



Open & Distance Learning Handbook for Course Instructor

1st Edition

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Foreword

We extend a warm welcome to all course instructors to this handbook on the development of Self-Instructional Materials (SIM) for Open and Distance Learning (ODL) at Universiti Malaysia Sarawak (UNIMAS). This handbook has been prepared to serve as a reference, guiding the systematic design, development, and delivery of SIM in accordance with institutional policies and quality assurance standards.

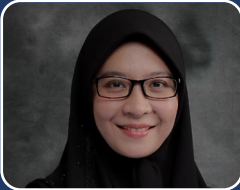
Developed in accordance with the structured training sessions conducted for course instructors, this handbook consolidates established pedagogical principles, practical methodologies, and technological applications into a single, comprehensive resource. It integrates both theoretical foundations and hands-on approaches, ensuring that the guidance provided reflects the concepts, strategies, and tools introduced during the training programme.

The content outlines the key stages of SIM creation—from planning and instructional design to production and delivery, emphasising best practices such as the 7-Step SIM Planning Process and Rowntree’s instructional techniques. It also highlights the effective integration of digital tools to enhance interactivity, accessibility, and learner engagement.

By providing clear direction and practical strategies, this handbook aims to equip course instructors with the knowledge and skills necessary to produce SIM that are academically rigorous, pedagogically sound, and responsive to the needs of diverse learners. In doing so, it reaffirms UNIMAS’s commitment to fostering inclusive, flexible, and high-quality education in the evolving landscape of digital and distance learning.

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Section 1: Introduction

Open and Distance Learning (ODL) provides flexible education, allowing learners to study remotely without time or location limits. At Universiti Malaysia Sarawak (UNIMAS), the Learning Management System (LMS) serves as the main platform for course delivery and interaction. Within this framework, Self-Instructional Materials (SIM) provide interactive, self-paced content to support effective learning.

1.1 What is ODL?

Open and Distance Learning (ODL) is a flexible education system that enables learners to study anytime, anywhere, and at their own pace. According to the Malaysian Qualifications Agency (2021), the requirements for ODL delivery are as follows:

- A minimum of 80% of course content shall be delivered remotely (e.g., online lectures, self-study materials, digital assessments).
- More than 60% of the program's total credits shall be offered through ODL methods.

Key Features of ODL:

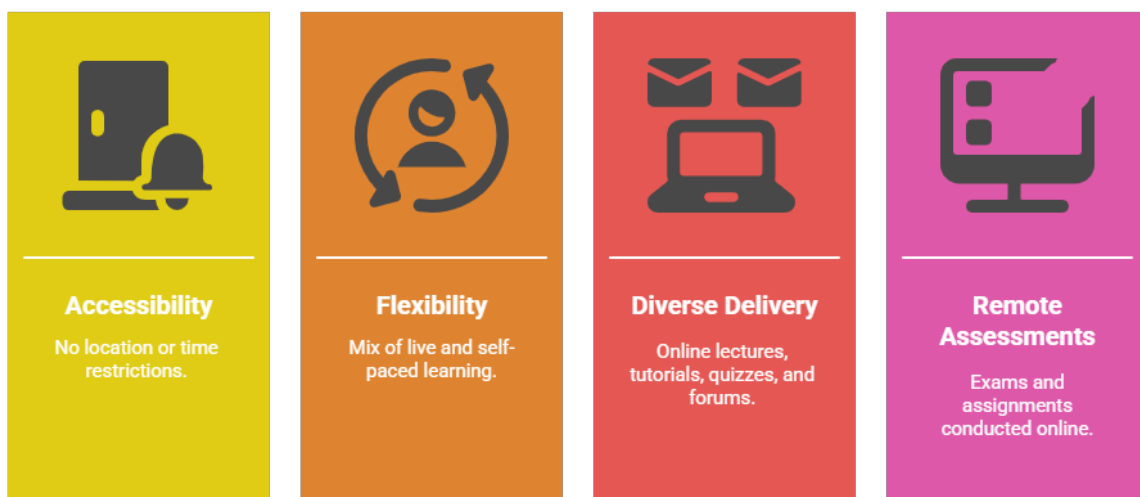


Figure 1: ODL main key features which includes accessibility, flexibility, diverse delivery and remote assessment.

Benefits for Learners:

- Study on their own schedule.
- Use digital tools (videos, e-books, quizzes).
- Occasional in-person sessions (if needed).

In short, ODL makes education more adaptable to learners' lives while maintaining quality standards.

1.2 The Role of the Learning Management System (LMS) in ODL Delivery

According to the Malaysian Qualifications Agency (2021), an electronic learning platform such as a Learning Management System (LMS), Learning Content Management System (LCMS), or learning portal is defined as an online repository for digital learning materials, assessments, assignments, and administrative information.

It is accessible to both instructors and learners, providing a medium for online interaction through various web-based tools. A standard LMS is expected to include features for user management, course management, communication, collaborative learning, and reporting.

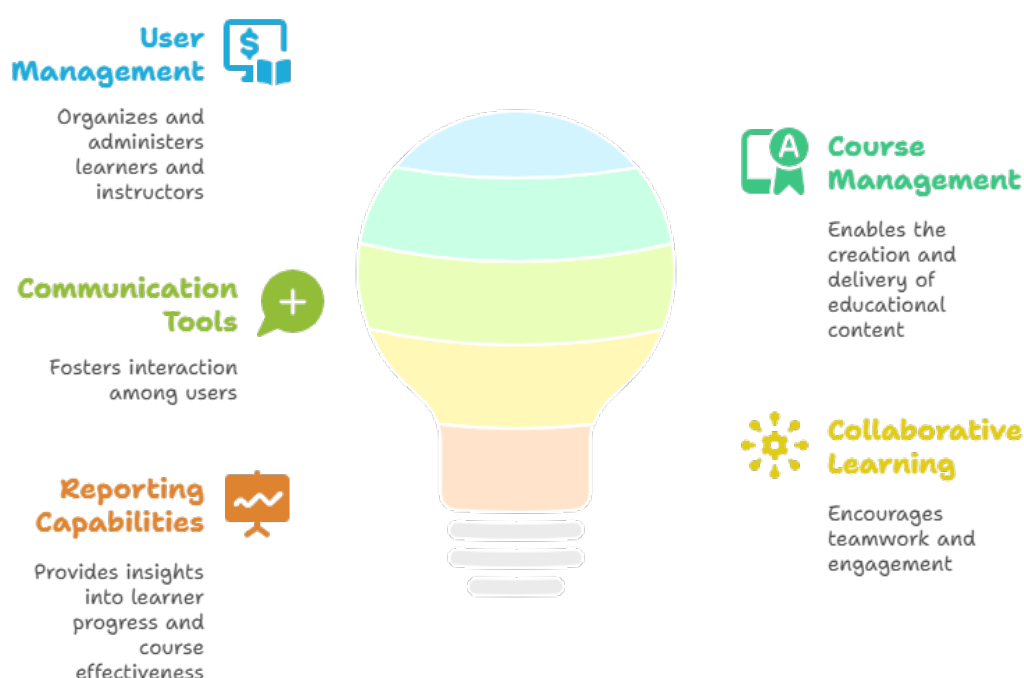


Figure 2: Key LMS features for supporting distance education.

In ensuring the effective use of the LMS in Open and Distance Learning (ODL), the Malaysian Qualifications Agency (MQA) stipulates that the following requirements shall be observed:

- Regular and substantive interaction between learners and instructors shall be conducted, either synchronously or asynchronously, through the LMS.
- Learners shall be provided with current program information, such as objectives, structure, schedule and assessment methods, at the commencement of their studies, accessible through the LMS.

Therefore, in accordance with the Malaysian Qualifications Agency's (MQA) recommendation, we have integrated all the required tools and features into our ODL LMS. Course instructors can access the ODL LMS via odl.unimas.my

1.3 What is SIM?

SIM stands for Self-Instructional Material. It is a specially designed learning material that guides learners to learn independently, without needing constant help from a course instructor.

SIMs are usually very clear, structured, interactive, and written in a way that "talks" to the learners, such as giving instructions, explanations, activities, and feedback.

In ODL, SIM is important because of its key characteristics, such as:



Figure 3: Key characteristics of SIM that enable ODL students to learn independently.

- Independent study - Learners often study on their own, away from campus and course instructors.
- Silent teacher - SIM acts almost like a "silent teacher". It helps learners understand, apply, and check their learning. It also must motivate learners to engage in learning activities.
- Flexible – SIM enable learners to learn anytime, anywhere, and at their own pace.

1.4 Fundamentals of SIM

For SIM to successfully support independent learning in ODL, course instructor should follow these six core principles, when develop the learning material, or SIM:

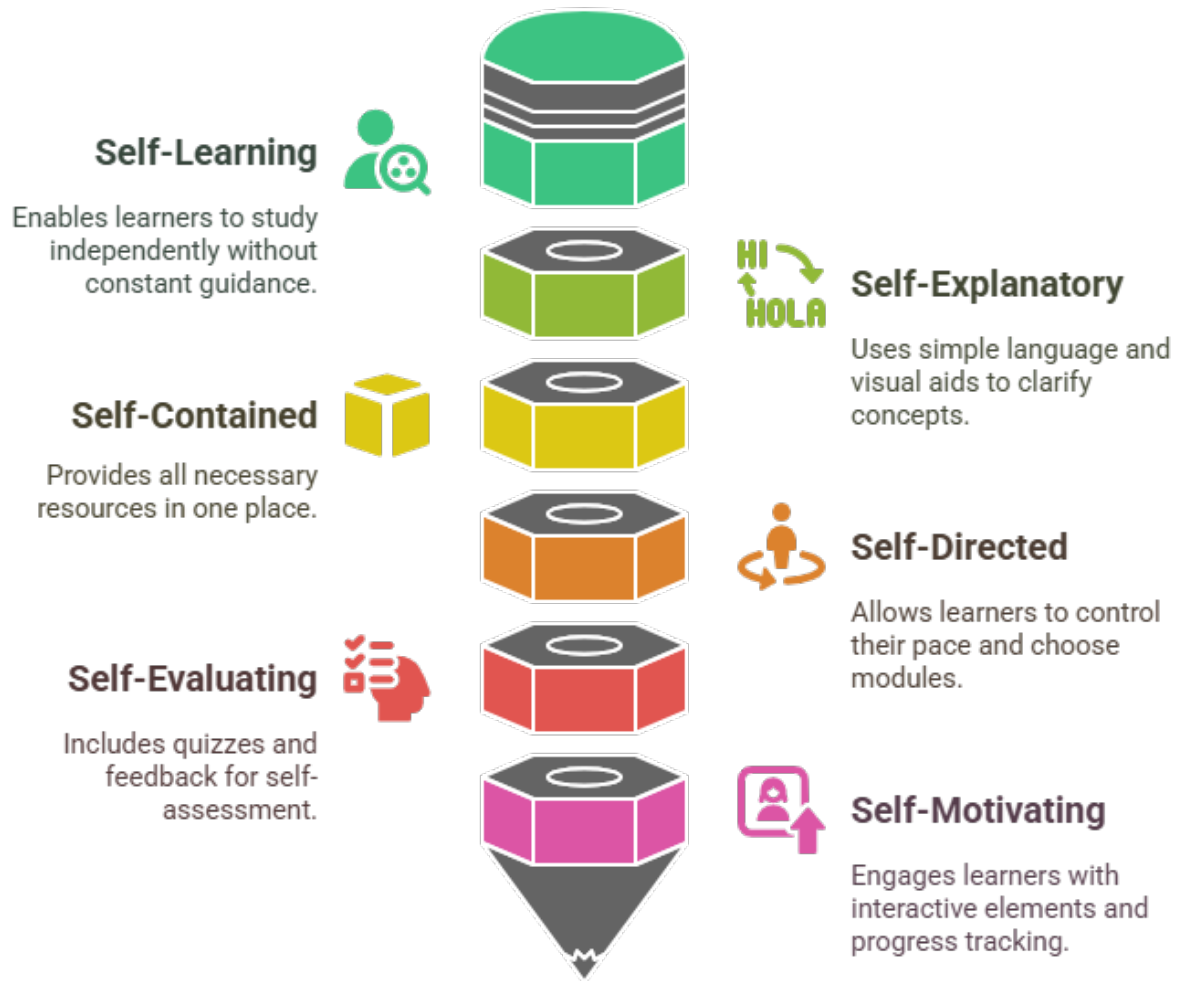


Figure 4: Six core principles of SIM for independent learning

Why These Principles Matter

When SIM follows these fundamentals, learners can:

- Study independently without feeling lost.
- Retain knowledge better through active participation.
- Stay motivated throughout the course.

For course instructors, this means designing materials that are not just informative but also interactive and user-friendly.

1.5 SIM VS Conventional Learning Materials

As a course instructor, it is important to understand the distinctions between Self-Instructional Materials and conventional learning materials. Table 1 provides a detailed comparison of the key differences:

Features	Self-Instructional Materials	Conventional Learning Materials
Interactivity	Includes guiding questions and activities.	Mainly text-based, passive reading.
Learning Approach	Learner-centred, self-paced study.	Teacher-centred, lecture-based.
Content Structure	Modular with outcomes, summaries, self-checks.	Long chapters, linear progression.
Feedback	Provides model answers or explanations.	Answers at end, often without detail.
Learning Support	Contains study tips, examples, and guidance.	Minimal support as it assumes teacher input.
Accessibility	Designed for independent use, print or digital.	Primarily print-based, classroom-dependent.
Updates	Easily revised for relevance.	Fixed until next edition.
Assessment	Emphasises formative self-checks.	Emphasises summative, end-of-chapter tests.

Table 1: Comparison between SIM and conventional learning materials.

1.6 The Role Of Instructional Designer In SIM Development

At Centre for Flexible Learning (CFlex), a dedicated instructional designer is available to support course instructors in the development of Self-Instructional Materials (SIM).

The role of the instructional designer in SIM development is to support course instructors in designing ODL courses that meet institutional goals, accreditation requirements, and industry standards. They ensure SIMs are well-structured, learner-friendly, and outcome-driven by applying effective instructional strategies, assessments, and content organization. Instructional designers also update materials, provide training, and develop learner support resources such as guides and FAQs. Ultimately, they bridge subject expertise with pedagogy to produce high-quality and impactful ODL materials.

Figure 5 illustrates the SIM development flowchart together with the role of the instructional designer in the process.

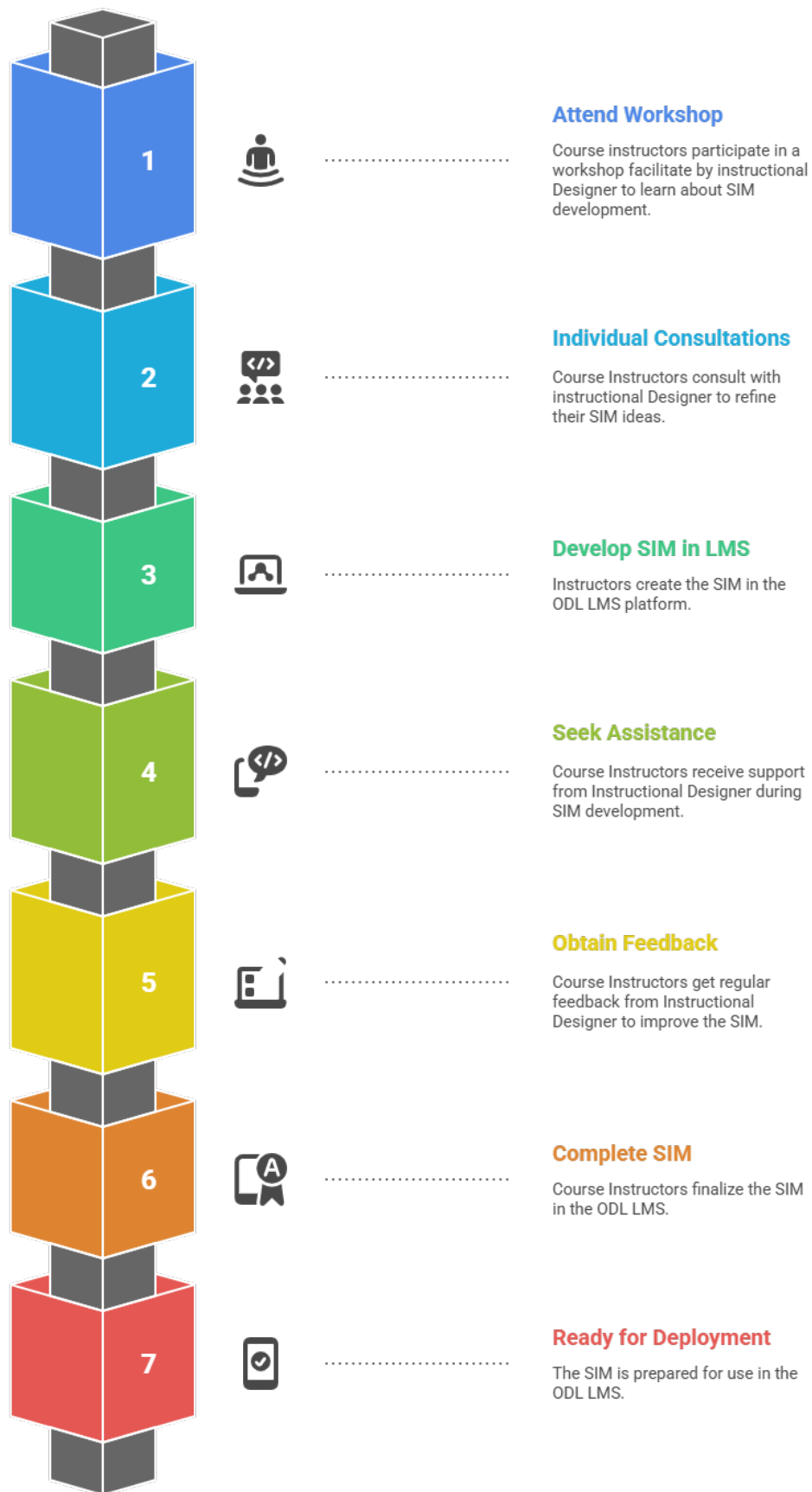


Figure 5: SIM development flowchart and the role of Instructional Designer

Section 2: SIM Planning

In the context of Open and Distance Learning (ODL), the design of high-quality Self-Instructional Materials is essential to support independent learning and learner engagement. Effective SIM development begins with careful and systematic planning. To facilitate this process, course instructors are provided with two essential planning tools: the Course Plan and the Course Storyboard. These tools are designed not only to guide the development of content but also to ensure that the instructional materials produced are learner-centred, outcome-driven, and pedagogically sound.

2.1 Overview of the Planning Tools

Course Outline Summary

The Course Outline Summary is a document that captures the overall instructional framework of a course. It includes key elements such as the course synopsis, learning outcomes, assessment strategies, delivery mode, and learner expectations. This plan serves as the foundational reference for aligning the SIM with the broader goals of the course. It enables instructors to identify the scope of content, the intended learning achievements, and the mechanisms through which learners will be assessed and supported throughout the course. Table 2 provides an example of a course outline summary.

Course Title	
Course Coordinator/ Lecturer(s)	
Course Synopsis	<i>Provide a brief overview of the course, outlining its objectives, key benefits, and intended audience. Highlight the knowledge and skills that learners will gain, as well as how the micro-credential adds value to their personal or professional development</i>
Student Learning Time (SLT)	<i>e.g. 120 hours (3 credits)</i>
Study Session	<i>e.g. Semester 1 or Semester 2</i>
Course Delivery	<i>e.g. online or blended</i>
Language	<i>Main language of course delivery</i>
Course Learning Outcomes (CLO)	<i>At the end of this course, students will be able to:</i> <i>1. xxxxx</i> <i>2. xxxxx</i>
Assessments	<i>Continuous Assessments:</i> <i>1. xxxxx – 10%</i> <i>2. xxxxx – 30%</i> <i>3. xxxxx – 30%</i> <i>Final Assessment:</i> <i>1. xxxxx – 40%</i>
Learner Commitment	<i>Describe what learners will need to do to complete the course. Include estimated hours/days/weeks – face-to-face (course/class schedule) or online (synchronous or asynchronous) and time spent on assessment.</i> <i>e.g. time schedule</i>

Table 2: Course Outline Summary example

Course Storyboard

The Course Storyboard provides a more detailed, unit-level breakdown of the course structure. It outlines each Learning Unit (LU) by specifying the associated subtopics, learning resources, planned learner activities, self-assessment components, and discussion tools. The storyboard

functions as a blueprint for developing each SIM module, ensuring consistency in instructional design, pacing, and engagement strategies across the course. It also allows instructors to plan the integration of multimedia resources and interactive elements that promote active learning. An example of a course storyboard is presented in Table 3.

LU Topic	Subtopic/ Body of Knowledge	Learning Resources	Learning Activities	Learning Self-Assessment	Discussion Tools	Completion Date
<i>Example:</i> LU 1: xxxxx	<i>Example:</i> 1.1: Introduction to xxxxx 1.2: The importance of xxxxx 1.3: Underlying theory of xxxxx 1.4: Application of xxxxx	<i>Resources Example:</i> 1.1 & 1.2: Recorded video lecture 1.3: Notes 1.4: Notes	<i>Activity Example:</i> 1.1: Reflection short question	<i>Self-Assessment Example:</i> 1.2, 1.3 & 1.4: Quiz	<i>Feedback Example:</i> - Forum peer discussion - Synchronous tutorial session	<i>Example:</i> xx September 2025

Table 3: Course Storyboard example

2.2 Alignment with the 7-Step SIM Planning Process

The 7-Step SIM Planning Process, advocated by the Commonwealth of Learning (2012), offers a systematic framework for developing high-quality, learner-centred Self-Instructional Materials (SIM), particularly within Open and Distance Learning (ODL) contexts. Each step contributes to ensuring that the materials are pedagogically sound, clearly structured, and aligned with intended learning outcomes.

Step 1: Needs Assessment

This step involves identifying the learners' background, learning context, and specific needs. A thorough needs assessment helps determine the content level, language style, mode of delivery, and types of support learners may require. It ensures that the SIM is tailored to suit the characteristics and expectations of the intended audience.

Step 2: Define Learning Outcomes

Learning outcomes are specific statements that describe what learners should be able to know, do, or demonstrate upon completing the course or unit. These outcomes form the foundation for content development, instructional strategies, and assessment methods. Clearly defined outcomes promote alignment and coherence throughout the learning material.

Step 3: Content Selection and Organization

This step involves identifying and selecting relevant content based on the defined learning outcomes. The content is then structured into logical sequences, progressing from simpler concepts to more complex ideas. Effective organization of content enhances comprehension and supports cumulative learning.

Step 4: Instructional Design

Instructional design focuses on how the content will be delivered and how learners will interact with it. This includes the use of examples, illustrations, activities, feedback, and learner support mechanisms. The goal is to create engaging, interactive, and accessible materials that promote active learning and critical thinking.

Step 5: Writing the Draft

In this phase, the SIM is written in a clear, conversational, and accessible tone. The content should guide the learner through the material in a logical and supportive manner. The draft includes introductions, content explanations, learning activities, summaries, and self-assessment tasks to reinforce understanding and encourage reflection.

Step 6: Review and Revision

Draft materials undergo content and instructional design reviews to ensure accuracy, clarity, consistency, and pedagogical effectiveness. Feedback from reviewers is used to improve and refine the materials. This step is crucial for maintaining quality and aligning the SIM with academic and institutional standards.

Step 7: Production and Distribution

The final stage involves formatting the SIM for publication and making it accessible to learners. This may include the integration of multimedia elements, layout adjustments, and ensuring compatibility with digital platforms. Distribution is planned in accordance with the course delivery mode, ensuring that learners can access and engage with the material effectively.

The Course Plan and Course Storyboard are constructed based on the principles of the 7-Step SIM Planning Process. This structured process provides a comprehensive framework for SIM development and ensures that each phase of instructional design is addressed in a systematic manner. Table 4 presents a detailed breakdown of the steps:

7-Step SIM Planning Process	Corresponding Planning Tool Component	Suggested Tools
Step 1: Needs Assessment	Identify needs of the target learners, to ensure learning material is directly aligned with learner needs.	Can be done by surveys, questionnaires, interview or observation.
Step 2: Define the Learning Outcomes	Course Learning Outcomes (CLOs) in the Course Plan	Course Plan
Step 3: Content Selection and Organization	Topics and subtopics structured in the Course Storyboard	Course Storyboard
Step 4: Instructional Design	SIM Design: Start designing the content of each SIM according to the	Content creation tools such as Capcut, Canva,

	Storyboard. Ensure that the following elements are included in the SIM: • engaging, • interactive, and • accessible materials that promote active learning and critical thinking	ElevenLab, Napkin AI, PowerPoint
Step 5: Writing the Draft	SIM Development: Drafting and developing SIM guided by the detailed structure of the storyboard	AI assisted tools such as ChatGPT, Copilot and Gemini and learning management delivery tools such as Built-in Moodle Tools
Step 6: Review and Revision	Opportunities for peer review and iterative refinement based on the plan	Rubric
Step 7: Production and Distribution	Planning for digital delivery in the Course Plan (e.g., online mode, tools used)	Checklist

Table 4: Corresponding Planning Tool Component with 7-Step SIM Planning Process

By aligning the Course Outline Summary and Storyboard with the 7-Step SIM Planning Process, instructors are able to systematically develop instructional materials that are coherent, learner-focused, and aligned with course objectives. This integration also supports consistency and quality assurance across course offerings within the ODL system.

Section 3: SIM Design

A well-designed Self-Instructional Material provides structured explanations, purposeful learning activities, and timely opportunities for self-assessment and feedback. Its primary objective is to enable learners, in the absence of direct instructor support, to comprehend the content, apply acquired knowledge, and sustain motivation throughout the learning process.

3.1 Rowntree's Techniques for SIM Design

According to Derek Rowntree (1994), he outlined several pedagogical strategies aimed at enhancing learner engagement and comprehension in distance education. Among these, “Test and Tell,” “Tutorial,” and the “Reflective Action Guide” are particularly valuable for structuring content that supports independent learning. Figure 6 provides a brief explanation of each of the techniques.

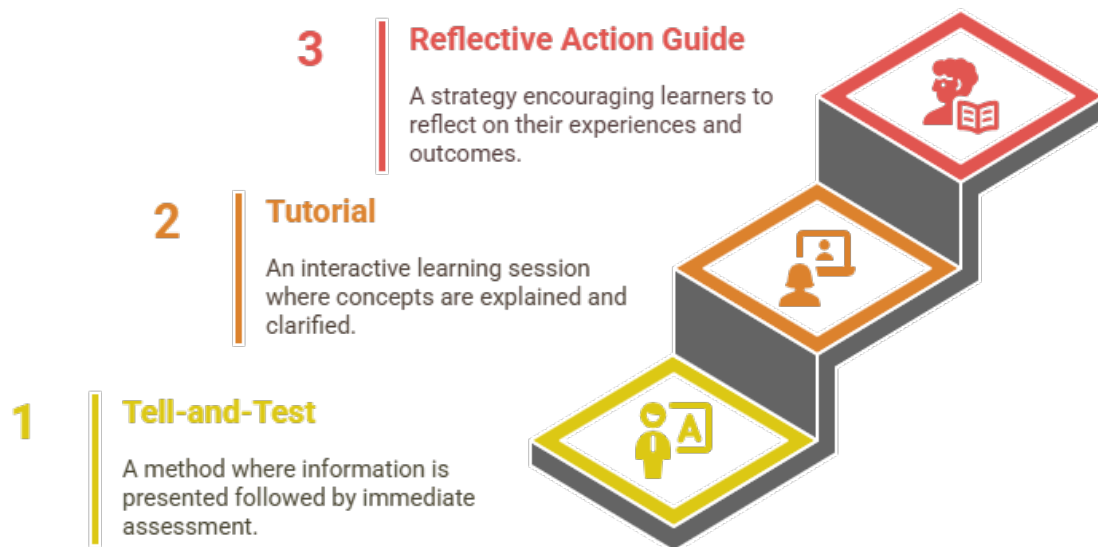


Figure 6: Rowntree (1994) pedagogical strategies in distance education

1. Tell-and-Test

“Tell-and-Test” is an instructional technique that integrates formative assessment into the learning process. In this approach, learners are first provided with information or instructional content ("tell"), followed by a brief test or question to assess understanding ("test").

Purpose:

- To introduce and explain key concepts before assessing comprehension.
- To reinforce learning through immediate application.
- To identify areas of misunderstanding for timely intervention.

2. Tutorial

The “Tutorial” approach in SIM simulates the role of a tutor by guiding learners through the content in a supportive and conversational manner. It anticipates learner questions and misconceptions, offering explanations, prompts, and clarifications as if the tutor were present.

Purpose:

- To provide a sense of interaction and instructor presence in self-study.
- To scaffold complex ideas through guided inquiry.
- To personalise the learning experience.

3. Reflective Action Guide

The Reflective Action Guide is a technique that encourages learners to stop and reflect on what they have learned, how it applies to their own context, and what actions they might take as a result of their learning.

Purpose:

- To deepen understanding through self-reflection.
- To encourage metacognition (thinking about one’s own learning).
- To promote the application of theory to practice.

3.2 Alignment of SIM Components with Rowntree’s Instructional Techniques

The development of our Self-Instructional Materials was guided by a commitment to learner autonomy, clarity of instruction, and active engagement. In doing so, the design approach reflects the instructional techniques proposed by Rowntree (1994). These techniques were purposefully embedded throughout the SIM to support independent learning by simulating instructor guidance, encouraging critical thinking, and promoting reflection. Table 5 presents a mapping of key SIM components to each of these techniques, illustrating how pedagogical theory informed our practical course design.

Rowntree’s Technique	Purpose	Example of SIM Components
Tell-and-Test	Presents instructional content before assessing understanding through questions or tasks. Reinforces learning and identifies gaps in comprehension.	• Explanatory Videos • Slides, eBook, reading materials Focus: Information transfer, concept explanation.
Tutorial	Simulates instructors’ guidance by offering clear, step-by-step explanations in a conversational tone. Supports learner comprehension and autonomy.	• Instructional videos with step-by-step demonstrations (e.g., solving a hypothesis test) • Embedded practice questions (i.e. using H5P)

		• Instant feedback and explanations (Self-evaluated quizzes) Focus: Teach by doing, with feedback and instruction.
Reflective Action Guide	Encourages learners to reflect on what they have learned and how it applies to their context. Promotes deeper understanding and metacognition.	Engages learners in reflection, decision-making, and internal dialogue; often scenario-based • Forum Discussion • Ice-Breaker Activity • Learning Activities with reflective prompts • Course Wrap-Up

Table 5: Rowntree's Techniques are aligned with our SIM component

3.3 SIM Structure and Component

To facilitate ease of navigation and promote an effective learning experience, the SIM has been systematically organised to support the needs of distance learners. The SIM is structured into three main parts: Introduction Section, Learning Unit Section, and Conclusion Section. This layout provides a clear and consistent learning pathway, allowing learners to engage with the course material in a logical and manageable sequence. Each part serves a distinct purpose in guiding the learner from course orientation to content mastery and final reflection.

Introduction

The Introduction Section of the Self-Instructional Materials (SIM) is designed to orient learners at the beginning of the course. It provides key information to help them understand the course structure, expectations, and available support. Table 6 outlines the components included in this section.

Component	Description
Welcoming Remarks Video	A pre-recorded video message from the course instructor to welcome and motivate learners.
Course Synopsis	A detailed description of the course, including its purpose, scope, and relevance to learners.
Course Learning Outcomes	Statements outlining the knowledge, skills, and competencies learners are expected to achieve.
Student Learning Time	An estimate of the time learners should allocate to complete each learning unit and assessment.
Methods of Assessment	A breakdown of graded assessment components required to successfully complete the course.

Suggested Study Schedule	A recommended weekly study plan to help learners manage their time and progress effectively.
Tutorial Schedule	A timetable of planned synchronous sessions for live interaction between learners and instructors.
Contact Information	Instructor contact details to facilitate communication and learner support.
Housekeeping Rules	A set of course policies, expectations, and behavioural guidelines for online learning.
Ice-Breaker Activity	An initial activity designed to foster interaction and build rapport among learners and instructor.

Table 6: SIM component to be included in the Introduction section

Learning Unit Section

The Learning Unit Section forms the core of the Self-Instructional Materials, providing structured, outcome-based content delivery to support independent learning. Each unit is designed to be self-contained, guiding learners through a logical sequence of subtopics, activities, and assessments. Table 7 outlines the key components of each learning unit and their instructional functions.

Component	Description
Overview	A detailed description introducing the focus, purpose, and context of the specific learning unit.
Unit Learning Outcome(s)	Statements outlining what learners are expected to achieve by the end of the learning unit.
List of Subtopics	A breakdown of subtopics covered within the unit, including the suggested time required to complete each.
Terminology	A glossary of specific or unique terms used in the unit to support learner understanding of key concepts.
Learning Resources	Materials provided to facilitate content understanding, such as recorded video/audio slides, interactive notes, or AI voice clone tools. Must include at least one resource and cover all subtopics.
Learning Activities	Activities designed to promote reflection and deeper understanding, often using tools such as feedback prompts, forums, or Padlet. Must include at least one and cover all subtopics.
Self-Assessment Activities	Tools that enable learners to test their understanding, typically in the form of MCQs, True/False, or matching tasks. Learners must be able to self-check their responses. Minimum one per unit, covering all subtopics.

Forum Discussion	An asynchronous communication space where learners can ask questions and interact with instructors and peers regarding the unit content.
Key Points	A point-form summary highlighting the main concepts and takeaways from the unit.
References	A list of academic sources specific to the learning unit, formatted according to APA style.

Table 7: SIM component to be included in the learning unit section

Course Assessments Section

This section outlines all graded assessments associated with the course. Unlike self-assessment activities, these tasks contribute to the learner's final grade and are used to measure the achievement of learning outcomes. Table 8 lists the components to be included in the course assessment section.

Component	Description
Assignment Instructions	Clear, detailed guidelines for each graded task, including the format, submission requirements, and objectives.
Assessment Types	May include individual assignments, group projects, presentations, case analyses, or reports.
Assessment Weighting	Percentage value assigned to each task as part of the final course grade.
Estimated Completion Time	Suggested number of hours required to complete each graded assessment, helping learners plan their time effectively.

Table 8: SIM component to be included in the course assessment section

Conclusion Section

The Conclusion Section of Self-Instructional Materials wraps up the learning experience by summarizing key points and guiding learners to reflect, review progress, and complete all required tasks. Table 9 highlights the elements included:

Component	Description
Course Wrap-Up	A final message from the course instructor that summarizes the course journey, reinforces key themes, and expresses hopes or well wishes for learners as they complete the course.
Course Completion Checklist	An automated, interactive checklist tool that enables learners to track their completion of learning units, activities, and assessments, ensuring all course requirements are fulfilled.

Table 9: SIM component to be included in the conclusion section

Section 4: SIM Development

The development of Self-Instructional Materials (SIM) is vital to ensure course content is accessible, engaging, and effective for independent learners. This section offers practical guidance for instructors on creating slides, designing interactive notes, developing self-assessment activities, and recording video/audio slides. Each guide supports the production of high-quality materials that foster engagement and active learning in an ODL environment.

4.1 Slides Creation & Design

Slides Creation & Design equips educators with the technical skills to create clear, well-structured, and visually appealing slides that enhance SIM content delivery. In these guidelines, we present several methods to support you in designing effective slides.

4.1.1 Using Canva AI (Design for Me)

To support the development of visually engaging and pedagogically sound content, instructors are encouraged to use Canva's AI-powered presentation tool. The following steps outline how to generate and refine PowerPoint-style slides using Canva:

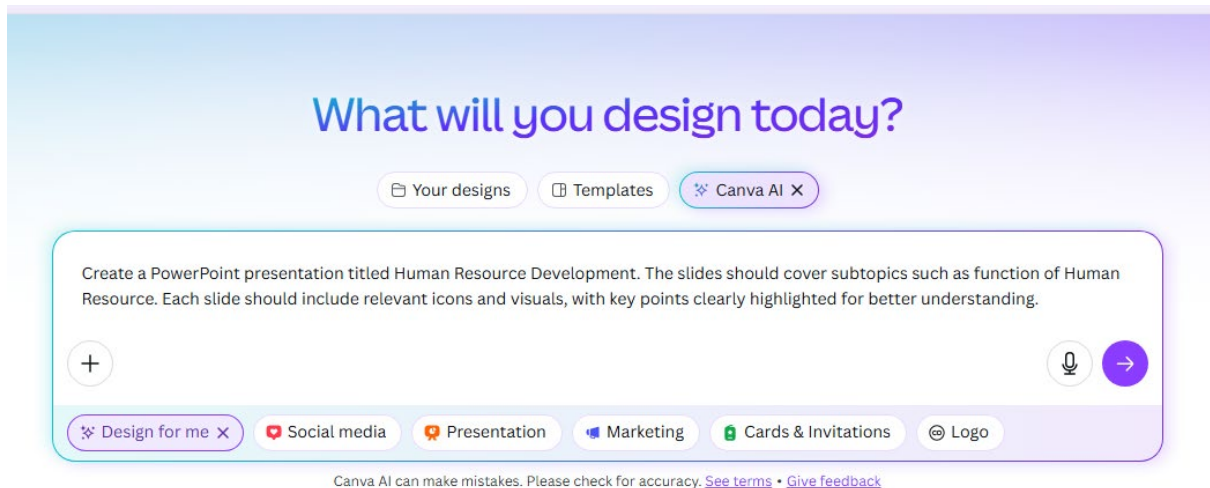


Figure 7: Simply input your prompt into Canva AI, and select the Design for me features, and Canva will auto generate slides for you.

Step 1: Access the Canva Dashboard

Begin by navigating to the Canva homepage and logging into your account.

Step 2: Launch the AI Presentation Tool

Use Canva's AI Design for Me feature to generate slide content based on your instructional needs.

Step 3: Enter the Prompt

In the AI tool, enter the following prompt:

“Create a PowerPoint presentation titled [Topic]. The slides should cover subtopics such as [Subtopic]. Each slide should include relevant icons and visuals, with key points clearly highlighted for better understanding.”

Step 4: Generate the Slides

Allow Canva to process the prompt and produce a draft slide deck within a few seconds.

Step 5: Review and Edit the Content

Carefully review the generated slides. Make necessary adjustments to the text, layout, or visual elements to ensure alignment with the learning outcomes and context of your course.

Step 6: Incorporate Custom Visuals or Branding

Enhance the presentation by adding institutional branding, course logos, or subject-specific visuals to create a cohesive and professional learning resource.

4.1.2 Using AI Generator (ChatGPT, Copilot, Gemini) + PowerPoint Online

This guide outlines the process of transforming raw lecture materials into interactive presentation slides using AI tools and Microsoft PowerPoint. The steps below provide a structured approach for instructors to develop effective visual learning resources.

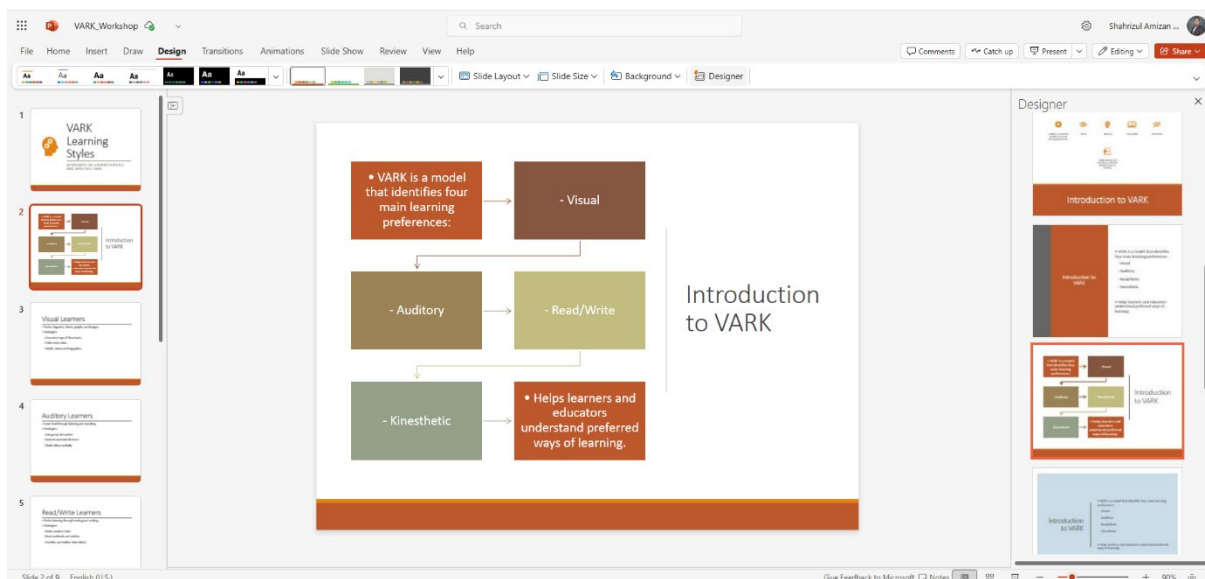


Figure 8: You can quickly redesign the plain slides generated by ChatGPT, into an interactive slide using PowerPoint Designer function.

Step 1: Upload Source Content

Begin by uploading your lecture notes, PDF documents, or relevant textbook excerpts to the AI content generator of your choice.

Step 2: Generate a Slide Summary Using AI

To summarize content into presentation slides, use the prompt:

“Summarize this content into key slide points for a presentation on [Topic]. Use icons and highlight key text to make it interactive. Then, convert it into a .pptx file (16:9).” The AI will condense the information into clear, slide-ready points.

Alternatively, if you prefer to create slides from scratch, use this prompt instead:

“Produce pptx (16:9) on [Topic]. Include subtopics such as [Subtopic].”

Step 3: Import into PowerPoint Online

Upload the generated .pptx file into your PowerPoint Online account to begin editing and refining the content.

Step 4: Apply a Slide Design

Use the PowerPoint Designer tool to apply a professional template or layout. Apply the chosen design to each slide individually to ensure consistency and visual appeal throughout the presentation.

4.1.3: Enhance Your Visual Using Napkin AI

This guide provides step-by-step instructions for using Napkin AI to design interactive visual notes that complement presentation slides and enhance learner engagement. These visuals can be used to illustrate concepts through infographics, diagrams, or flowcharts.



Figure 9: Simply highlight your text points, and Napkin AI will generate interactive graphics based on your text input.

Step 1: Access Napkin AI and Create a New Project

Sign in to Napkin AI on a desktop browser. Click “Create my first Napkin” or initiate a new project. You may paste existing slide text, input a topic manually, or generate content using the built-in AI tool.

Step 2: Generate Visual Representations

Hover over each text block and select the “Generate Visual” button. Napkin will automatically produce a range of visual diagrams or graphic options based on the input content.

Step 3: Select a Visual Style

Review the generated visuals and select the most appropriate representation. Choose a preferred style, such as a flowchart, concept map, or infographic, depending on the instructional intent.

Step 4: Edit and Refine the Visual

Customise the visual directly within Napkin by adjusting icons, connectors, colour schemes, and typography to align with your message and course design aesthetics.

Step 5: Export the Final Visual

Export the completed visual in your desired format—options include PowerPoint (PPT), PNG, SVG, or PDF—depending on the intended use and platform compatibility.

Step 6: Integrate into Presentation Tools

Insert the exported visuals into your preferred authoring tools, such as PowerPoint or Canva. The visuals can be used as standalone slides or embedded within existing presentation materials.

4.2 Interactive Notes Creation

Interactive Notes Creation equips educators with the skills to design engaging, easy-to-navigate notes using Canva AI. In these guidelines, we outline the method for creating interactive notes that enhance SIM content delivery.

4.2.1 Using Canva AI (Code for Me)

This guide outlines the process of generating interactive notes using Canva’s AI tools and embedding them into Moodle for learner access. Interactive notes enhance engagement by combining structured content with integrated reflection and self-assessment activities.

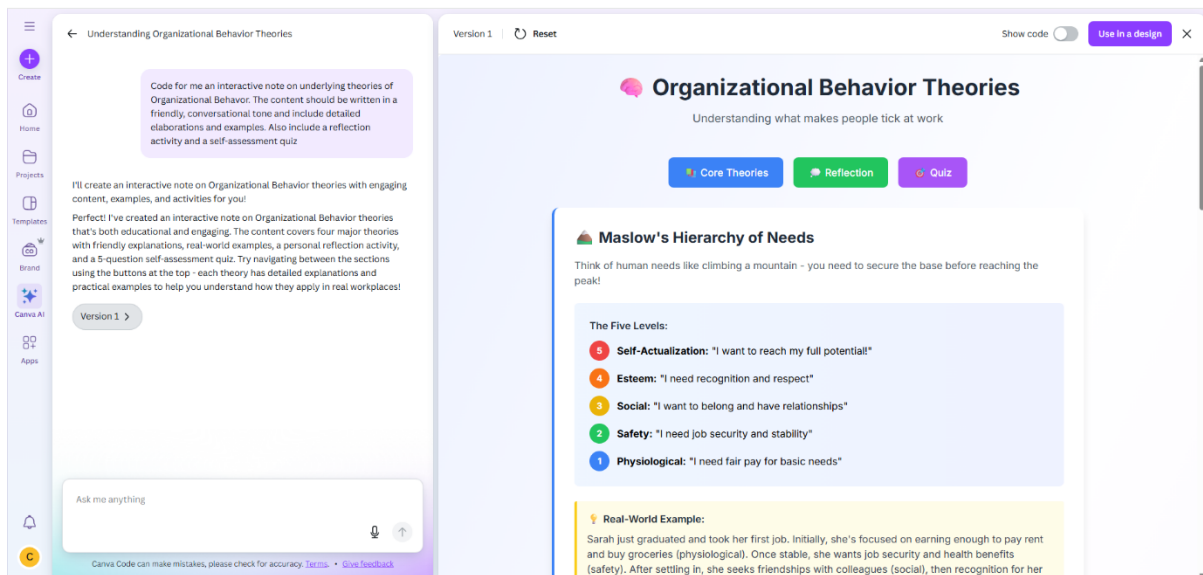


Figure 10: By using the Code for Me feature in Canva AI and entering the correct prompt, you can generate interactive notes and embed them into the ODL LMS.

Step 1: Access Canva Home

Begin by navigating to the Canva dashboard and logging into your account.

Step 2: Enter the HTML Prompt in Canva AI

Use the following prompt to generate an interactive note:

“Code for me an interactive note on [topic]. Include subtopics such as [insert subtopics]. The content should be written in a friendly, conversational tone and include detailed elaborations and examples. Also include a reflection activity and a self-assessment quiz (True/False or Matching).”

Step 3: Wait for Canva to Generate Content

Depending on the complexity of the topic and subtopics, Canva may take some time to produce the complete interactive note.

Step 4: Use in Design

Once the content is generated, select “Use in Design” and choose the Presentation format to begin customising the layout.

Step 5: Generate the Embed Code

After finalising the interactive note, click Share → More → See all → Embed to obtain the HTML embed code.

Step 6: Embed into Moodle

Navigate to the appropriate section within your Moodle course. Switch to the HTML editor in the desired activity or content area, and paste the embed code. This will display the interactive note directly within the Moodle interface for student access.

4.3 Self-Assessment Creation

Self-Assessment Creation equips educators with the skills to develop quizzes efficiently by using AI tools to generate questions. In these guidelines, we outline this method to help you create effective self-assessments that support SIM content delivery.

4.3.1 AI Code Generator (ChatGPT, Copilot, Gemini) + Moodle Quiz

This guide explains how to develop self-assessment quizzes for Moodle using AI-powered content generators capable of producing GIFT-formatted questions. The GIFT (General Import Format Technology) format enables efficient import of various question types into Moodle for auto-graded assessments.

Create a 10-item quiz in GIFT format on the topic of Organizational Behavior. Include multiple choice, with correct answers marked. Output in plain text for Moodle.

Here's a 10-item GIFT-format quiz on Organizational Behavior, ready to be imported into Moodle:

```
perl                                                                    Copy Edit

::Q1:: Which of the following best defines Organizational Behavior? {
~The process of structuring organizations
~The study of accounting and financial systems
=The study of human behavior in organizational settings
~The design of organizational charts
}

::Q2:: Which of the following is NOT one of the Levels of analysis in Organizational Behavior? {
~Individual
~Group
=Technological
~Organizational
}

::Q3:: Motivation theories in Organizational Behavior primarily seek to explain: {
=Why individuals choose certain behaviors and persist with them
~How organizations design their products
~Why firms compete in certain industries
~How leaders create organizational charts
}

::Q4:: Maslow's Hierarchy of Needs suggests that self-actualization refers to: {
~Meeting basic survival needs
~Gaining safety and security
}
```

+ Ask anything

ChatGPT can make mistakes. Check important info.

Figure 11: By using the appropriate prompt, you can ask an AI generator to produce ready-to-use quiz code, which can then be imported directly into the ODL LMS.

Step 1: Generate Quiz Content Using an AI Tool

Use an AI generator and enter the following prompt:

“Create a [number]-item quiz in GIFT format on the topic of [Your Topic]. Include [question types: multiple choice, true/false, short answer], with correct answers marked. Output in plain text for Moodle.”

Step 2: Save the Output in a Plain Text File

Copy the AI-generated content and paste it into a plain text editor such as Notepad. When saving, ensure the file type is set to 'All Files' and the encoding is set to 'UTF-8'. Figure 12 shows the correct saving process.

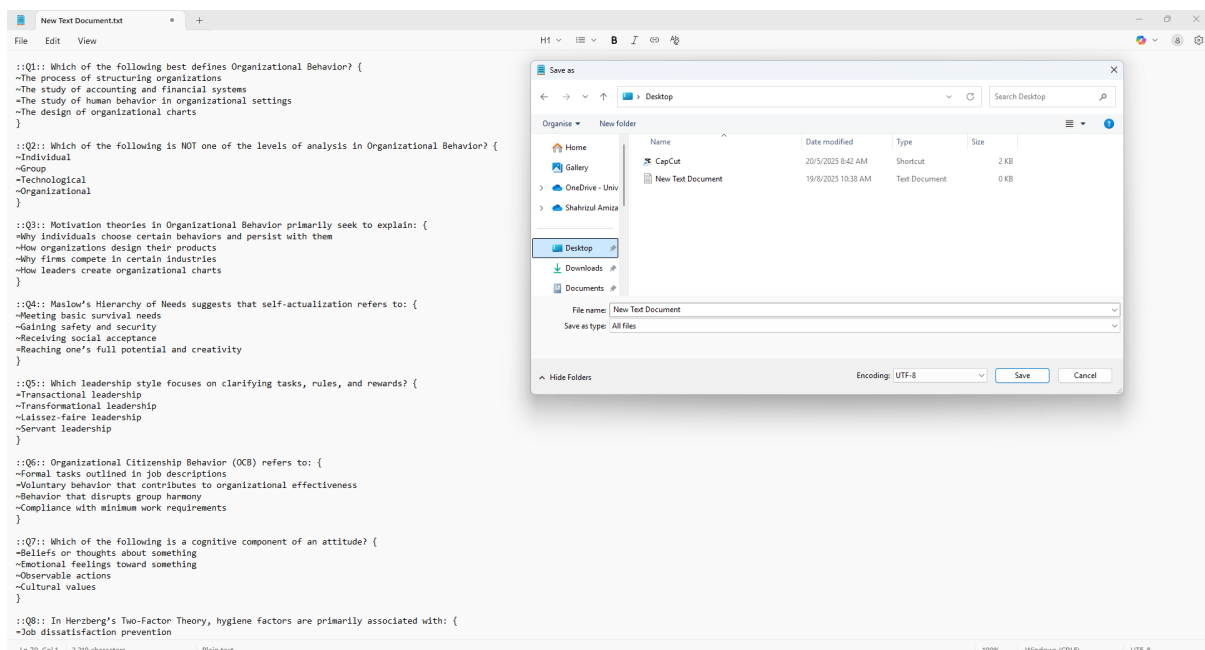


Figure 12: The screenshot shows the correct settings for saving your quiz code using Notepad.

Step 3: Upload the Quiz to Moodle

Log in to the ODL LMS and navigate to your respective course. Use an existing quiz or create a new one if you don't have any. From the quiz, go to Question Bank → Import. Choose the GIFT format, then upload your txt file. Moodle will automatically process and integrate the questions into your course's question bank. Figure 13 shows the correct process.

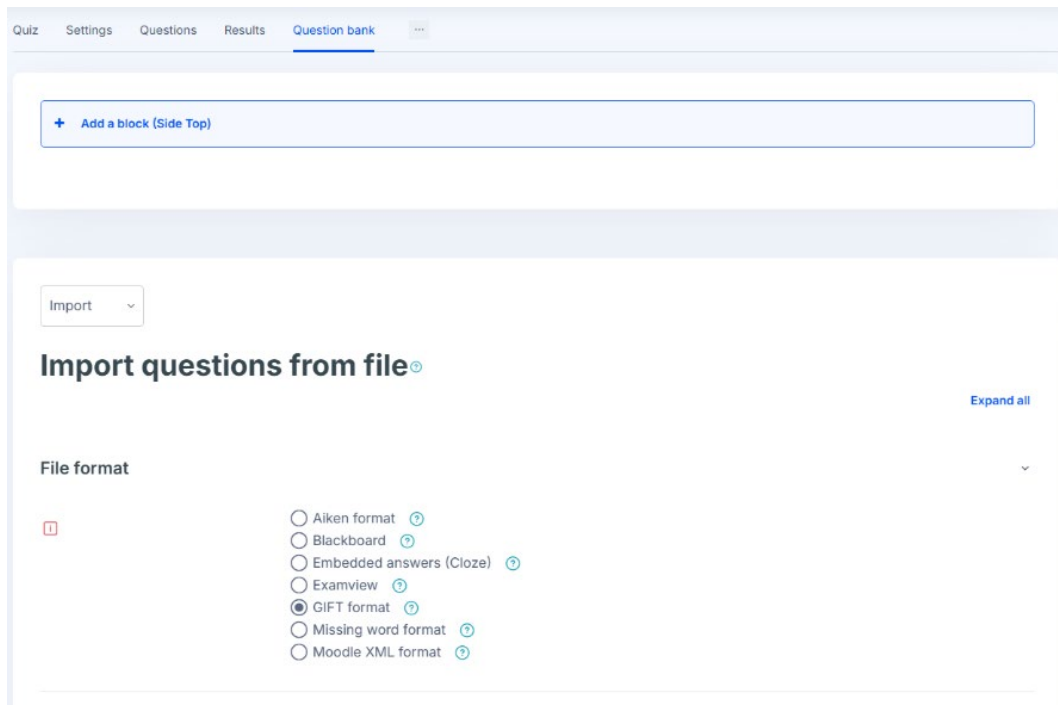


Figure 13: From your existing quiz, go to the Question Bank tab on the top left corner, click the Import button, and in the file format options, choose GIFT format.

Step 4: Display and Test Your Quiz

After completing importing questions, click the Questions tab in the top-left corner. In the Questions section, click Add and select From the question bank. Choose the question bank you imported. Once finished, test your quiz to ensure it was imported correctly and that answer feedback is displayed after completion. Figure 14 shows the correct process.

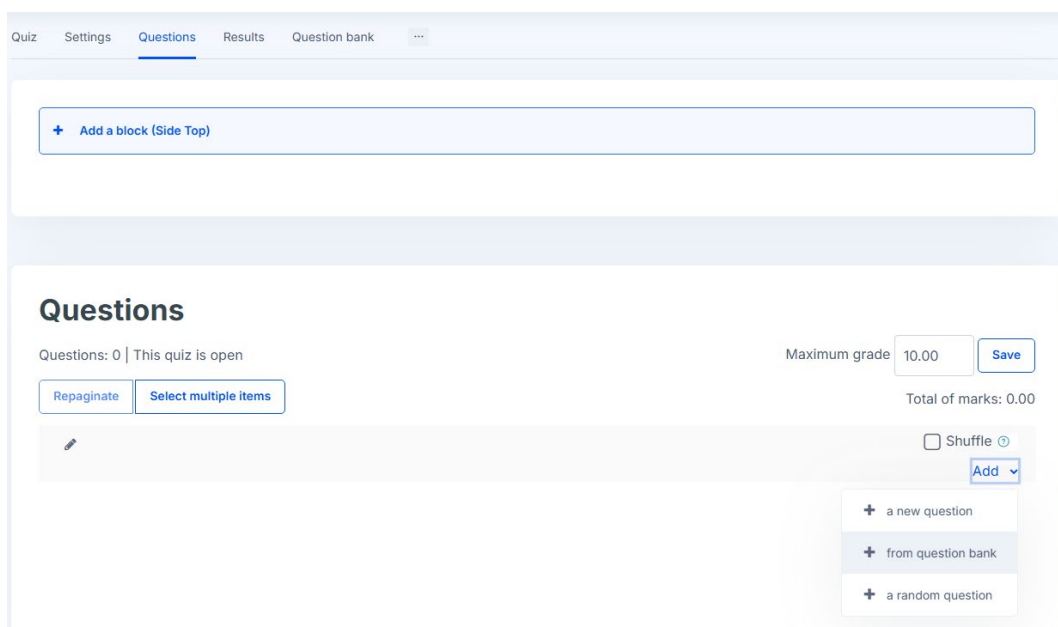


Figure 14: After importing, go to the Questions tab as shown. In the Questions section, click Add and select From the question bank.

4.4 Recording Video/ Audio Slides

Recording Video/Audio Slides equips educators with the skills to create engaging narrated presentations using Canva. In these guidelines, we outline this method to help you produce effective video or audio slides that support SIM content delivery.

4.4.1 Record Slide Presentation in Canva

The following outlines step by step for recording narrated presentation slides using Canva's built-in recording studio. These recordings can be used as video lectures or learning resources, supporting flexible and independent learning in an Open and Distance Learning (ODL) environment.

Step 1: Prepare Your Slides

- Open Canva and either create a new presentation or open an existing one.
- Organise the slides in a logical sequence to support coherent delivery.

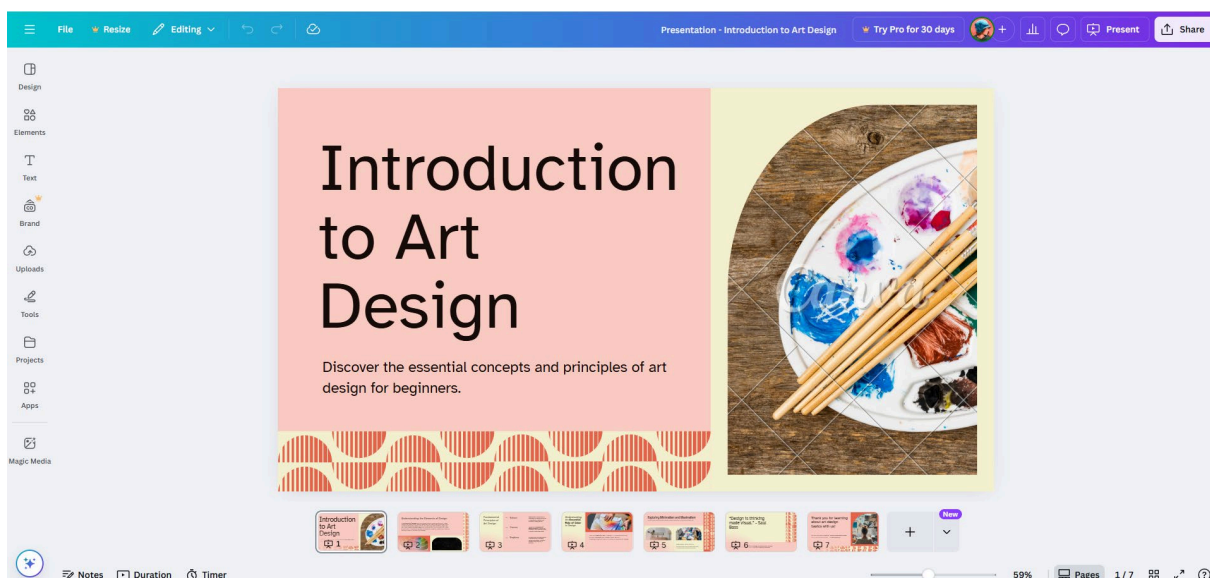


Figure 15: In this screenshot, the slides are arranged in a logical sequence

Step 2: Access the Presentation Mode

- Click the “Present” button in the top-right corner of the Canva interface.
- Select “Present and record” from the dropdown menu.

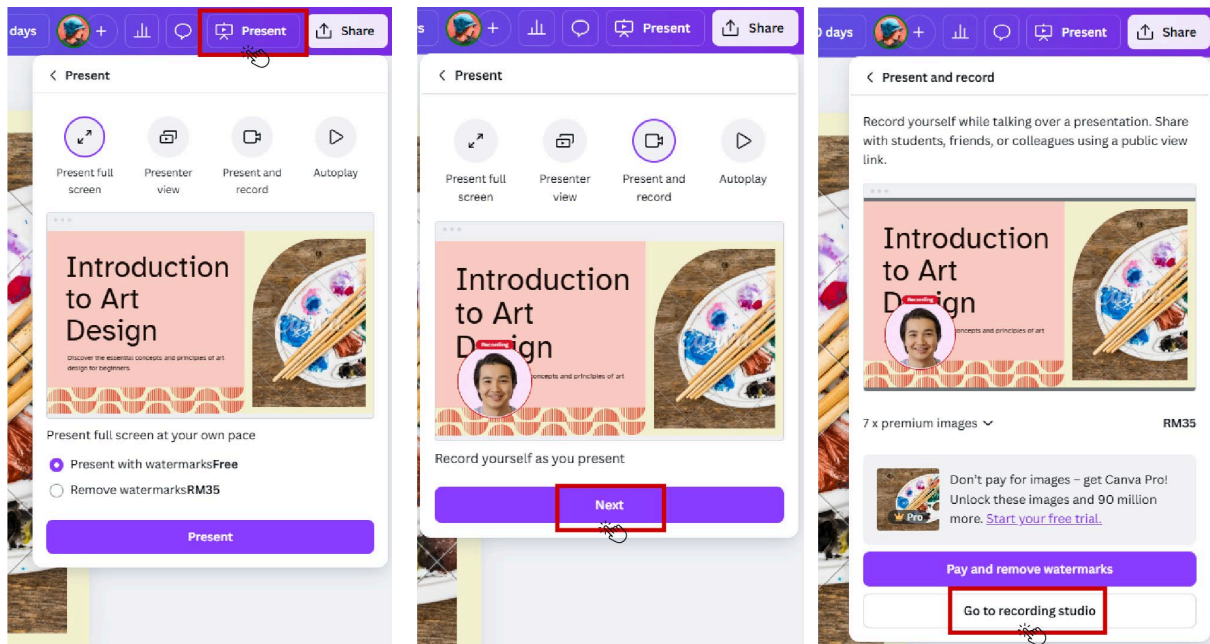


Figure 16: Step-by-step to access presentation mode

Step 3: Enter the Recording Studio

- Click “Go to recording studio” to launch the recording interface in a new browser tab.
- Allow Canva to access your microphone and camera when prompted.

Step 4: Set Up Your Recording Environment

- Choose whether to enable your camera (optional).
- Select the appropriate microphone input for clear audio.
- Preview your setup to ensure clarity and readiness.

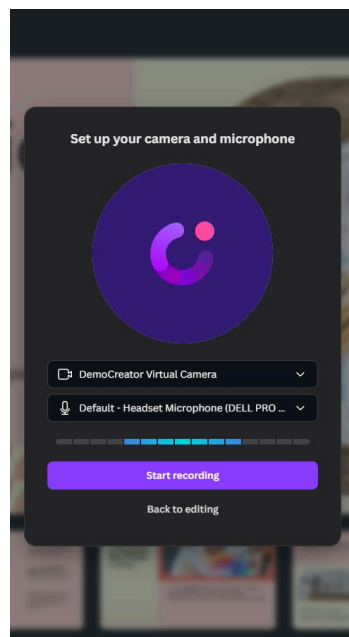


Figure 17: Test your camera and mic before you begin recording

Step 5: Begin Recording Your Presentation

- Click the “Start recording” button.
- Navigate through the slides using arrow keys or on-screen controls.
- Present each slide individually, while Canva records your voice narration and slide transitions.
- You may pause between slides and resume as needed. Canva also allows minor editing after the recording session.

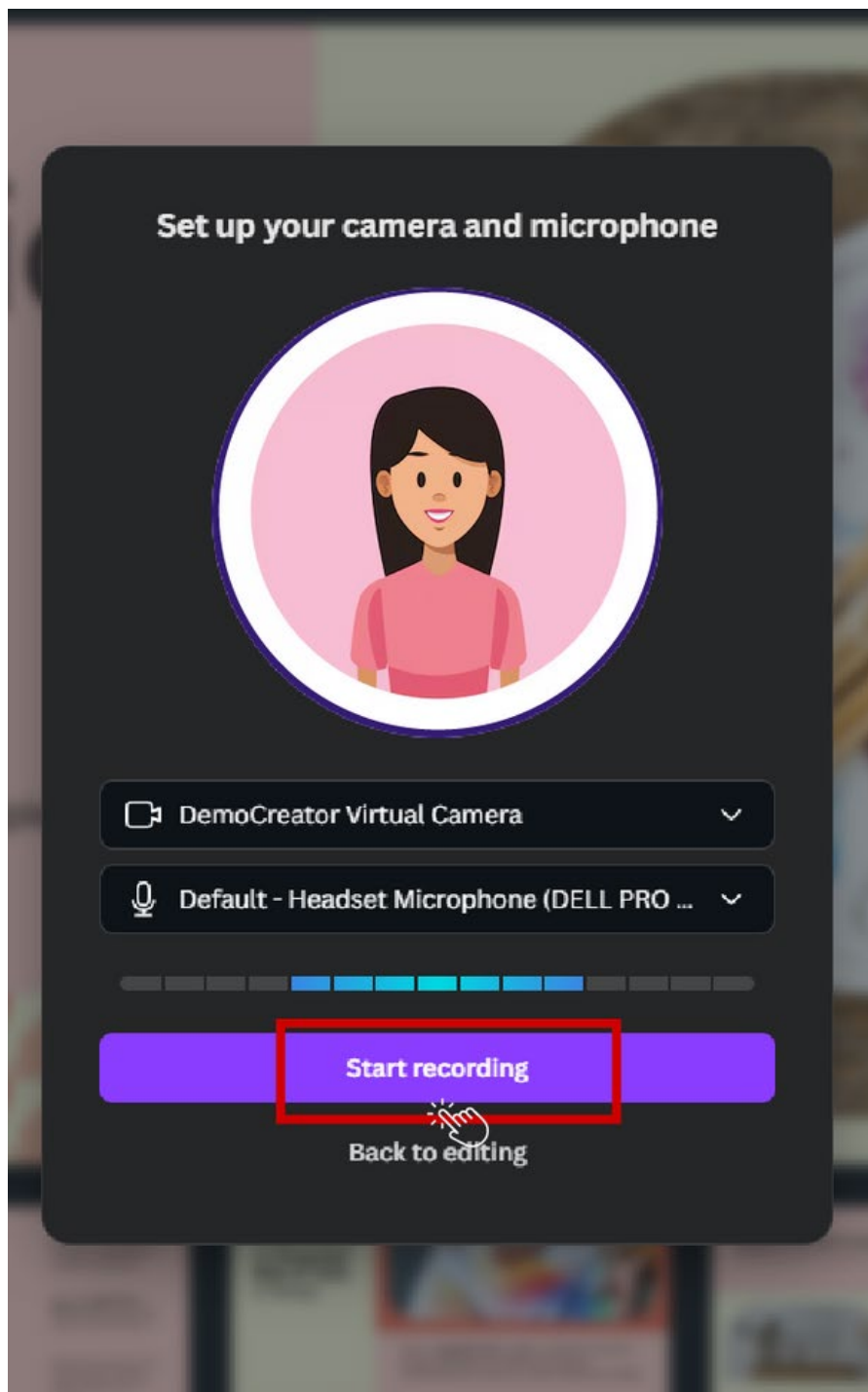


Figure 18: Press the “Start Recording” button, as shown in the screenshot, to start recording

Optional Slide-by-Slide Recording Method:

- For individual slide recordings, select “Upload” then click “Record yourself”.
- Click “Record” to begin narration for the current slide.
- Proceed to the next slide and repeat the process.
- When finished, select “Save and exit.”

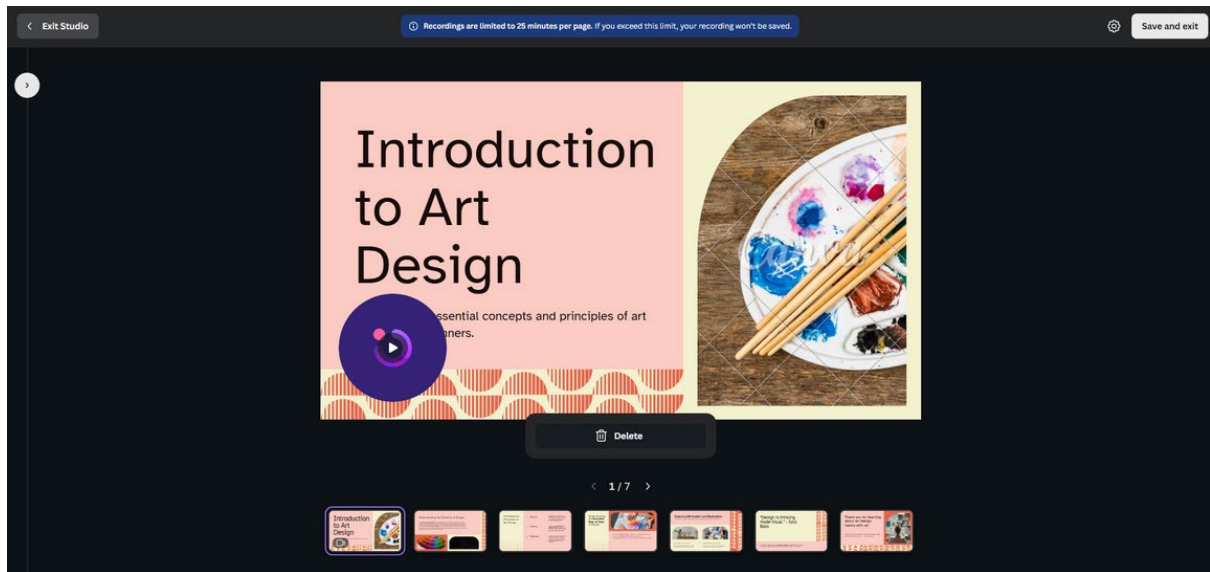


Figure 19: Screenshot of slide-by-slide recording method

Step 6: End and Process the Recording

- Click “End recording” when your presentation is complete.
- Canva will automatically process and save the video.

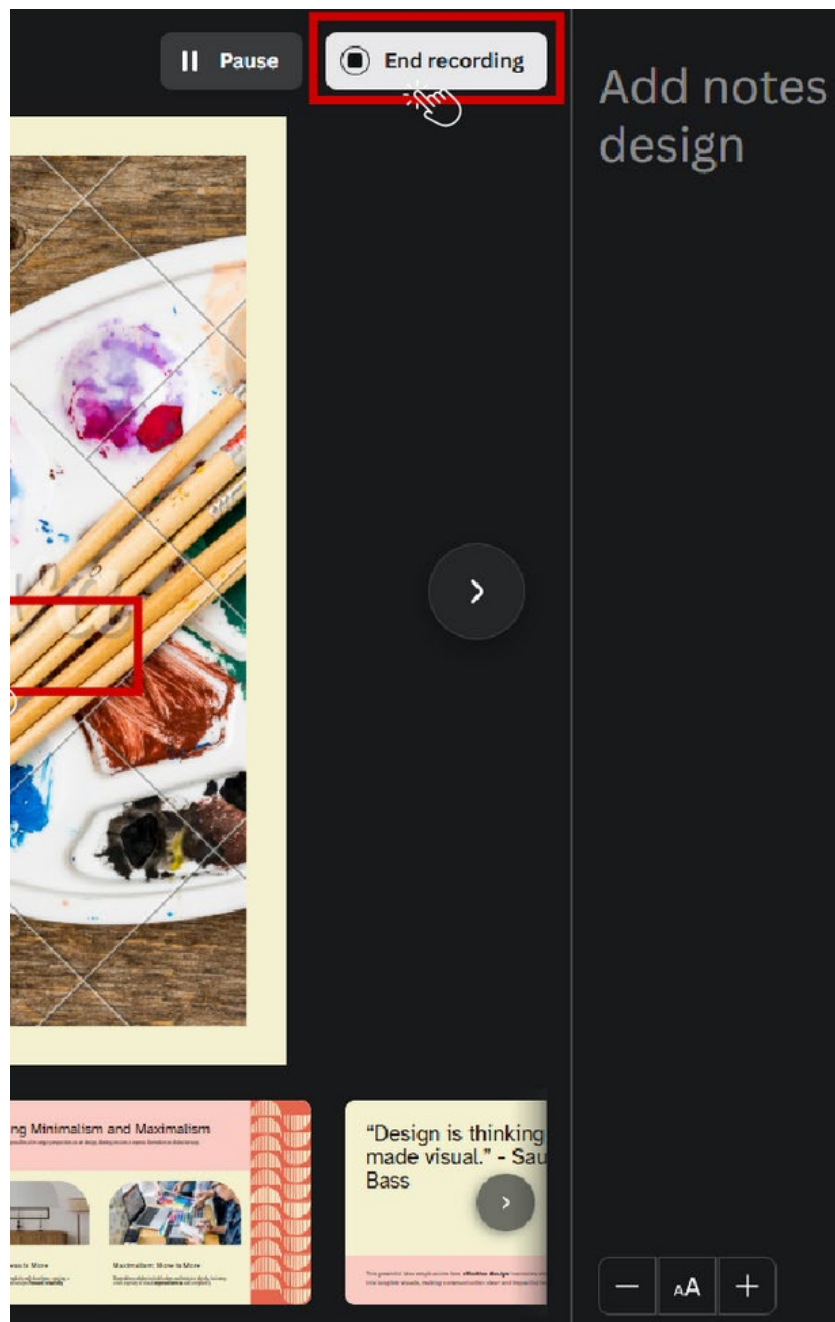


Figure 20: Click the “end recording” button to end recording session

Step 7: Download or Share the Recording

Choose to either:

- Copy the shareable link, or
- Download the video in MP4 format to your local device.

Tips for Effective Recording

- Limit each video recording to 10 minutes per unit or module for better learner engagement.
- Rehearse your narration before recording to ensure smooth delivery.
- Record in a quiet environment to minimise background noise and distractions.

Section 5: Conclusion

The development of Self-Instructional Materials at Universiti Malaysia Sarawak is a strategic and pedagogically grounded process that supports high-quality learning within the context of Open and Distance Learning (ODL). As outlined in this handbook, the creation of effective SIM requires systematic planning, structured design, and the integration of instructional strategies that prioritise learner autonomy and engagement.

The adoption of the 7-Step SIM Planning Process ensures that each phase of development is informed by sound instructional design principles. Furthermore, alignment with Rowntree's instructional techniques, namely Test and Tell, Tutorial, and Reflective Action Guide, reinforces the SIM's ability to support independent learning, promote critical thinking, and encourage learner reflection.

The structured organisation of SIM into three distinct sections, which are, Introduction, Learning Unit, and Conclusion, enables content to be delivered in a coherent and accessible manner. This structure also facilitates consistency across courses and supports learners in navigating materials effectively, fostering a more autonomous and self-directed learning experience.

The integration of digital tools, including Canva, AI content generators, and the Moodle learning management system, further enhances the interactivity and accessibility of SIM. These technologies enable the inclusion of diverse media formats such as video lectures, interactive notes, and automated self-assessments, which contribute to maintaining learner motivation and interest throughout the course.

Although developing high-quality SIM requires time, effort, and careful attention to detail, the impact on learner engagement, comprehension, and academic achievement is substantial. Course instructors are encouraged to adopt a learner-centred approach throughout the design process, informed by feedback, reflection, and evidence-based practices in online education.

In conclusion, SIM development at UNIMAS represents more than the creation of content. It is an intentional pedagogical practice aimed at promoting inclusive, flexible, and effective learning environments that empower learners to take ownership of their educational journey.

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- Malaysian Qualifications Agency. (2021). Code of practice for programme accreditation: Open and distance learning (COPPA-ODL) (2nd ed.). Malaysian Qualifications Agency.
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