Entering the Course Information

In this chapter, we will explore how to create a new learning design about developing a product for the elderly, similar to what we demonstrated in Chapter 5. However, this time we will use the Pattern Library, beginning with the course-level pattern.

Choosing a Course-level Pattern

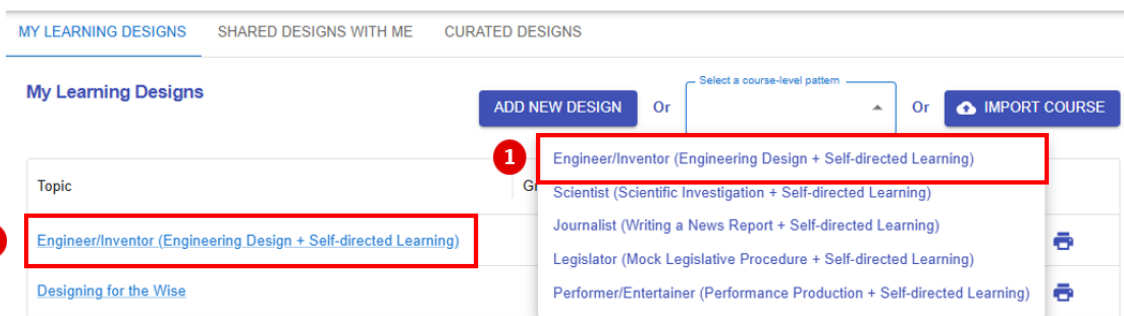


Figure 6.1: The Course-level Pattern Library

After selecting the pattern **1) "Engineer/Inventor (Engineering Design + Self-directed Learning)"**, a new learning design will **2) appear in "My Library"**.

Entering the Course Information

Figure 6.2: The Course Information Section of the Engineering Designer Pattern

After choosing "**Engineer/Inventor (Engineering Design + Self-directed Learning)**", the pattern have already provided some course information. You can adapt or modify the provided information and fill in the remaining details as needed.

* The customised item will be highlighted in red.

Item	Content
Title	Engineer/Inventor (Engineering Design + Self-directed Learning) <i>Designing for the Wise</i>
Description	<i>Designing for the Wise is an interactive course where you' ll discover how to create innovative, user-centered solutions for the elderly. Learn to empathize with the unique challenges the elderly face, apply design thinking processes, and develop practical prototypes that make a real difference. Join us to blend creativity and care as you design a better world for the wise!</i>
Key Learning Area(s)	Science Education, Technology Education
Grade Level	<i>P6</i>
No. of Lesson	6
Duration per Lesson	<i>35</i>

Total In-Lesson Time	210
Contributor Name	-
Contributor Affiliation	-

6.2 Exploring with the Learning Design Triangle

Once you have filled out the course information section, you will use the **Learning Design Triangle** framework to design contextual framework for the entire learning design. Unlike creating a course from scratch, using the course-level pattern provides you with the foundational elements of the LDT, streamlining the design process.

The screenshot displays the 'Learning Design Triangle' section of a course design tool. The interface is divided into three main areas:

- Navigation (Left):** A sidebar menu with options: Course Information, Learning Design Triangle (highlighted with a red box), Intended Learning Outcomes, Disciplinary Practice, Pedagogical Approach, Details of Learning Design, Curriculum Components, Course Overview, Designer Dashboard, iLAP Section Arrangement, and LD to iLAP Converter.
- Main Content (Center):** Titled 'Engineer/Inventor (Engineering Design + Self-directed Learning)'. It shows 'Intended Learning Outcomes' with two sections: 'Disciplinary Skills' and 'Generic Skills'. Each section contains a list of skills with 'Apply' buttons, status icons (red exclamation mark and green checkmark), and edit/delete icons. The 'Disciplinary Skills' list includes: 'Apply design thinking process - Empathize with users', 'Apply design thinking process - Define design problems', 'Apply design thinking process - Ideate innovative solutions', 'Apply design thinking process - Build prototype', 'Apply design thinking process - Test solution', and 'Apply design thinking process - Optimize solution'. The 'Generic Skills' list includes: 'Apply self-directed learning strategies (Goal setting) in the learning process', 'Apply self-directed learning strategies (Self-planning) in the learning process', and 'Apply self-directed learning strategies (Self-monitoring) in the learning process'.
- Information Window (Right):** A panel showing 'Disciplinary Practice' for 'Engineering Design' with a 5-step list: 1. Identify the problem, 2. Generate ideas for solutions, 3. Design the solution, 4. Construct a prototype, 5. Test the prototype's performance and optimize the product. Below it is 'Pedagogical Approach' for 'Self-Directed Learning' with a 5-step list: 1. Goal-setting, 2. Self-planning, 3. Self-monitoring, 4. Self-evaluation, 5. Revision. At the bottom, there is an 'ASSISTANT CHATBOT' section with a text prompt: 'Intended Learning Outcomes (ILOs) are clear and concise statements which describe what learners will know and be able to do by the end of this course.' and buttons for 'TELL ME MORE' and 'SHOW ME EXAMPLES'. A dropdown menu for 'Category' and a 'SHOW INTENDED LEARNING OUTCOME PATTERNS' button are also visible.

Figure 6.3: Learning Design Triangle Section

6.2.1 Intended Learning Outcomes (ILOs)

The course-level pattern **Engineer/Inventor (Engineering Design + Self-directed Learning)** has provided some intended learning outcome patterns for you. However, you still need to customise the patterns or add new ILOs to complete your learning design.

The screenshot displays the 'Intended Learning Outcomes' section for the 'Engineer/Inventor (Engineering Design + Self-directed Learning)' course. The interface is divided into three main areas: a navigation sidebar on the left, a central content area, and an information window on the right.

Navigation Sidebar: Includes links for Course Information, Learning Design Triangle, Intended Learning Outcomes (selected), Disciplinary Practice, Pedagogical Approach, Details of Learning Design, Curriculum Components, Course Overview, Designer Dashboard, iLAP Section Arrangement, and LD to iLAP Converter.

Central Content Area: Titled 'Engineer/Inventor (Engineering Design + Self-directed Learning) Intended Learning Outcomes'. It features two sections: 'Disciplinary Skills' and 'Generic Skills'. Each section has a '+ ADD' and '+ PATTERNS' button. The 'Disciplinary Skills' section lists six outcomes, all with an 'Apply' button and a 'Technology Education' tag. The 'Generic Skills' section lists three outcomes, all with an 'Apply' button.

Information Window: Contains 'Disciplinary Practice' (Engineering Design) with a 5-step list: 1. Identify the problem, 2. Generate ideas for solutions, 3. Design the solution, 4. Construct a prototype, 5. Test the prototype's performance and optimize the product. It also shows 'Pedagogical Approach' (Self-Directed Learning) with a 5-step list: 1. Goal-setting, 2. Self-planning, 3. Self-monitoring, 4. Self-evaluation, 5. Revision. At the bottom, there is an 'ASSISTANT CHATBOT' section with a 'TELL ME MORE' and 'SHOW ME EXAMPLES' button, and a 'SHOW INTENDED LEARNING OUTCOME PATTERNS' button.

Figure 6.4: Learning Design Triangle Section - Intended Learning Outcomes

For the following part, you will explore how to add the new ILOs to the design.

For guidance on developing strong ILOs, refer to [Chapter 2.2 - Intended Learning Outcomes \(ILOs\)](#)

In the LDS, there are four categories of Intended Learning Outcomes (ILOs):

- **Disciplinary Knowledge:** The core concepts, theories, facts, and frameworks that are recognized and developed within a particular field or area of study.
- **Disciplinary Skills:** The specific techniques, methods, and competencies associated with a particular field or area of study.
- **Generic Skills:** The broad abilities that help people succeed in education, work, and daily life, regardless of a particular field or area of study.
- **Values & Attitudes:** The beliefs, principles, and dispositions that guide a person's behavior, decision-making, and interactions with others.

Adding a New ILO

There are two ways to add a new ILO: (1) using the ILO patterns or (2) writing it yourself.

1. Use the ILO Patterns

- You will use our pre-defined pattern to indicate what students is expected to achieve as a result of the learning process.

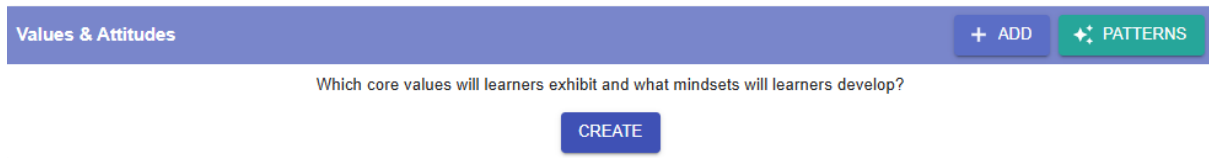


Figure 6.5: Intended Learning Outcomes - Values & Attitude

- For example, if you want to create an ILO for the **Values & Attitude** category, we can create one by using the ILO patterns.

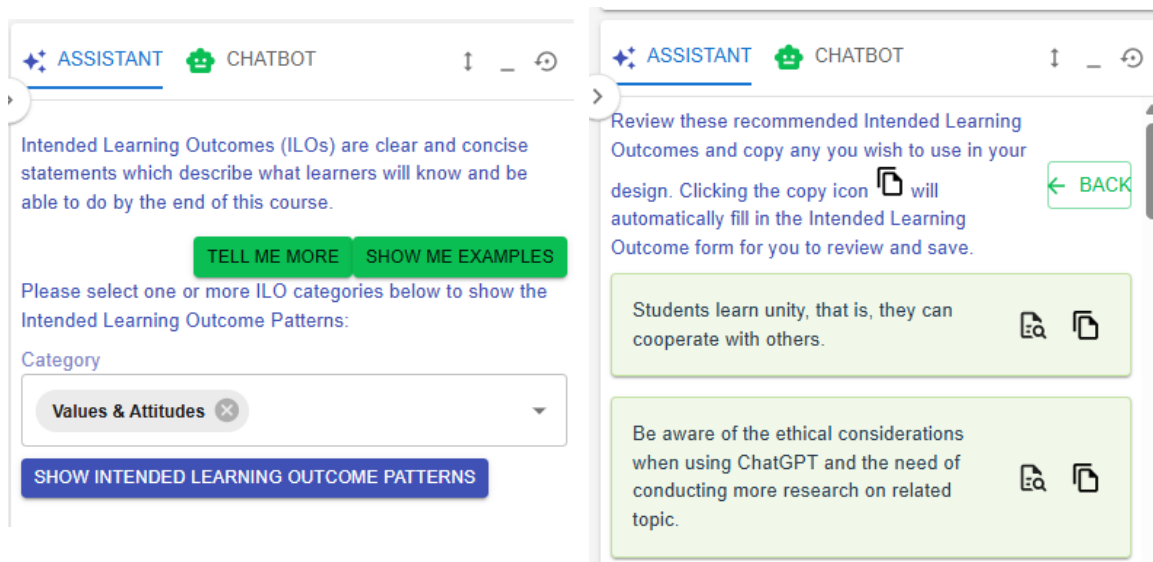


Figure 6.6: The ILOs Patterns in the LDS Facilitator



- After selecting the targeted ILO category in the Learning Design Facilitator, click the **"SHOW INTENDED LEARNING OUTCOME PATTERNS"** button to view suggested patterns. Alternatively, you can click the **PATTERNS** button to instantly activate the pattern list.
- By clicking the  button, you can explore the details of the targeted ILO.



Figure 6.7: Details of the Targeted ILO Pattern (1)

- You can use the targeted ILO pattern directly by clicking "**COPY**" button in the new pop-up window, or by clicking the  button in the Learning Design Facilitator. The ILO pattern details will be auto-filled into the LDS.

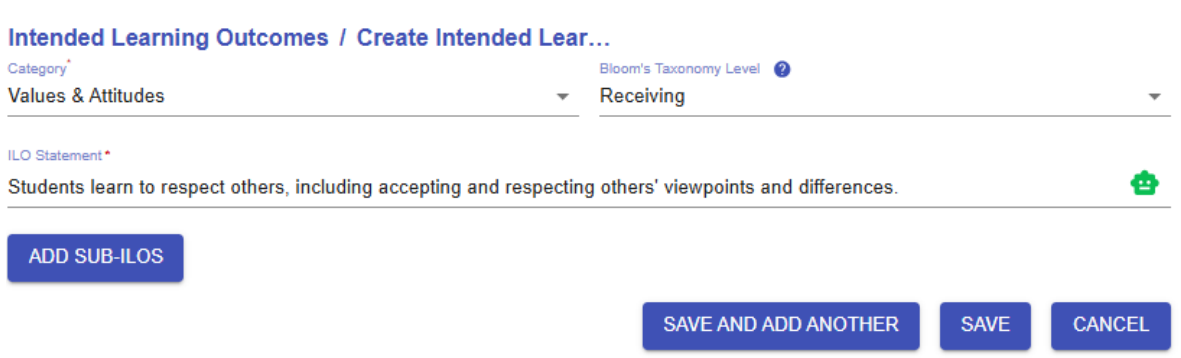


Figure 6.8: Details of the Targeted ILO Pattern (2)

- After copying the ILO pattern, you can see the ILO "Students learn to respect others, including accepting and respecting others' viewpoints and differences." appear in the ILO builder.
- To better fit our course context and the Bloom 's Taxonomy, we can modify it to: "Demonstrate willingness to accept and respect the elderly, including accepting and respecting their viewpoints and differences."

2. Writing it Yourself

- In addition to using patterns, you may write a full ILO yourself.

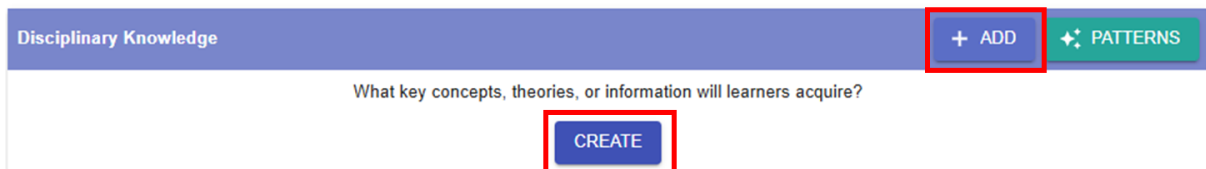
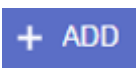



Figure 6.9: Adding a New ILO

- If you have not added any ILOs before, you can click the  or  button to add a new ILO.

Designing for the Wise

Intended Learning Outcomes / Cre...

Category*

Disciplinary Knowledge



Bloom's Taxonomy Level* ?



ILO Statement*

Identify the unique needs and challenges that elderly face in their daily lives.



ADD SUB-ILOS

SAVE AND ADD ANOTHER

SAVE

CANCEL

Figure 6.10: Interface of the ILO Builder (1)

- We will review each field in the ILO Builder below.

1. Subject/Discipline(s)

Subject/Discipline(s)



Science Education



Technology Education

Figure 6.11: Interface of the ILO Builder (2)

- Select the appropriate discipline(s) for each ILO as needed.

2. Category

Category*

Disciplinary Knowledge

Disciplinary Knowledge

Disciplinary Skills

Generic Skills

Values & Attitudes

Figure 6.12: Interface of the ILO Builder (3)

- Select the category of ILO: **Disciplinary Knowledge, Disciplinary Skills, Generic Skills, or Values & Attitudes.**

3. Bloom's Taxonomy Level

Bloom's Taxonomy Level ?

Understand ▲

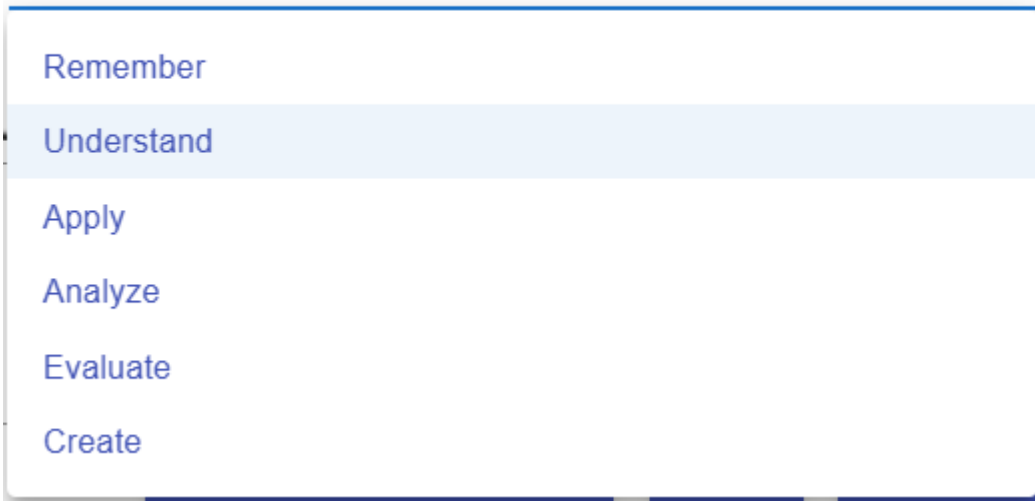


Figure 6.13: Interface of the ILO Builder (4)

- Select the Bloom's Taxonomy level that best reflects the intended skill, knowledge, or value for this outcome (e.g., Remember, Apply, Evaluate).

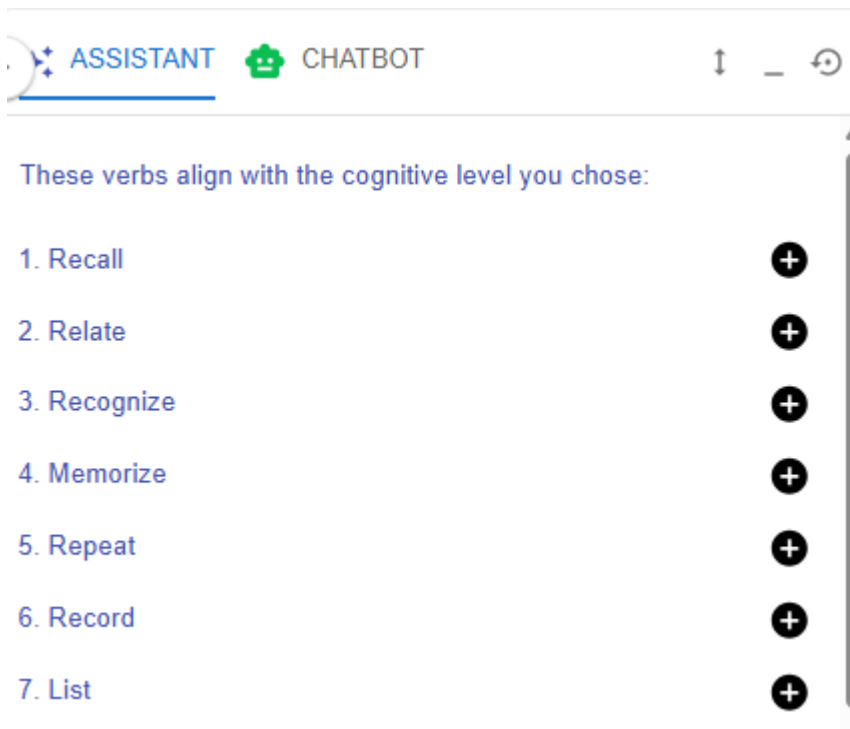


Figure 6.14: Writing a ILO with the Learning Design Facilitator

- After selecting the Bloom's Taxonomy level, the Learning Design Facilitator will recommend suitable action verbs to help you formulate your ILOs.
- Choose the appropriate action verb that best reflects the skill, knowledge, or value targeted by your ILO.

4. ILO and Learning Design Facilitator

ILO Statement *

Identify the unique needs and challenges that elderly face in their daily lives



Figure 6.15: Interface of the ILO Builder (5)

Click the Learning Design Facilitator button  to request feedback from the chatbot on your ILO.

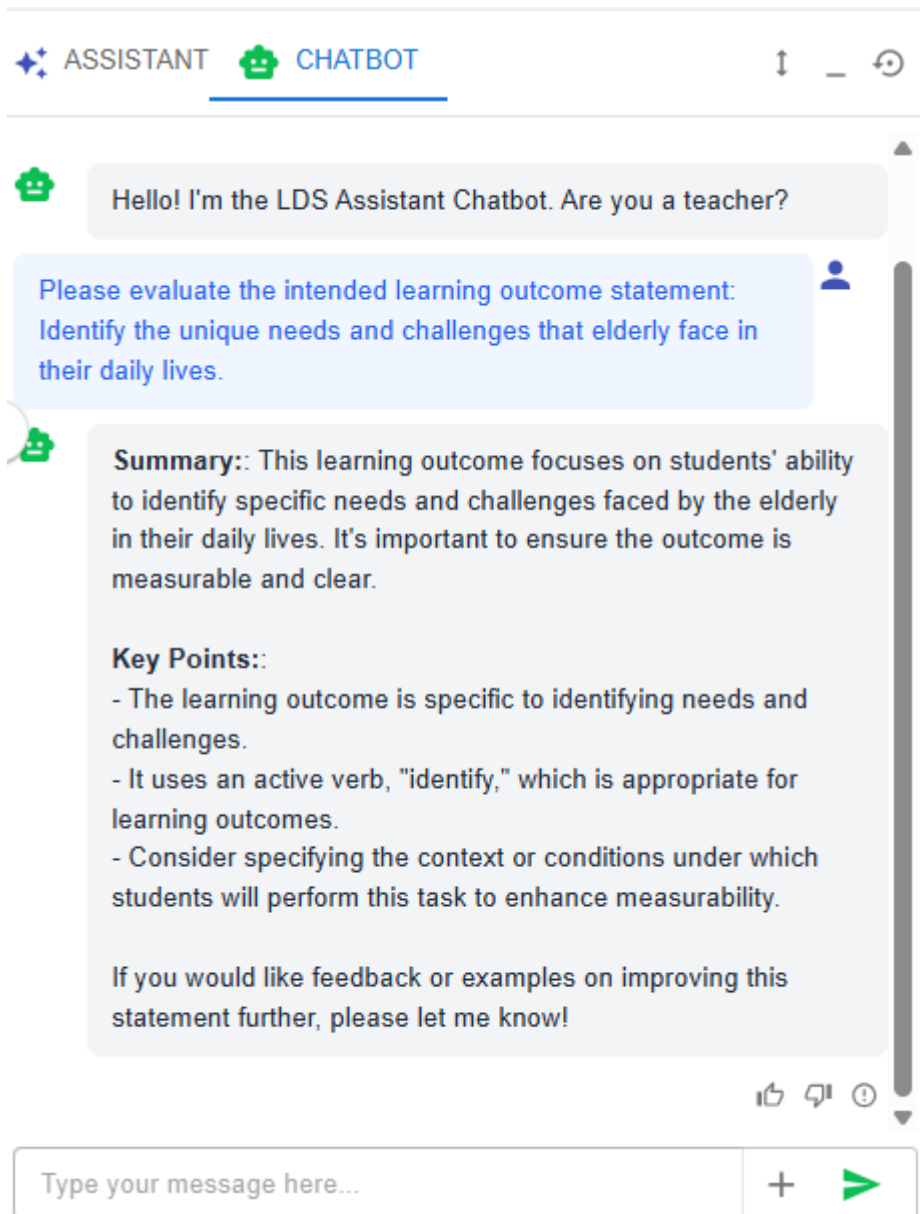


Figure 6.16: Writing a ILO with the Chatbot

5. Sub-ILO(s)

Sub-ILO(s) +

Bloom's Taxonomy Level *

Statement *



Figure 6.17: Interface of the ILO Builder (6)

- To provide greater clarity, an ILO can be subdivided into more detailed sub-ILOs as needed.

6.2.2 Disciplinary Practice (DP)

For guidance on choosing disciplinary practice, refer to [Chapter 2.3 - Disciplinary Practice \(DP\)](#)

The course-level pattern **Engineer/Inventor (Engineering Design + Self-directed Learning)** has provided the the disciplinary practice details for you.



The screenshot displays the 'Disciplinary Practice' section within the 'Engineer/Inventor (Engineering Design + Self-directed Learning)' course. The interface is divided into three main panels:

- Navigation Panel (Left):** Contains menu items such as 'Course Information', 'Learning Design Triangle', 'Intended Learning Outcomes', 'Disciplinary Practice' (highlighted), 'Pedagogical Approach', 'Details of Learning Design', 'Curriculum Components', 'Course Overview', 'Designer Dashboard', 'iLAP Section Arrangement', and 'LD to iLAP Converter'.
- Disciplinary Practice Details (Center):**
 - Name:** Engineering Design
 - Description:** The disciplinary practice of 'Engineering Design' supports our young learners to apply their knowledge and skills in developing effective solutions to real-world problems. Like engineers and inventors, learners will engage in identifying problems, then ideate, design, create, and optimize solutions to address those challenges.
 - Role of Learner:** Engineer, Inventor
 - Workflow steps:**
 1. Identify the problem
 2. Generate ideas for solutions
 3. Design the solution
 4. Construct a prototype
 5. Test the prototype's performance and optimize the product
- Information Window (Right):**
 - Intended Learning Outcomes Disciplinary Skills:**
 - Apply design thinking process - Empathize with users
 - Apply design thinking process - Define design problems
 - Apply design thinking process - Ideate innovative solutions
 - Apply design thinking process - Build prototype
 - Apply design thinking process - Test solution
 - Apply design thinking process - Optimize solution
 - Generic Skills:**
 - Apply self-directed learning strategies (Goal setting) in the learning process

At the bottom of the interface, there are two buttons: 'MANAGE INTENDED LEARNING OUTCOMES' and 'MANAGE PEDAGOGICAL APPROACH'. A red box highlights the '+ ADD' button in the top right corner of the details panel.

Figure 6.19 Learning Design Triangle Section - Disciplinary Practice


1. Editing or Creating a DP

- By clicking the  or  button, you can access the DP builder to modify the DP information.

Name* : Engineering Design

Description : The disciplinary practice of 'Engineering Design' supports our young learners to apply their knowledge and skills in developing effective solutions to real-world problems. Like engineers and inventors, learners will engage in identifying problems, then ideate, design, create, and optimize solutions to address those challenges.

Role of Learner: Engineer, Inventor

Workflow steps : 

1. Identify the problem ✕

2. Generate ideas for solutions ✕

3. Design the solution ✕

4. Construct a prototype ✕














5. Test the prototype's performance and optimize the product ✕



SAVE
CANCEL

Figure 6.20: Editing/Creating a DP

2. Learning Design Facilitator

- In the Learning Design Facilitator, there are DP Patterns that we have designed for you to copy and use in your own design.

<div style="border: 1px solid #ccc; padding: 10px;"> <p> ASSISTANT  CHATBOT ↑ _ ↻</p> <p>Review these recommended Disciplinary Practices and copy any you wish to use in your design. Clicking the copy icon will automatically fill in the Disciplinary Practice form for you to review and save.</p> <div style="margin-top: 10px;"> <div style="border: 1px solid #007bff; padding: 5px; margin-bottom: 5px; display: flex; justify-content: space-between; align-items: center;"> Engineering Design   </div> <div style="border: 1px solid #007bff; padding: 5px; margin-bottom: 5px; display: flex; justify-content: space-between; align-items: center;"> Scientific Investigation   </div> <div style="border: 1px solid #007bff; padding: 5px; margin-bottom: 5px; display: flex; justify-content: space-between; align-items: center;"> Mock Legislative Procedure   </div> <div style="border: 1px solid #007bff; padding: 5px; margin-bottom: 5px; display: flex; justify-content: space-between; align-items: center;"> Performance Production   </div> <div style="border: 1px solid #007bff; padding: 5px; display: flex; justify-content: space-between; align-items: center;"> Writing a News Report   </div> </div> </div>	<div style="border: 1px solid #ccc; padding: 10px;"> <p style="display: flex; justify-content: space-between; align-items: center;"> Engineering Design  COPY ✕ </p> <hr/> <p>Description:</p> <p>The disciplinary practice of 'Engineering Design' supports our young learners to apply their knowledge and skills in developing effective solutions to real-world problems. Like engineers and inventors, learners will engage in identifying problems, then ideate, design, create, and optimize solutions to address those challenges.</p> <p>Workflow steps</p> <ol style="list-style-type: none"> 1. Identify the problem 2. Generate ideas for solutions 3. Design the solution 4. Construct a prototype 5. Test the prototype's performance and optimize the product </div>
<p>Figure 6.21: The DP Patterns in the Learning Design Facilitator</p>	<p>Figure 6.22: Details of the Targeted DP Pattern</p>

- By clicking the  button, you can explore the details of the targeted DP pattern.
- You can use the targeted DP pattern directly by clicking "**COPY**" button in the pop-up window, or by clicking the  button in the Learning Design Facilitator. The DP pattern details will be automatically appear in the LDS.

6.2.3 Pedagogical Approach

For guidance on choosing pedagogical approach, refer to [Chapter 2.4 - Pedagogical Approach](#)



The course-level pattern **Engineer/Inventor (Engineering Design + Self-directed Learning)** has provided the the pedagogical approach details for you.



Figure 6.24 Learning Design Triangle Section - Pedagogical Approach

Please see the introduction below on how to interact with the LDS to edit/create the pedagogical approach.

1. Editing or Creating a pedagogical approach

By clicking the  or  button, you can access the area to modify the pedagogical approach information.


Topic






Engineer (Engineering Design + Self-directed Learning)



Pedagogical Approach

Name* : Self-Directed Learning

Description : Self-Directed Learning (SDL) is a popular educational method that encourages learning around real-world problems and empowers students. It uses a five-step structure, akin to problem-solving, comprising goal setting, self planning, self-monitoring, self-evaluation, and revision.

Pedagogical Foci: 

1. Goal-setting 
2. Self-planning 
3. Self-monitoring 
4. Self-evaluation 
5. Revision 

MANAGE INTENDED LEARNING OUTCOMES

MANAGE DISCIPLINARY PRACTICE

Figure 6.25: Editing/Creating the Pedagogical Approach

2. Learning Design Facilitator

- In the Learning Design Facilitator, there are Pedagogical Approach Patterns that we have designed for you to copy and use in your own design.

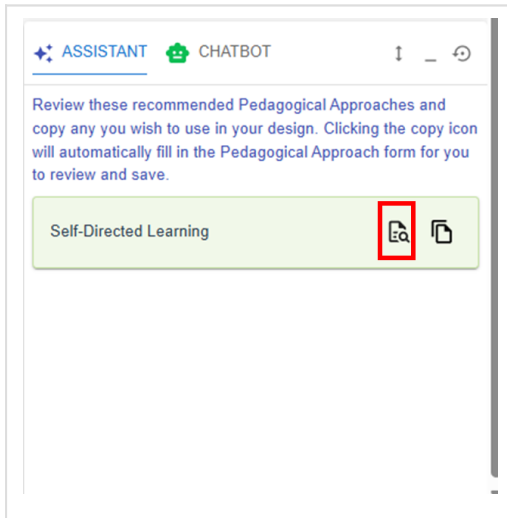


Figure 6.26: The Pedagogical Approach Patterns in the Learning Design Facilitator

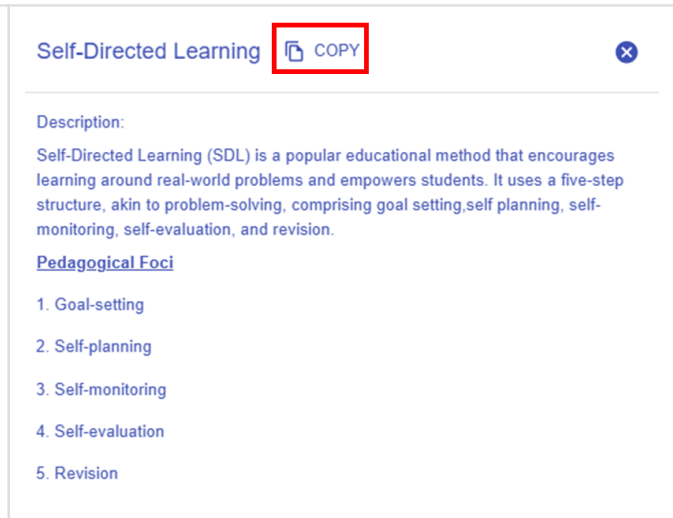




Figure 6.27: Details of the Targeted Pedagogical Approach Pattern

- By clicking the  button, you can explore the details of the targeted pedagogical approach pattern.
- You can use the targeted pedagogical approach directly by clicking "COPY" in the pop-up window, or by clicking the  button in the Learning Design Facilitator. The pedagogical approach details will be auto-filled into the LDS.

6.3.1 Creating Curriculum Components (CCs) Part 1

After completing the Learning Design Triangle (LDT) to establish the contextual framework for the entire learning design, we will explore how to develop Curriculum Components (CCs) and learning tasks that align with these elements, transforming overarching design concepts into actionable teaching practices. For a detailed theoretical explanation of Curriculum Components (CC), see [Chapter 2.5 – Curriculum Component Sequence](#).

By using a course-level pattern, the Learning Design Studio (LDS) will recommend and assign relevant CC patterns and the task patterns for you. Next, we'll take a closer look at how they work.

Reviewing and Revising the Existing CCs

1. How to Name a CC?

Formula of naming a CC

Through the **1) focal task(s) to 2) achieve the intended learning outcome to 3) implement the workflow step(s) of a disciplinary practice for 4) applying the focus or foci of the pedagogical approach.**

- Below are the 6 CC patterns provided by the course-level pattern.
 - Through **1) brainstorming to 3) identify problem for 4) goal-setting**
 - Through **1) discussing essential design elements to 3) ideate solution for 4) self-planning**
 - Through **1) collecting feedback to 3) design solution for 4) self-planning**
 - Through **1) creating criteria and material lists to 3) construct prototype for 4) self-monitoring**
 - Through **1) competition based on the rubrics to 3) test performance of the product for 4) self-evaluation**
 - Through **1) analyzing feedback to 3) optimize the product for 4) revision**
- We recommend adding an intended learning outcome to the title of the CC to specify what you aim to achieve in that particular CC.
- For example,
 - Through **1) brainstorming to 2) identify the unique needs and challenges of the elderly to 3) identify problem for 4) goal-setting**

6.3.2 Creating Curriculum Components (CCs) Part 2

Reviewing and Revising the Existing CCs

2. Reviewing the CC Patterns and Task Patterns

The screenshot displays a curriculum component editor for the title "1 | Through brainstorming to identify problem for goal-setting". The interface is organized into several sections:

- Intended Learning Outcomes:** Three outcomes are listed, each with an "Apply" button and a red information icon. The outcomes are:
 - Apply self-directed learning strategies (Goal setting) in the learning process
 - Apply design thinking process - Empathize with users (Technology Education)
 - Apply design thinking process - Define design problems (Technology Education)
- Disciplinary Practice:** "Identify the problem"
- Pedagogical Approach:** "Goal-setting"
- Learning Task(s):** A section with "+ ADD" and "PATTERNS" buttons. It contains four tasks:
 - Task 1:** "Students observe the scenario of the design problem through stimulus". Duration: 5 min. Location: Inside Classroom. Grouping: Whole Class. Includes an "ILAP FORUM" button.
 - Task 2:** "Students discuss the needs of users". Duration: 15 min. Location: Inside Classroom. Grouping: Group (5 Per Group). Includes "ILAP FORUM" and "PRACTICE EXERCISE (E.G. WORKSHEET, WORKBOOK)" buttons.
 - Task 3:** "Students work on indentifying the most prominent problem needed to be addressed." Duration: 5 min. Location: Inside Classroom. Grouping: Group (5 Per Group). Includes "ILAP FORUM", "ILAP WIKI", "ILAP URL", and "PRACTICE EXERCISE (E.G. WORKSHEET, WORKBOOK)" buttons.
 - Task 4:** "Students present their findings on user needs to the whole class". Duration: 5 min. Location: Inside Classroom. Grouping: Whole Class. Includes "ILAP FORUM", "ILAP WIKI", "ILAP WIKI", and "ILAP URL" buttons.

Figure 6.29: Example of a CC Pattern

Name	Through brainstorming to identify problem for goal-setting
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Intended Learning Outcomes	<ul style="list-style-type: none"> • Apply design thinking process - Empathize with users • Apply design thinking process - Define design problems • Apply self-directed learning strategies (Goal setting) in the learning process
Disciplinary Practice / Pedagogical Approach	Identify problem / Goal-setting
Learning Task(s)	<ul style="list-style-type: none"> • Students observe the scenario of the design problem through stimulus • Students discuss the needs of users • Students work on identifying the most prominent problem needed to be addressed • Students present their findings on user needs to the whole class

- This CC pattern has already provided the backbone of a CC. We now need to modify it to fit our own design by following below steps:
 1. Update the name of the CC to include the key intended learning outcome: **"Identify the unique needs and challenges of the elderly"**.
 2. Link the intended learning outcomes **"Identify the unique needs and challenges of the elderly"** to the CC.
 3. Edit and Add the learning task(s) to fit the design.

2.1 Editing a CC

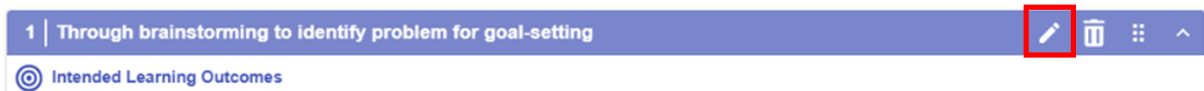



Figure 6.30: Editing a CC

- By clicking the  button, you can open the CC builder to update the CC details. Please refer to the introduction below for guidance on updating a CC.

Curriculum Components / Edit Curriculum Components

CC name*

Through brainstorming to identify problem for goal-setting

Workflow steps: Identify the problem

Pedagogical foci: Goal-setting

Linked Intended Learning Outcome(s)

Disciplinary Skills

- Apply: Apply design thinking process - Empathize with users (Technology Education)
- Apply: Apply design thinking process - Define design problems (Technology Education)

Generic Skills

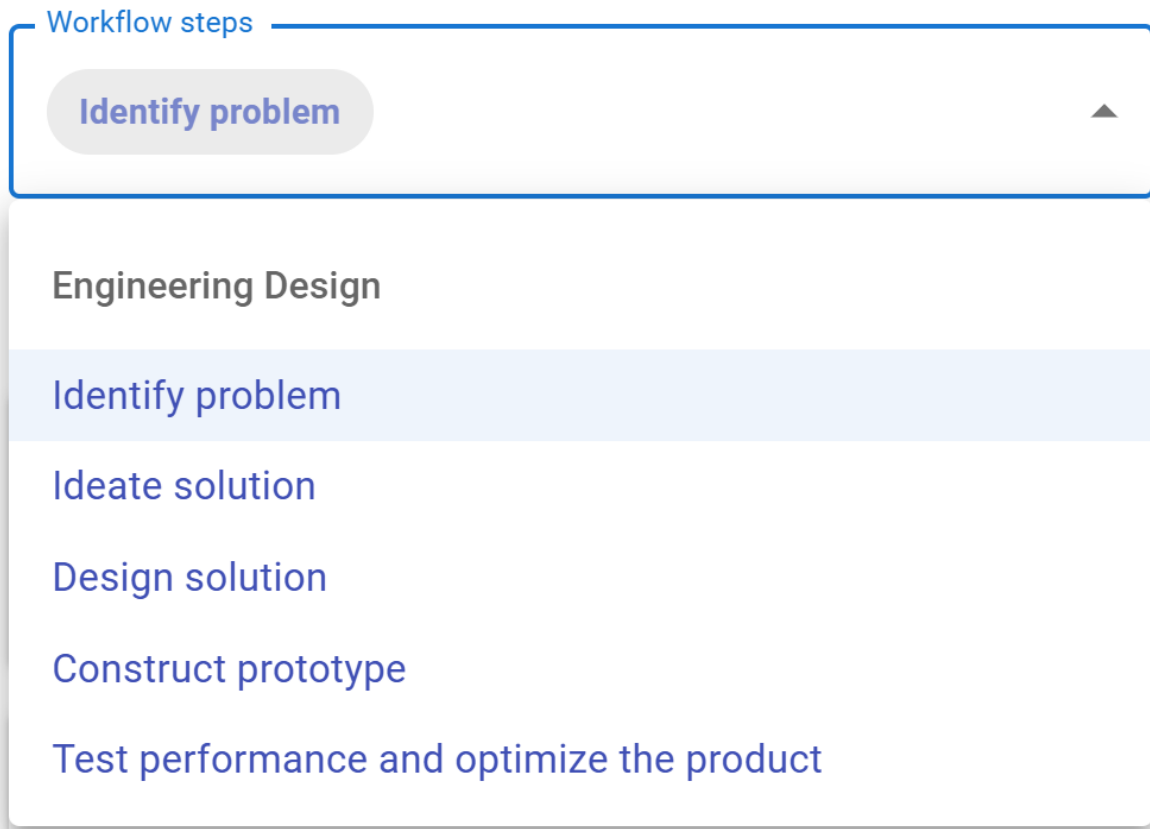
- Apply: Apply self-directed learning strategies (Goal setting) in the learning process

Figure 6.31: The Interface of CC Builder

1. CC Name

- Through brainstorming to identify problem for goal-setting
- Through brainstorming to identify the unique needs and challenges of the elderly to identify problem for goal-setting

2. Workflow steps



Workflow steps

Identify problem

Engineering Design

Identify problem

Ideate solution

Design solution

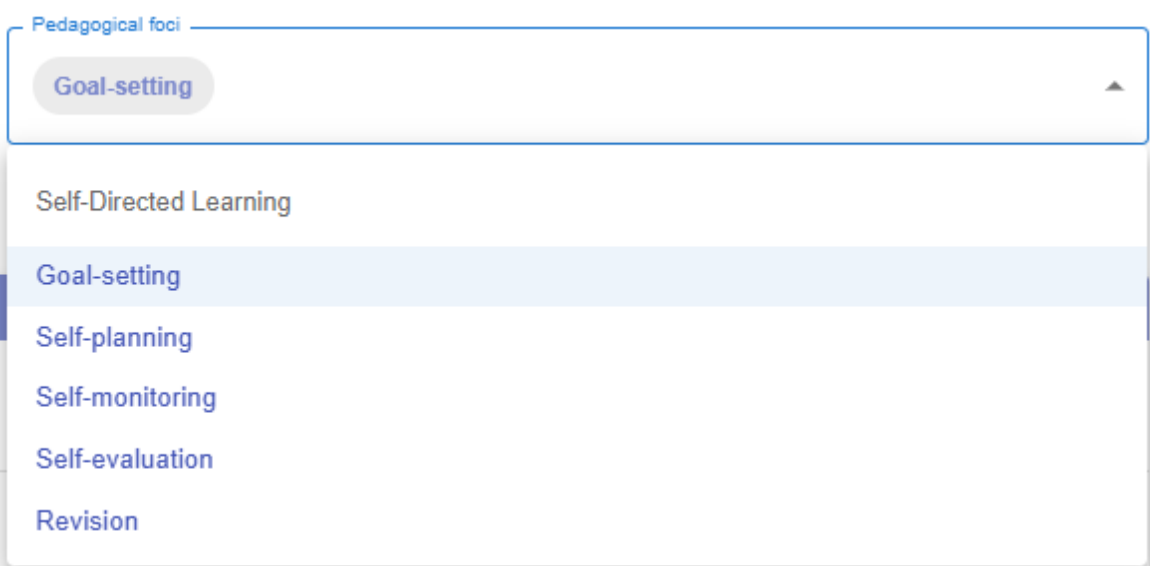
Construct prototype

Test performance and optimize the product

Figure 6.32: The Workflow Steps of Engineering Design

- The workflow steps of Engineering Design are drawn from the Disciplinary Practice (DP) section you completed previously.
- In this case, we do not need to make changes to **"Identify problem"**.

3. Pedagogical foci



Pedagogical foci

Goal-setting

Self-Directed Learning

Goal-setting

Self-planning

Self-monitoring

Self-evaluation

Revision

Figure 6.33: The Pedagogical Foci of Self-directed Learning

- The pedagogical foci of Self-directed Learning are drawn from the Pedagogical Approach section you completed previously.
- In this case, we do not need to make changes to **"Goal-setting"**.


4. Linked Intended Learning Outcomes (ILOs)

- We need to link the intended learning outcomes "Identify the unique needs and challenges of the elderly face in their daily lives" to the CC

4.1. The Link Button










Figure 6.34: Linking the ILOs to a CC (1)

- You can view all the Intended Learning Outcomes (ILOs) entered in the LDT section by clicking the  button.

4.2 Selecting the Appropriate ILOs

Linked Intended Learning Outcome(s) ×

Disciplinary Knowledge		
Understand	Identify the unique needs and challenges that elderly face in their daily lives. 	<input checked="" type="checkbox"/>

Disciplinary Skills		
Apply	Apply design thinking process - Empathize with users  Technology Education	<input checked="" type="checkbox"/>
Apply	Apply design thinking process - Define design problems  Technology Education	<input checked="" type="checkbox"/>
Apply	Apply design thinking process - Ideate innovative solutions  Technology Education	<input type="checkbox"/>
Apply	Apply design thinking process - Build prototype  Technology Education	<input type="checkbox"/>
Apply	Apply design thinking process - Test solution  Technology Education	<input type="checkbox"/>
Apply	Apply design thinking process - Optimize solution  Technology Education	<input type="checkbox"/>









Generic Skills		
Apply	Apply self-directed learning strategies (Goal setting) in the learning process 	<input checked="" type="checkbox"/>
Apply	Apply self-directed learning strategies (Self-planning) in the learning process 	<input type="checkbox"/>
Apply	Apply self-directed learning strategies (Self-monitoring) in the learning process 	<input type="checkbox"/>

Figure 6.35: Linking the ILOs to a CC (2)

- Select the intended learning outcomes we want to link to the CC.

4.3 The Alert Icon and Complete Icon

Disciplinary Skills		
Apply	Apply design thinking process - Empathize with users   Technology Education	 
Apply	Apply design thinking process - Define design problems   Technology Education	