

ODL SELF INSTRUCTIONAL MATERIAL (SIM) DEVELOPMENT

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SIM Co-ordinator

Fakulti Pengurusan Teknologi dan Teknousahawanan

TODAY'S AGENDA



- Open Distance Learning (ODL)
- Self Instructional Material (SIM)
- Designing SIM content

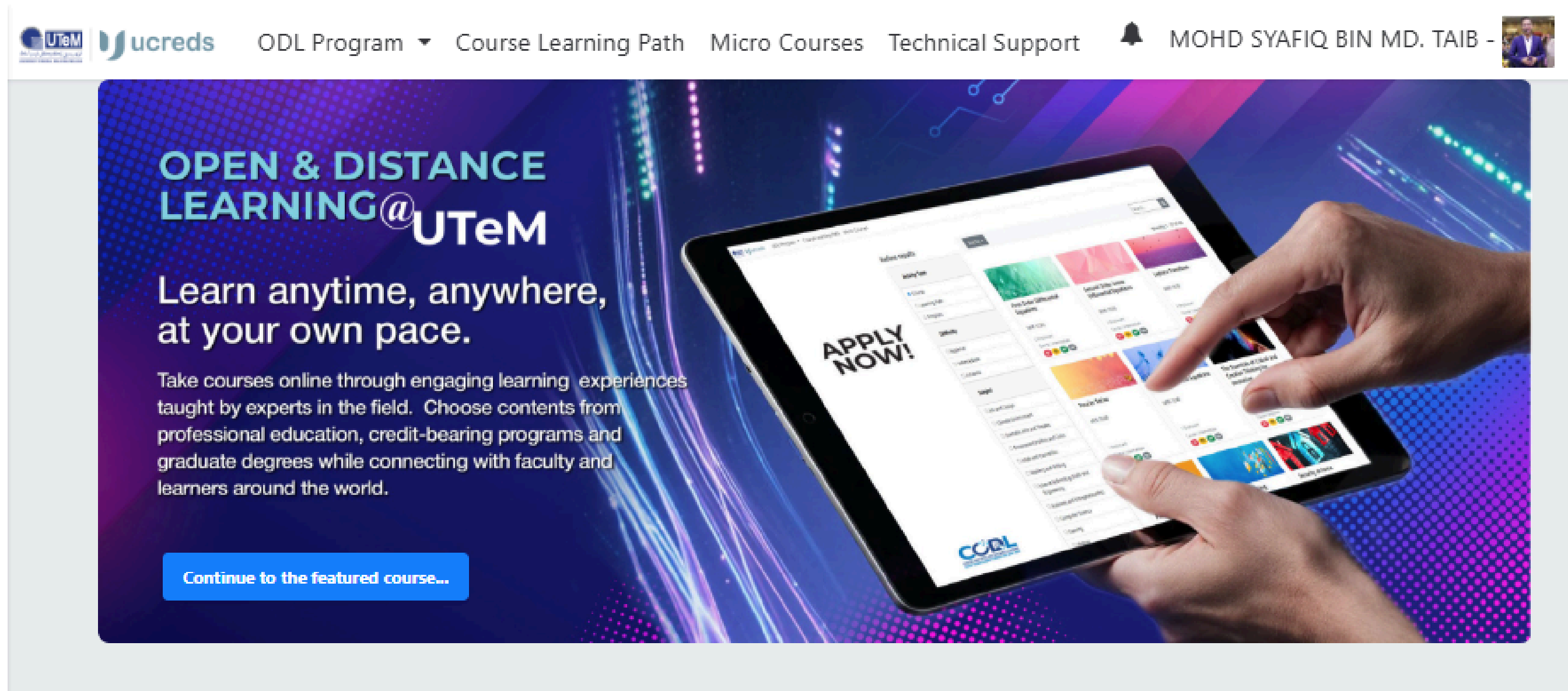


- UCreds Platform
- Instructional design
- Activities and assessments
- SIM development



UCREDS PLATFORM

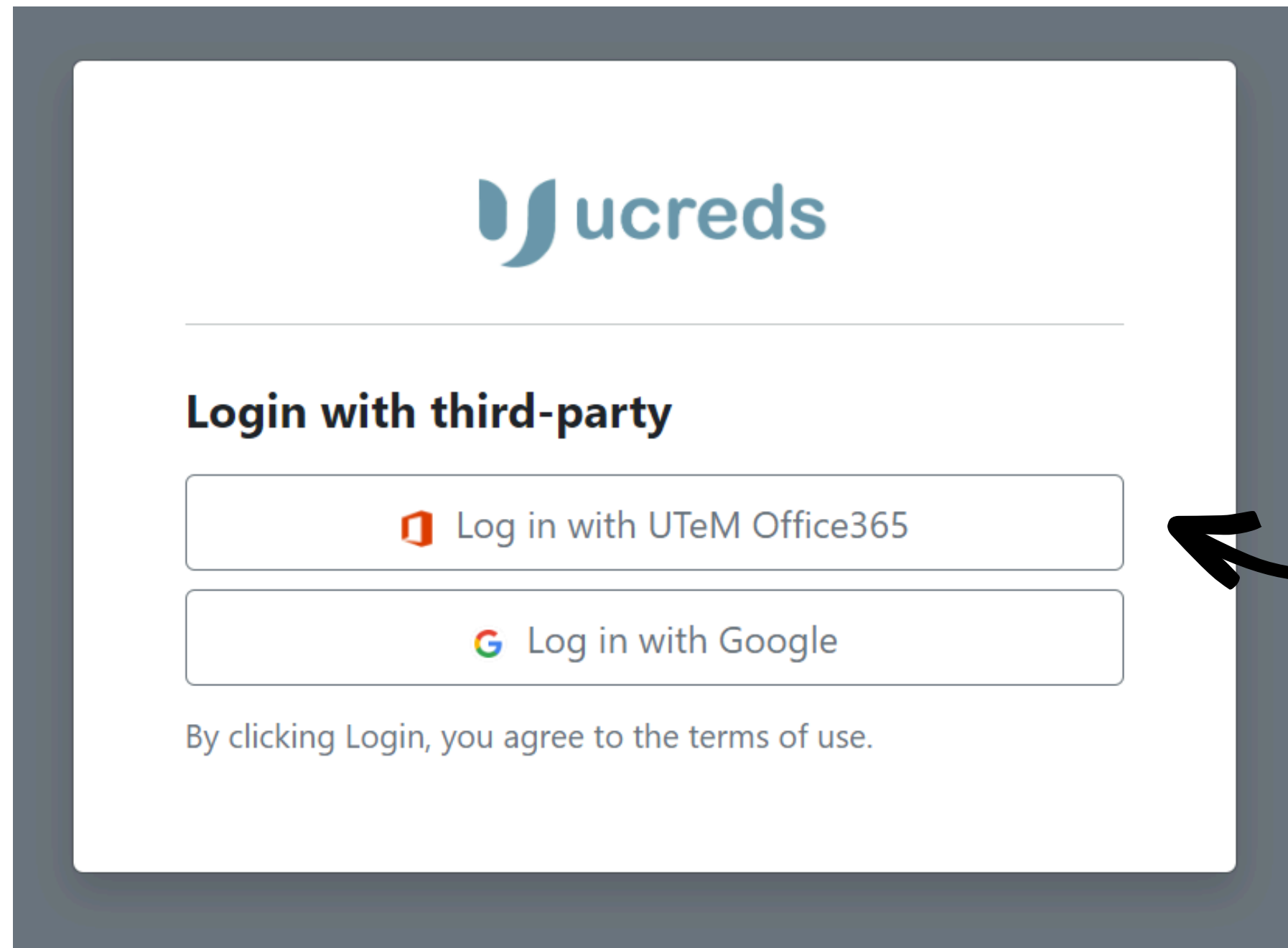
WHAT IS UCREDs?



The screenshot shows the UCREDs website interface. At the top, there is a navigation bar with the UTeM logo, the UCREDs logo, and links for ODL Program, Course Learning Path, Micro Courses, and Technical Support. A user profile for MOHD SYAFIQ BIN MD. TAIB is visible on the right. The main banner features the text 'OPEN & DISTANCE LEARNING@UTeM' and 'Learn anytime, anywhere, at your own pace.' Below this, it states: 'Take courses online through engaging learning experiences taught by experts in the field. Choose contents from professional education, credit-bearing programs and graduate degrees while connecting with faculty and learners around the world.' A blue button labeled 'Continue to the featured course...' is at the bottom left. On the right, a hand holds a tablet displaying the 'APPLY NOW!' button and a grid of course options.

- A platform that consists of Micro-credentials, MOOC, and ODL
- 3-in-1 platform as one-stop centre for online content delivery
- A platform for any non-credit or credit bearing courses offered

SIGNING-IN



The screenshot shows the ucreds login interface. At the top is the ucreds logo. Below it is a horizontal line. Under the line is the heading "Login with third-party". There are two buttons: "Log in with UTeM Office365" and "Log in with Google". Below the buttons is a line of text: "By clicking Login, you agree to the terms of use."

ucreds

Login with third-party

 Log in with UTeM Office365

 Log in with Google

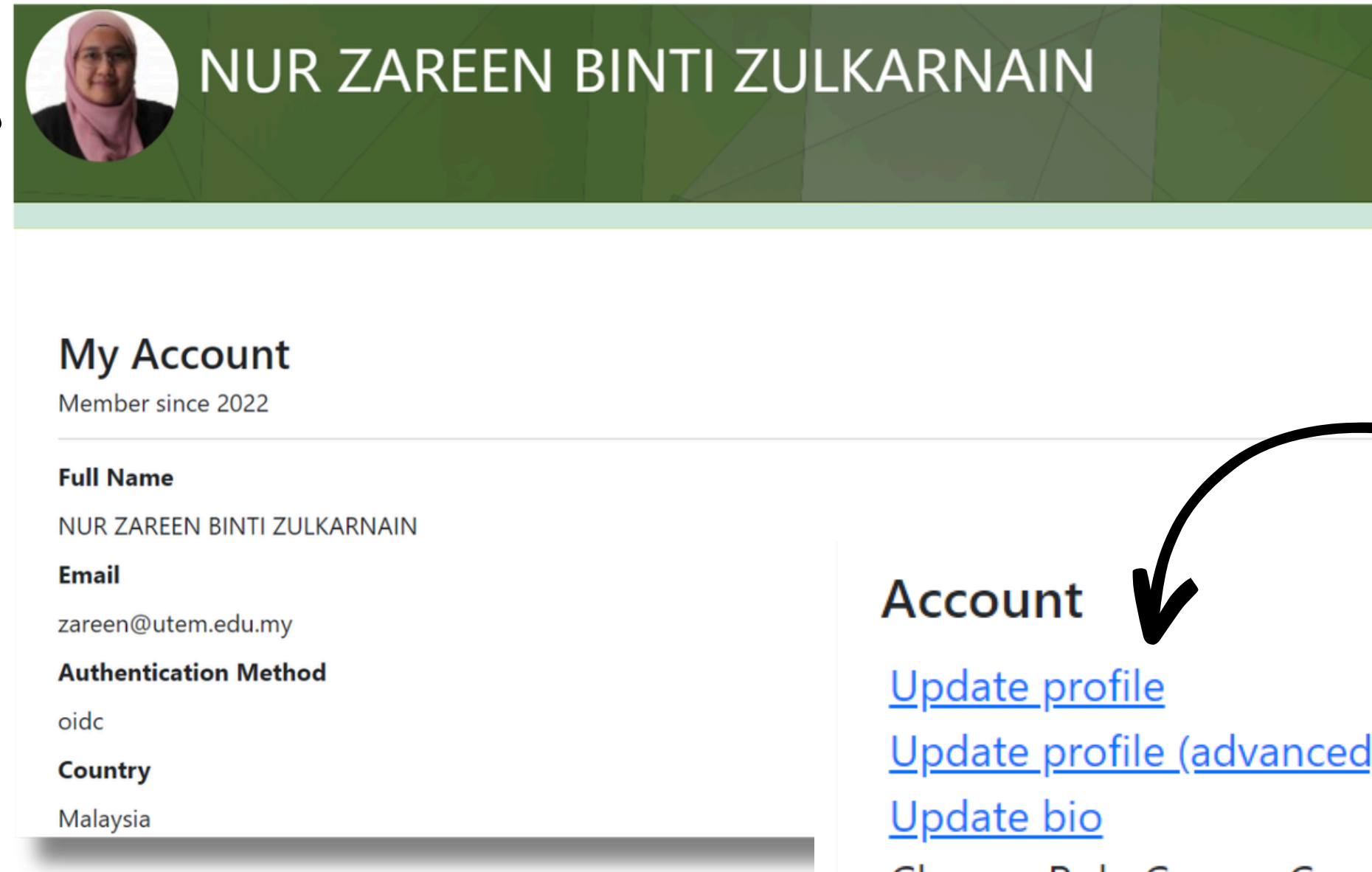
By clicking Login, you agree to the terms of use.

As simple as
using your
UTeM Office365
account



SET UP PROFILE

Add photo



The profile card features a green header with a circular profile picture of a woman in a pink hijab on the left and the name 'NUR ZAREEN BINTI ZULKARNAIN' in white text on the right. Below the header is a white section titled 'My Account' with the text 'Member since 2022'. This section contains four rows of information: 'Full Name' (NUR ZAREEN BINTI ZULKARNAIN), 'Email' (zareen@utem.edu.my), 'Authentication Method' (oidc), and 'Country' (Malaysia). To the right of this section is another white section titled 'Account' which contains three blue links: 'Update profile', 'Update profile (advanced) - Admin only', and 'Update bio', followed by the text 'Change Role Course Creator'.

NUR ZAREEN BINTI ZULKARNAIN

My Account
Member since 2022

Full Name
NUR ZAREEN BINTI ZULKARNAIN

Email
zareen@utem.edu.my

Authentication Method
oidc

Country
Malaysia

Account
[Update profile](#)
[Update profile \(advanced\) - Admin only](#)
[Update bio](#)
Change Role Course Creator

Update profile if necessary

CHANGE ROLE

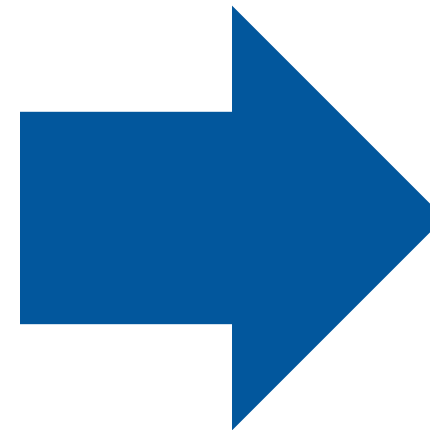
Account

[Update profile](#)

[Update profile \(advanced\) - Admin only.](#)

[Update bio](#)

[Change Role Course Creator](#)



Account

[Update profile](#)

[Update profile \(advanced\) - Admin only.](#)

[Update bio](#)

Change Role Course Creator

Click on the “Change Role Course Creator” to get access to create your own course. If successful, link will turn black.

EDIT BIO

NUR ZAREEN BINTI ZULKARNAIN



- My Account
- My Learning
- My Teaching
- How to Teach on UCreds
- My Bio (Public)**
- Log out

Biography

I	B	/	
Hello! I'm Dr. Zareen, your instructor for this course. I am passionate about AI, especially Natural Language Processing and lifelong learning. Let's learn together!			

To help learners learn more about you, your bio should reflect your Credibility, Empathy, Passion, and Personality. Your biography should have at least 50 words, links and coupon codes are not permitted.



UCREDS ODL STRUCTURE

Conventional Term

UCREDS Term

PROGRAM

MBA ODL

PROGRAM

COURSE

**MTKL5013 - Talent
Management**

LEARNING PATH

SUBJECT

**#1: Introduction to
Talent Management**

COURSE

UoM

ucredits

ODL Program

Course Learning Path

Micro Courses

Technical Support

MOHD SYAFIQ BIN MD. TAIB

Master of Business Administration

By: Universiti Teknikal Malaysia Melaka | Program | Master

RESUME

EDIT

Program

Learning Path

Sem 1

Done	Courses	Credits	-	Status
☐	MTKL5013 TALENT MANAGEMENT	3		Resume course
☐	MTKL5023 MANAGING INNOVATION AND TECHNOLOGICAL CHANGE	3		Resume course
☐	MTKL5033 TECHNOLOGY AND OPERATIONS MANAGEMENT	3		Resume course

Course Learning Path	Micro Courses	Duration	Badge	Status
☐	1. [MTKL5013] Overview and Evaluation of Human Resource Management	6 hours 0 mins		Resume course
☐	2. [MTKL5013] Job Analysis and Organizational Design	6 hours 0 mins		Resume course
☐	3. [MTKL5013] Recruitment	6 hours 0 mins		Resume course

Course

CREATE YOUR COURSE

To start creating your course, click your profile and choose My Teaching option



All Courses



Create a Course



Course full name



1

Type your course full name

Course short name



2

Type in the short course name

Course category



× Development

Search



Course visibility



Hide



3

Leave the Course Visibility "Hide" throughout your development to prevent your incomplete course visible to the public

Course start date



19



September



2023



00



00



Course end date



18



September



2023



16



34



Enable

Course ID number



Include user data



No



Include role enrolments



☐ Course creator

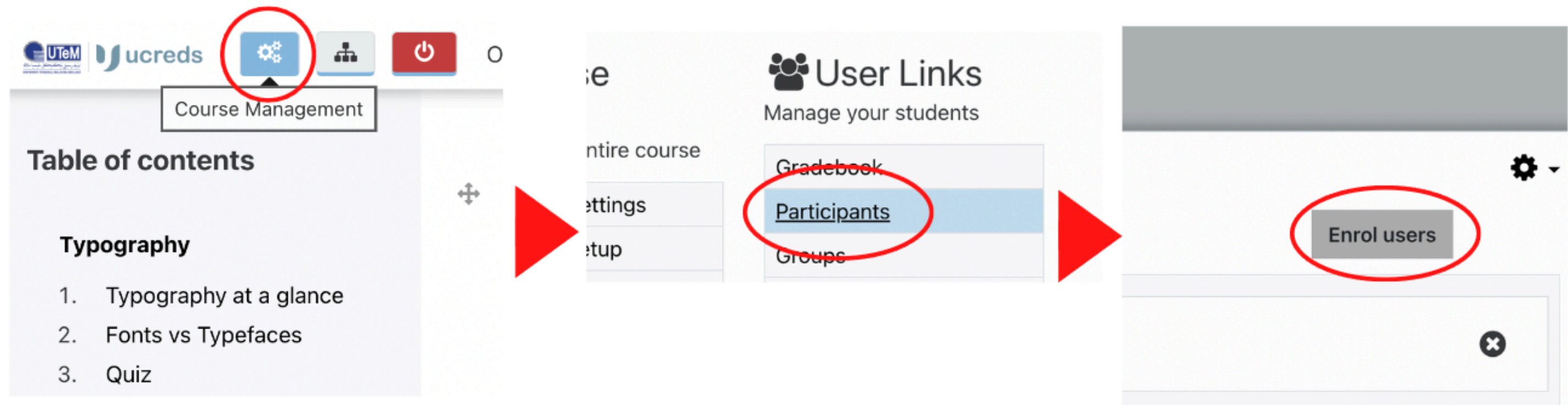
Select all/none

Submit

Cancel

ENROL AS INSTRUCTOR

The next step is to enroll the user. This will include enrolling yourself and other team to the course page you just created. This will enable you to see your course page in your profile under My Courses Menu. Go to Course Management > Participants > Enrol User



ADD COURSE BANNER

Course Settings

Manage your entire course

Edit course settings

Gradebook setup

Edit course completion settings

Competencies

Course administration

Copy course

Reset

Backup

Restore

Import

Recycle bin

Filter settings

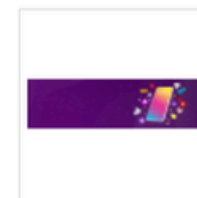
Event monitoring

Course image

Banner size should be **1400px X 400px**



Files



sma2-2.png

Maximum file size: Unlimited, maximum number of files: 1



EDIT COURSE DESCRIPTION

Preview Course

Display Cover Page

Edit Course Description

Request for review

Save

Display cover page

Back

Social Media Data Mining Course Description

This page is to modify course description.

Course Details

Course Full Name

Social Media Data Mining

Code

MC SMDM

Institution

Dr. Nur Zareen Zulkarnain | Universiti Teknikal Malaysia Melaka

Faculty

Faculty of Information and Communications Technology

CREATING YOUR CONTENT

The screenshot displays a course editor interface. At the top, there is a navigation bar with logos for ODL, ucreds, and icons for settings, users, and a power button. The main navigation menu includes 'ODL Programs', 'MOOC Courses', and 'Micro-Credentials'. A user profile for 'Zulisman' is visible in the top right corner.

On the left side, a 'Table of contents' panel is shown. It includes a 'Change : Collapse All' button and a 'Typography' section with a list of four items: 'Tile 1', 'Tile 2', 'Tile 3', and 'Tile 4'. A red circle with the number '1' is placed over the 'Tile 1' entry in this list.

The main content area shows a list of activities. The first activity is 'Tile 1', which is highlighted with a red circle containing the number '1'. Below it is 'Tile 2', also highlighted with a red circle containing the number '2'. Each activity entry has an 'Add an activity or resource' button and an 'Edit' dropdown menu. The activities are represented by light blue bars with a dark blue header and a light blue body.

LINKING YOUR LEARNING PATH

MTDS 5233 Social Media Analytics

By: Universiti Teknikal Malaysia Melaka | Learning Path | Intermediate

START

EDIT

Learning Path

Course Learning Path Micro Courses

Duration



Social Media Data Mining

18 hours 0 mins



Insights from Twitter Data

17 hours 0 mins



Insights from Facebook Data

9 hours 0 mins



Analyzing Affective States

16 hours 30 mins

LINKING YOUR LEARNING PATH

↑ Course Blocks

Set Learning Path

Preview Course

Display Cover Page

Edit Course Description

Request for review

Courses in MTDS 5233 Social Media Analytics Learning Path

This page is to choose courses for your Learning Path.

Sequence	Course List	Duration	
1	Social Media Data Mining	18 hours 0 minutes	Unlink
	High Impact Teaching: Becoming a Superstar Educator	6 hours 0 minutes	link
	Journey Towards Artificial Intelligence	10 hours 0 minutes	link
	Speech	0 hours 0 minutes	link
1	Social Media Data Mining	18 hours 0 minutes	Unlink
	Intelligent Agent	0 hours 0 minutes	link



YOUR TASK

Create a page for a sub-MC of your course. Include necessary descriptions and content structure.



INSTRUCTIONAL **DESIGN**

HOW ADULTS LEARN?



01

PURPOSE

“Why do I need this?”

Explain the WHY

Connect learning to real-life goals.



02

SELF-DIRECTION

“Let me manage my progress.”

Encourage autonomy

Use progress checks and learning analytics.



03

EXPERIENCE

“I already bring experience.”

Build on experience

Link prior knowledge with new skills.



04

READINESS

“I learn when I’m ready.”

Offer flexibility

Allow choice of pace, level or task.



05

PROBLEM-CENTRED

“Show me a real problem.”

Use practical tasks

Apply learning through authentic projects.



06

MOTIVATION

“I want to see progress.”

Create quick wins

Use feedback, milestones and self-assessment.

KEY TAKEAWAY

Adults learn best when learning is relevant, flexible, experience-based and immediately applicable.

HOW ADULTS LEARN?

Adult Learners	Instructional Design in ODL
Adults need to know why they are learning	Include the 'Why' – link learning to real-life purpose (e.g. start a business).
Adults see themselves as responsible, self-directed persons	Self-directed tools – progress checks, learning analytics.
Adults come to ODL program with a wealth of experience	Leverage experience – recall prior knowledge, practice new skills.
Adults are likely to choose to learn when they are ready to learn	Choice & flexibility – allow learners to pick level or task variety.
Adults, in their learning, are problem-centered	Problem-centered tasks – offer multiple task formats (e.g. brochure, poster, ad).
Adults tend to be motivated by personal factors	Personal motivation – frequent self-assessments for quick wins.



INSTRUCTIONAL DESIGN

- A systematic process of **planning instruction** using **established teaching and learning principles** to ensure high-quality learning.

WHY?

- Ensures structured, quality learning
- Supports independent, self-paced study
- Facilitates clear assessment and feedback

Instructional Design turns content into a clear learning journey

01 THE LEARNING PROBLEM

*"I have all the content...
but how should students learn it?"*

02 THE DESIGN BLUEPRINT

A systematic process that connects goals, content, activities and assessment into one purposeful learning experience.

03 THE LEARNING OUTCOME

*"Now I know what to learn,
what to do and how I'm progressing!"*

WHY IT MATTERS

STRUCTURED

Clear direction

FLEXIBLE

Learn independently

✓ MEASURABLE

Visible progress

Every element has a clear purpose.



INSTRUCTIONAL DESIGN

(example)

1. [MTDL5143] Introduction to Applied Machine Learning

Overview

Hello, welcome to the course on Introduction to Applied Machine Learning.



This course will take you **approximately 7 hours** to complete, including **6 hours of learning time for Introduction to Applied Machine Learning**, and **1-hour synchronous meeting** for opening remarks. You will learn the common concepts of Machine Learning, to help you scope a machine learning project at the end of the course. You will go through the topics from AI to Machine Learning, the definition of Machine Learning, machine learning tasks, using data to make decisions, machine learning workflow, and a summary to conclude your learning. The self-review activities will help you to evaluate your understanding, while the additional references will support your further exploration if needed.

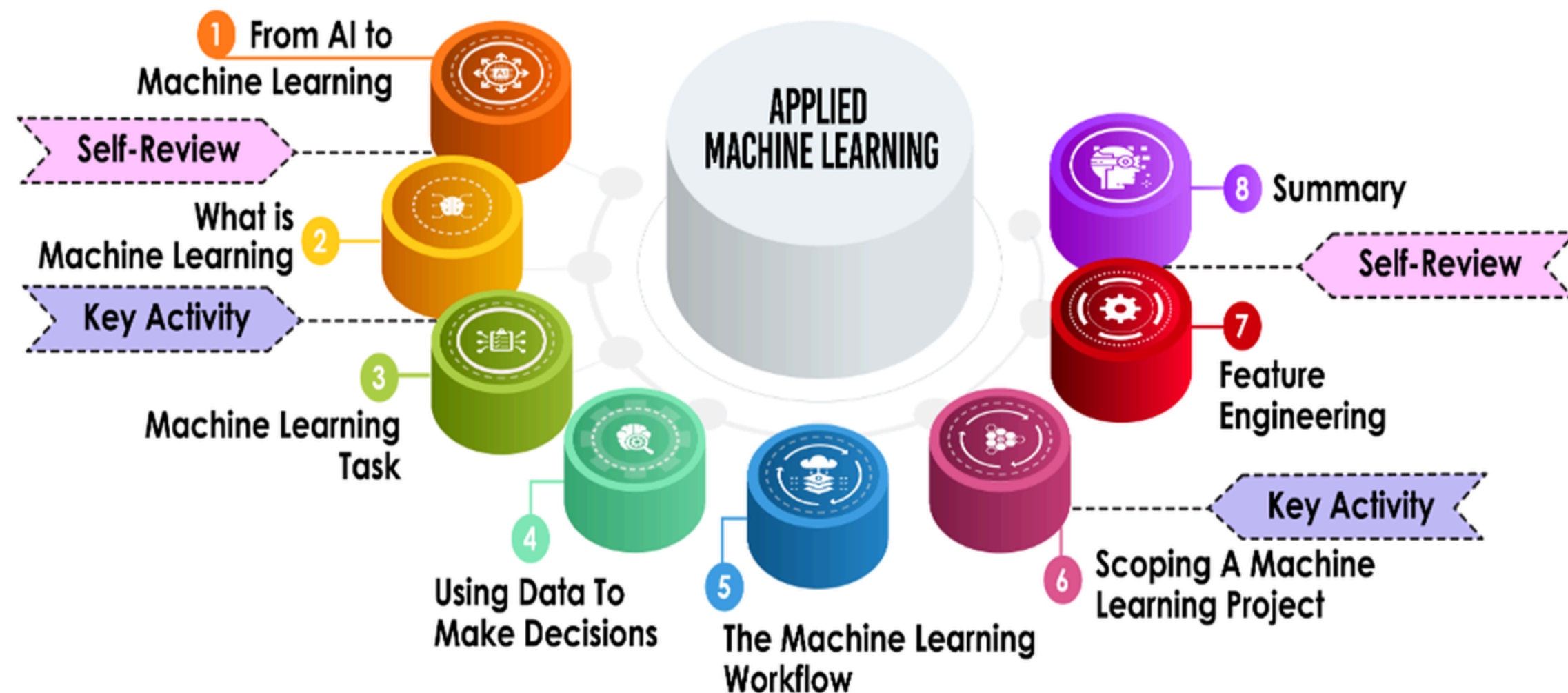
INSTRUCTIONAL DESIGN

(example)

MTDL 5143 Applied Machine Learning

Module :

**INTRODUCTION TO
APPLIED MACHINE LEARNING**

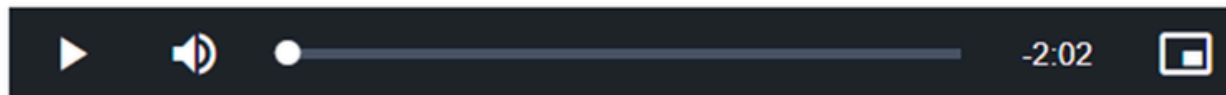


INSTRUCTIONAL DESIGN

(example)



Listen to the narrative explanation of The Differences between AI, ML, and DL:



AI is basically the intelligence on how we make machines intelligent, while machine learning is the implementation of the computation methods that support it. **AI is the science** and **machine learning is the algorithms** that make the machines smarter. Thus, Machine Learning is the enabler of AI. **Deep learning**, on the other hand, is a **subset of machine learning** that originates from the neural network learning framework.

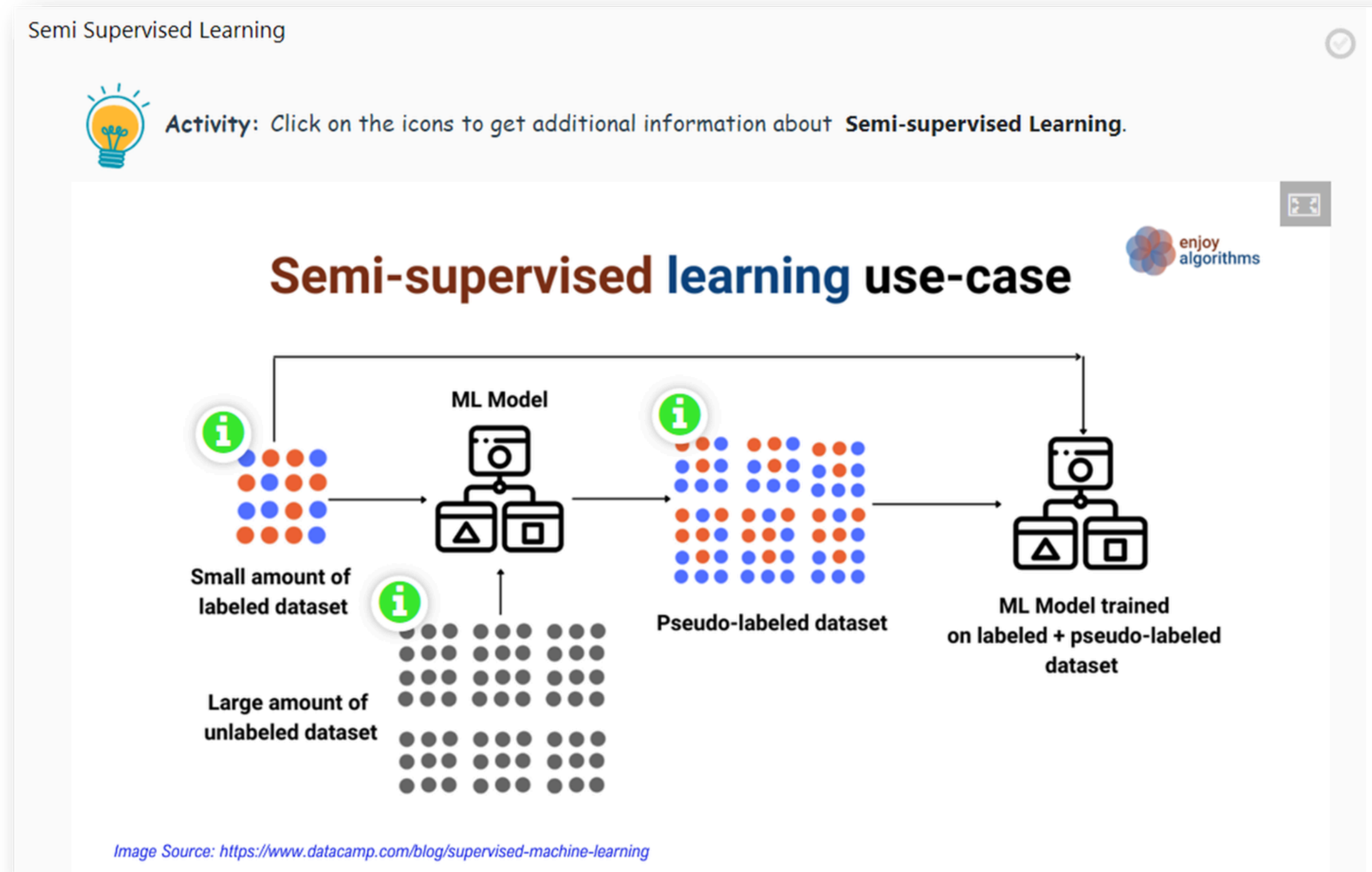


Back

Next

INSTRUCTIONAL DESIGN

(example)





INSTRUCTIONAL DESIGN COMPONENTS

1

Explain what the session is about

2

Conduct the session

3

Remind learners what the session **was about** and check that they have learnt it



INSTRUCTIONAL DESIGN COMPONENTS

1

Explain what the session is about

Hello, everyone! I'm excited to have you join me for this comprehensive overview of social media data mining. Through this module, you will learn about the **different types of social media platforms and data**, and how to **solve various types of problems** using social media data mining. You'll also delve into the **challenges** of performing social media data mining, including data quality issues and privacy concerns. So, let's begin this exciting learning journey together!

The module is expected to take approximately **17 hours and 30 minutes to complete**, and will end with an **assessed coursework in the form of a test**. This test will carry **20% out of your total coursework marks**.



INSTRUCTIONAL DESIGN COMPONENTS

1

Explain what the
session is about

Information on:

- Session / topic overview
- Approximate time needed
- Milestones
- Self-reviews
- Graded assessment

INSTRUCTIONAL DESIGN COMPONENTS

2

Conduct the session

To begin with, let's start with some activity that will engage everyone and introduce the basic terms of deep learning.

INTERACTIVE CONTENT

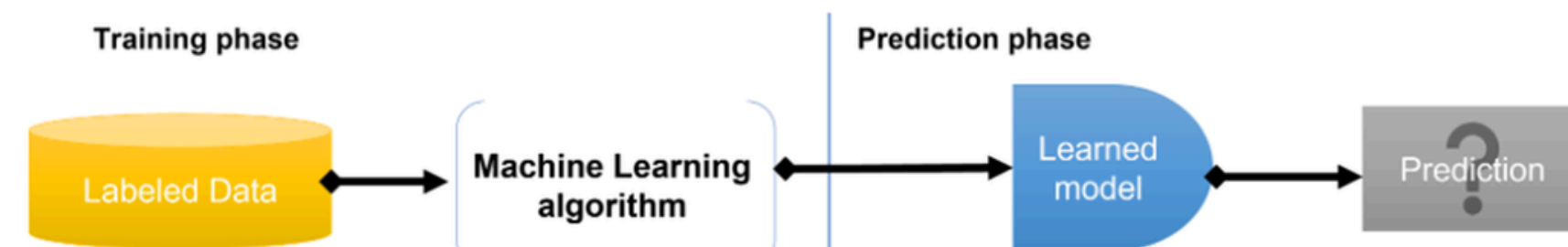
Activity: Basic terms of
deep learning



Machine Learning Overview

The purpose of machine learning is to build a prediction function by observing data. Data could be texts, images, videos, sounds etc. For example, given some movie reviews, a machine learning model can predict if the review carries positive or negative sentiment.

There are two (2) phases in machine learning i.e. (i) training phase ; (ii) prediction/testing phase.





INSTRUCTIONAL DESIGN COMPONENTS

2

Conduct the session

- Presents new material (examples and explanations)
- Sets activities based on this material

TIPS:

- careful not to put too much material into the course
- careful not to make activities more demanding than needed to achieve learning objectives

INSTRUCTIONAL DESIGN COMPONENTS

3

Remind learners what
the session **was**
about and check that
they have learnt it

A self-review is a valuable tool for assessing your own progress and identifying areas for improvement. By reflecting on your performance and accomplishments, you can gain insights into your strengths and weaknesses, set goals for the future, and develop strategies to enhance your skills and knowledge. This self-review aims to help you evaluate your current position and plan your next step.

Self Review 2

Restricted Not available unless:

- The activity Self Review 1 is marked complete
- The activity **Label** is marked complete
- The activity Activity 2: Crossword is marked complete

Drag the words into the correct boxes

A is a set of numerical data collected over time.

forecasting methods involve the determination of factors that relate to the variable you are trying to forecast.

is the component factor of a time series most often used to make intermediate and long-range forecasts.

In linear regression analysis, you use the method of to compute the sample slope.

Trend

exponential

seasonal effect

least squares

quadratic

time series

Exponential smoothing

moving averages

Causal



INSTRUCTIONAL DESIGN COMPONENTS

3

Remind learners what the session **was about** and check that they have learnt it

- Create self-review / simple quiz
- Provide an answer for self-review / quiz
- Give summary of unit

Guideline SLT

Based on UTeM Online Teaching and Learning and Assessment Guidelines (Academic Circular No. 7/2020)



1. Basis of SLT Calculation

- Student Learning Time (SLT) includes: Guided Learning, Independent Learning, and Assessment.
- 1 credit = 40 notional hours



1 credit
= **40**
notional hours

2 credits
= **80**
hours

3 credits
= **120**
hours

4 credits
= **160**
hours

3. Guideline for Calculating Asynchronous SLT



10-minute
pre-recorded
video lecture
≈ **1 hour**
face-to-face lecture



10 slides
with audio podcast
≈ **1 hour**
of learning



Class preparation /
revision:
approximately
5 minutes per
page or screen



Example:
24 slides
lecture notes
≈ **2 hours** SLT

2. Synchronous & Asynchronous



Synchronous (Real-Time)

- Lectures, tutorials, discussions, presentations conducted online in real time
- Duration is equivalent to face-to-face time
- Example: 60-minute synchronous online lecture = 60-minute face-to-face lecture



Asynchronous (Non-Real-Time)

- Pre-recorded lectures, slides with audio, online notes, readings, forums
- Learners access materials at their own pace
- Recommended as the main mode due to internet access constraints



Online synchronous interaction is advisable to be limited to a maximum of **40%** of the original face-to-face SLT.

4. Guideline for Calculating Preparation Durations



- Total SLT for assessment = **Assessment Duration (a) + Preparation Duration (b)**
- Preparation duration refers to the time students need to review materials, understand instructions, prepare responses, rehearse, draft, revise, and complete the task.

- Online Quiz/Test:
1 hour preparation

- MCQ using uLearn:
3 hours preparation

- Online Oral
Presentation / Viva:
5 hours preparation

- Written Assignment
(1000 words):
5 hours

- Project assignment
(media-based, e.g.
10-minute video/
podcast): 1 hour
preparation

5. Examples of SLT Calculation



Assessment Activity	Assessment Duration	Preparation Duration	Total SLT
1. Online Quiz/Test	1 hour	1 hour	2 hours
2. Online Oral Presentation / Viva	1 hour	5 hours	6 hours
3. MCQ using uLearn	1 hour	3 hours	4 hours
4. Written Assignment (1000 words)	-	5 hours	5 hours
5. Project Assignment (10-minute video/podcast)	10 minutes	1 hour	1 hour 10 minutes



*CODL practised

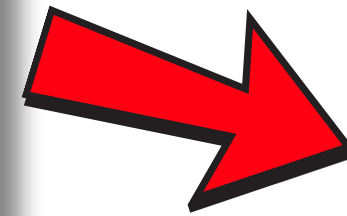
Distribution of Student Learning Time (SLT)
Note: This SLT calculation is designed for home grown programme only.

Course Content Outline and Subtopics		CLO*	Learning and Teaching Activities**										
			Face-to-Face (F2F)								NF2F Independent Learning (Asynchronous)		
			Physical				Online/ Technology-mediated (Synchronous)						
			L	T	P	O	L	T	P	O			
1	Overview on Global Management and Trends: - Environmental Forces Reshaping Management Practice - Understanding the Field of OB and Its Importance in Organization	1										2	4

CLO1: Analyze the fundamentals a

CLO2: Prepare appropriate solutio

CLO3: Build computer program b



#1: Table 4

CLO1:	Analyze the fundamentals and concepts of social media data mining. (C4, PLO3, LODC2)	Insert course learning outcomes
CLO2:	Prepare appropriate solution steps for social media data analysis based on text mining methods. (A5, PLO5, LODC4A)	
CLO3:	Build computer program based on appropriate methods for practical uses in social media analytics. (P5, PLO2, LODC3A)	

MC	CLO	MLO	TOPICS	ASSESSMENT	DELIVERY	SLT DELIVERY				SLT ASSESSMENT		Total SLT	
						F2F				NF2F	F2F		NF2F
						L	T	P	O	IL			
MC1	CLO1	1. Understand the overview of social media data mining 2. Analyse the different opinions regarding social media Micro Learning Outcomes (MLO) for each MC	OVERVIEW OF SOCIAL MEDIA DATA MINING - Introduction to Social Media - What is Social Media Data Mining? - What Types of Problems Can Be Solved? - Social Media Mining Challenges - Social Media Text Mining	Mid-Term (20%) [40 MCQ Questions]	Narrated slides on Introduction to Social Media (15 slides): 1.5 hours Video on What is Social Media Data Mining (5 min): 0.5 hour Video on What Types of Problems Can Be Solved? (10 min): 1 hour Video on Social Media Mining Challenges and Text Mining (5 min): 0.5 hour Revision slides (30 slides): 2.5 hours Interactive Activity on Types of Social Media: 1 hour Reflection on Social Media: Good or Bad?: 1 hour Applying for Twitter API Access: 2 hours (F2F) SLT Delivery: 1.5 + 0.5 + 1 + 0.5 + 2.5 = 6 hours SLT Activities: 1 + 1 = 2 hours F2F: 2 hours				2	8	1.5	6.5	18

Total SLT per MC

#2: Sim mapping

*Practised by FPTT

Distribution of Student Learning Time (SLT)
Note: This SLT calculation is designed for home grown programme only.

Course Content Outline and Subtopics		CLO*	Learning and Teaching Activities**									
			Face-to-Face (F2F)								NF2F Independent Learning (Asynchronous)	
			Physical				Online/ Technology-mediated (Synchronous)					
L	T	P	O	L	T	P	O					
1	Overview on Global Management and Trends: - Environmental Forces Reshaping Management Practice - Understanding the Field of OB and Its Importance in Organization	1									2	4

#1: Table 4

INSTRUCTIONAL STORYBOARD MBAODL

Module: Global Management & Organizational Behaviour (MTKL5103) Duration: 4 hours (SLT/week)
Topic: Chapter 1 Overview on Global Management and Trends SME: Dr. Mohd Amin bin Mohamad
Dr Athirah binti Mohd Tan

Content: Coordinator and SME	UCREDS Developer
Introduction & Topic Learning Outcomes Good day, Students, Welcome to Week 1 of Overview on Global Management and Trends. I'm excited to begin this blended learning journey with all of you. Throughout this course, we will explore the importance of Organizational Behaviour and how global environments shape managerial practices, workplace culture, and organizational effectiveness. By the end of this lesson, you'll walk away with a clear understanding of the two key learning outcomes outlined below: 1. Analyse the Environmental Forces Reshaping Management Practice 2. Understanding the Field of Organizational Behaviour (OB) and its Importance in Organization You will spend approximately 4 hours on this lesson.	Page
Content – MLO 1 Total SLT MLO1: Reading 15 minutes+ Video Script (10 minutes=1 hours SLT) + Video Script (10 minutes=1 hours SLT) + Independent Study (Activity 1 and 2) 30 minutes + Quiz (5 Question) 15 minutes = 3 hours Welcome everyone! In this topic we focus on the organizational behavior and the environmental forces affecting organizational behavior that are changing how managers work. By the end of this lesson, you'll understand why managers must continuously adapt to a fast-changing environment. Organizational behavior plays important role in bringing success to an organization. Management students should understand the arts and science of organizational behavior so that they know the reason of employees behave the way they do in the organization and how to increase their job performance. Figure 1 illustrates the Organizational Behavior (OB) Framework by showing how different layers contribute to understanding human behavior in organizations. At the core is Organizational Behavior, which focuses on studying how individuals and groups act within workplace settings. Surrounding it are the Behavioral Disciplines, representing major fields such as psychology, sociology, and anthropology—that shape OB theories and practices. The next layer, Challenges and Opportunities, highlights current issues and future prospects organizations face when applying OB concepts. The outermost layer, the OB Model, provides the overarching framework that ties these elements together, helping organizations interpret, predict, and improve workplace behavior effectively.	Page

#2: Storyboard

STORYBOARD STRUCTURE

INSTRUCTIONAL STORYBOARD MBAODL

Module: Global Management & Organizational Behaviour (MTKL5103) Duration : 4 hours (SLT/week)

Topic: Chapter 1 Overview on Global Management and Trends SME: Dr. Mohd Amin bin Mohamad Dr Athirah binti Mohd Tan

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Introduction & Topic Learning Outcomes Good day, Students, Welcome to Week 1 of Overview on Global Management and Trends. I'm excited to begin this blended learning journey with all of you. Throughout this course, we will explore the importance of Organizational Behavior and how global environments shape managerial practices, workplace culture, and organizational effectiveness. By the end of this lesson, you'll walk away with a clear understanding of the two key learning outcomes outlined below: - Analyse the Environmental Forces Reshaping Management Practice - Understanding the Field of Organizational Behavior (OB) and its Importance in Organization You will spend approximately 4 hours on this lesson.	Page
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Table of contents

1. Overview
2. Introduction To Big Data
3. Self-Review 1
4. Big Data Applications
5. Self-Review 2
6. Ethics in Data Analytic
7. Self-Review 3
8. Summary
9. Sync Tutorial
10. Additional Materials
11. Disclaimer
12. References
13. Forum & Discussion

Example 1

Overview
Contents

Activity/self-review

Summary

Sync tutorial (optional)

Additional material

Disclaimer

References

Forum & Discussion

Table of contents

1. Overview
2. What is BDM?
3. The Needs and Benefits of BDM
4. Challenges and Successes of BDM
5. Key Technologies of BDM
6. Activity
7. Self-Review
8. Summary
9. Synchronize Tutorial
10. Additional Materials
11. Disclaimer
12. Reference
13. Forum & Discussion

Example 2

#2: Storyboard



***SIM* CONTENT**



GENERATIVE AI TOOLS

GENERAL-PURPOSE AI ASSISTANTS



ChatGPT



Gemini



Deepseek



Copilot



Llama

- Flexible, open-ended tools that act like "digital teaching assistants"
- Can help across many tasks depending on our prompt



PURPOSE-BUILT AI TOOLS

- Specialized AI tools designed for specific needs
- Offer ready-made templates, workflows, and subject-focused features
- Enable quick, practical outputs

GAMMA

 **Napkin**

 **NotebookLM**



GAMMA

- Use simple prompt to create slide decks
- Converts PDFs or Word docs into scrollable decks
- Ideal for non-designers needing polished output fast
- Simple editing of text, themes, visuals

GAMMA

Products

Solutions

About

Pricing

English

Login

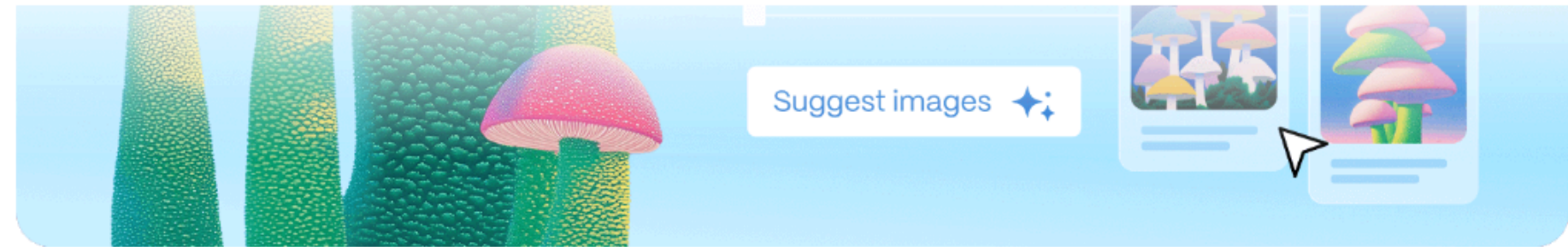
Start for free

Bring your ideas to life.

Gamma is your AI design partner for effortless presentations, websites, social media posts, and more—so you can focus on what you do best.

Start for free

Watch video ▶



Guess the Learning Type: A Micro-Designed Gamified Approach to Machine Learning Types

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Abstract—Gamification has increasingly been adopted in teaching and learning, especially to boost student engagement and aid comprehension. Complex topics are often better understood when broken down into smaller micro-topics. This study explores the implementation of a micro-designed gamified approach, “Guess the Learning Type” to enhance undergraduate students’ understanding of machine learning types. Conducted over four semesters in an Artificial Intelligence course at a Malaysian public university, the activity leverages gamification elements such as competition, time constraints, points, and penalties to increase student engagement and promote collaborative learning. Students participate in group-based activities where they must identify machine learning types based on given scenarios. The competitive nature of the activity encourages active participation and quick thinking, while immediate feedback reinforces learning outcomes. This paper examines the design and execution of the activity, its impact on student engagement, and its effectiveness in improving comprehension of supervised, unsupervised, and reinforcement learning. Results indicate that the gamified activity significantly enhances both engagement and understanding, offering a practical and alternative approach to teaching complex topics in machine learning.

Index Terms—gamification, active learning, micro-design, artificial intelligence

I. INTRODUCTION

The increasing demand for effective and engaging teaching methods in higher education, particularly in technical fields like Artificial Intelligence (AI), has prompted educators to seek innovative approaches to enhance student learning. Traditional lectures, while informative, often fail to maintain high levels of student engagement, especially when covering complex topics such as machine learning. Machine learning, as a key component of AI, involves understanding different types of learning models such as supervised, unsupervised, and reinforcement learning. Although these concepts are foundational, they can be difficult for students to fully comprehend through passive learning methods alone.

The primary motivation behind addressing this issue is to enhance students’ engagement in the classroom and to cultivate well-rounded graduates equipped with the essential knowledge and soft skills required to thrive in today’s workforce. Conventional teaching methods frequently fail to captivate students, hindering meaningful learning experiences. This presents a significant challenge for both educators and

learners, ultimately dampening motivation and enthusiasm for learning.

To address this challenge, gamification, and game-based learning approaches have emerged as viable solutions to foster student interaction and active learning. These methods not only enhance engagement but also offer immediate feedback, encourage problem-solving, and foster collaborative learning through structured activities. The “Guess the Learning Type” game exemplifies this approach by integrating gamification elements that reinforce students’ understanding of machine learning types within a competitive yet cooperative environment.

This paper presents a micro-designed gamified approach, “Guess the Learning Type”, which was implemented in an undergraduate AI course at a public university in Malaysia. Over four semesters, the activity has been used to boost student engagement, enhance their grasp of machine learning types, and provide a dynamic platform for applying theoretical concepts to practical scenarios. The study focuses on the design of the activity, its gamification elements, and the implementation in class, demonstrating how the integration of gamified group activities can significantly improve the learning experience and outcomes for students.

II. LITERATURE REVIEW

Gamification has become an increasingly popular approach in educational contexts due to its potential to enhance student engagement and learning outcomes. By incorporating game elements, such as points, badges, and competition, into non-game settings to foster a dynamic learning environment [1]. Leveraging competition, rewards, and leaderboards, gamification creates an engaging atmosphere that motivates students. Research has consistently shown that this approach improves student motivation, participation, and performance across various educational settings, particularly in STEM subjects [2]. In these fields, the complexity of the material can lead to disengagement, but gamification helps bridge this gap by promoting active learning.

Gamified classroom activities are especially effective in fostering collaborative learning and critical thinking [3]. These activities provide immediate feedback and encourage students to apply their knowledge in real-time, reinforcing theoretical



Guess the Learning Type: Gamified AI Education

Micro-designed gamified approach to teach machine learning types. Boosts engagement and comprehension in undergraduate AI courses.

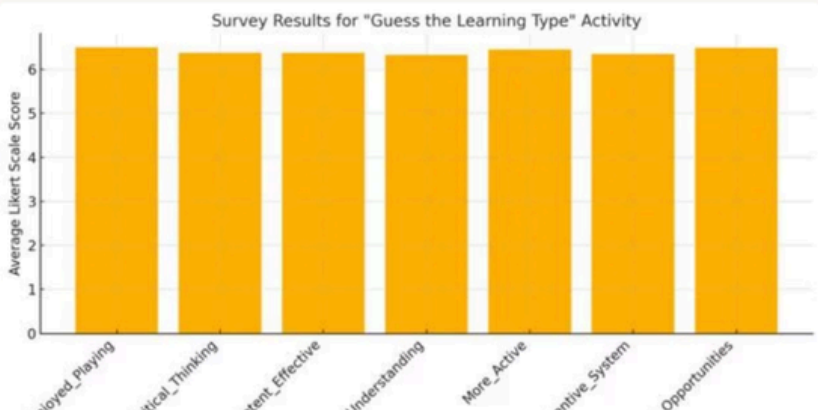
by Nur Zareen Zulkarnain
Last edited 20 days ago



Gamification and Micro-Design

- Gamification Elements**
Points, competition, leaderboards enhance motivation.
- Micro-Design**
Breaks complex topics into manageable chunks.
- Active Learning**
Encourages collaboration, critical thinking, immediate feedback.

Positive Student Feedback



Challenges in Teaching Machine Learning

- Complex Concepts**
Supervised, unsupervised, reinforcement learning hard to grasp.
- Traditional Lectures**
Often fail to engage students effectively.
- Need for Innovation**
Active, interactive methods required for better learning.



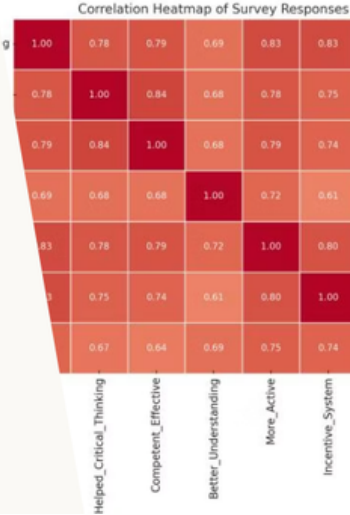
Class Implementation and Participation

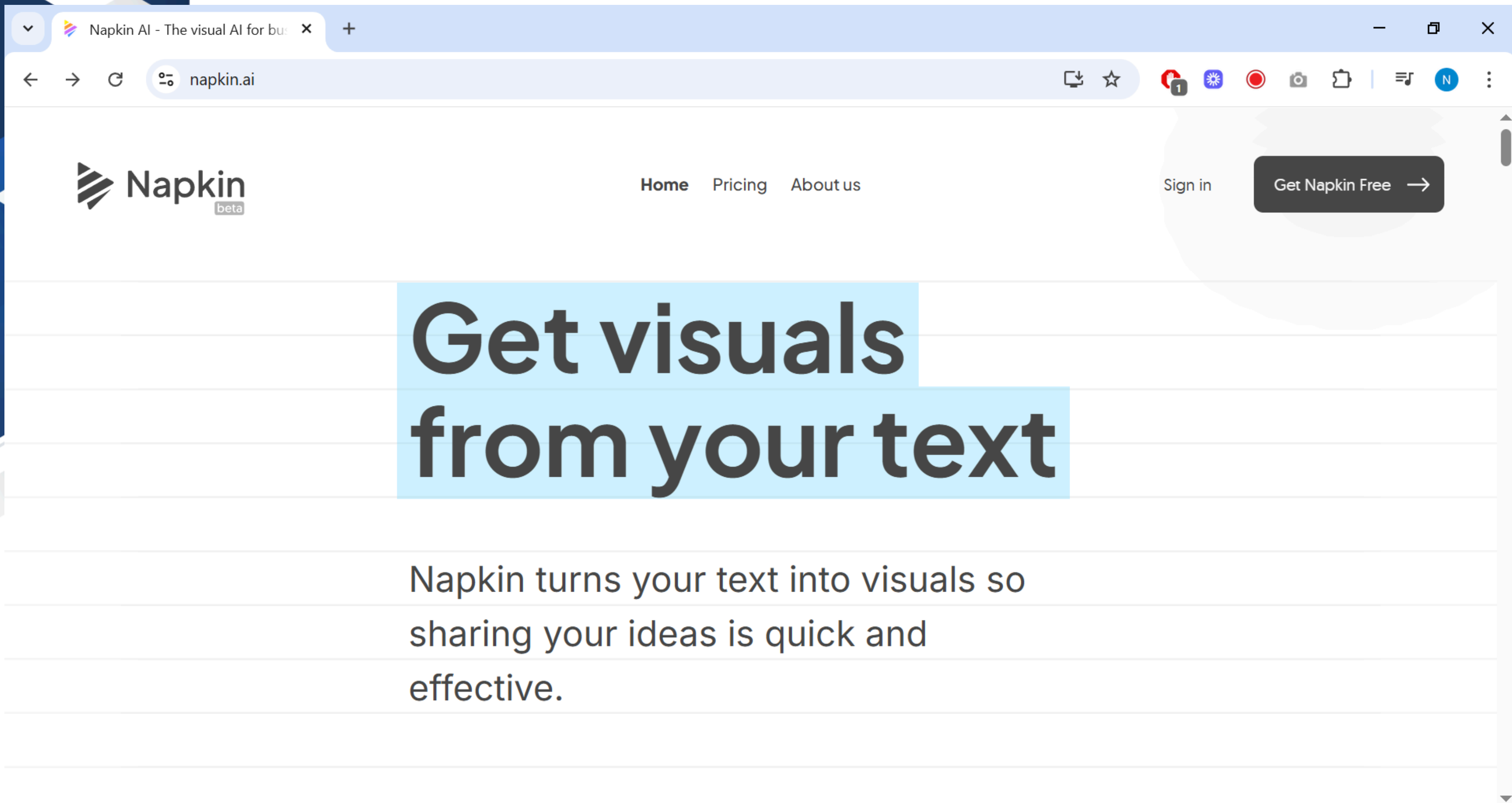
- Reduced Lecture Time**
From 2 hours to 1 hour lecture plus game.
- Group Setup**
6 groups of 5 students per round.
- Multiple Rounds**
Different students participate each round.
- Teamwork**
Discussion and point collection to win.



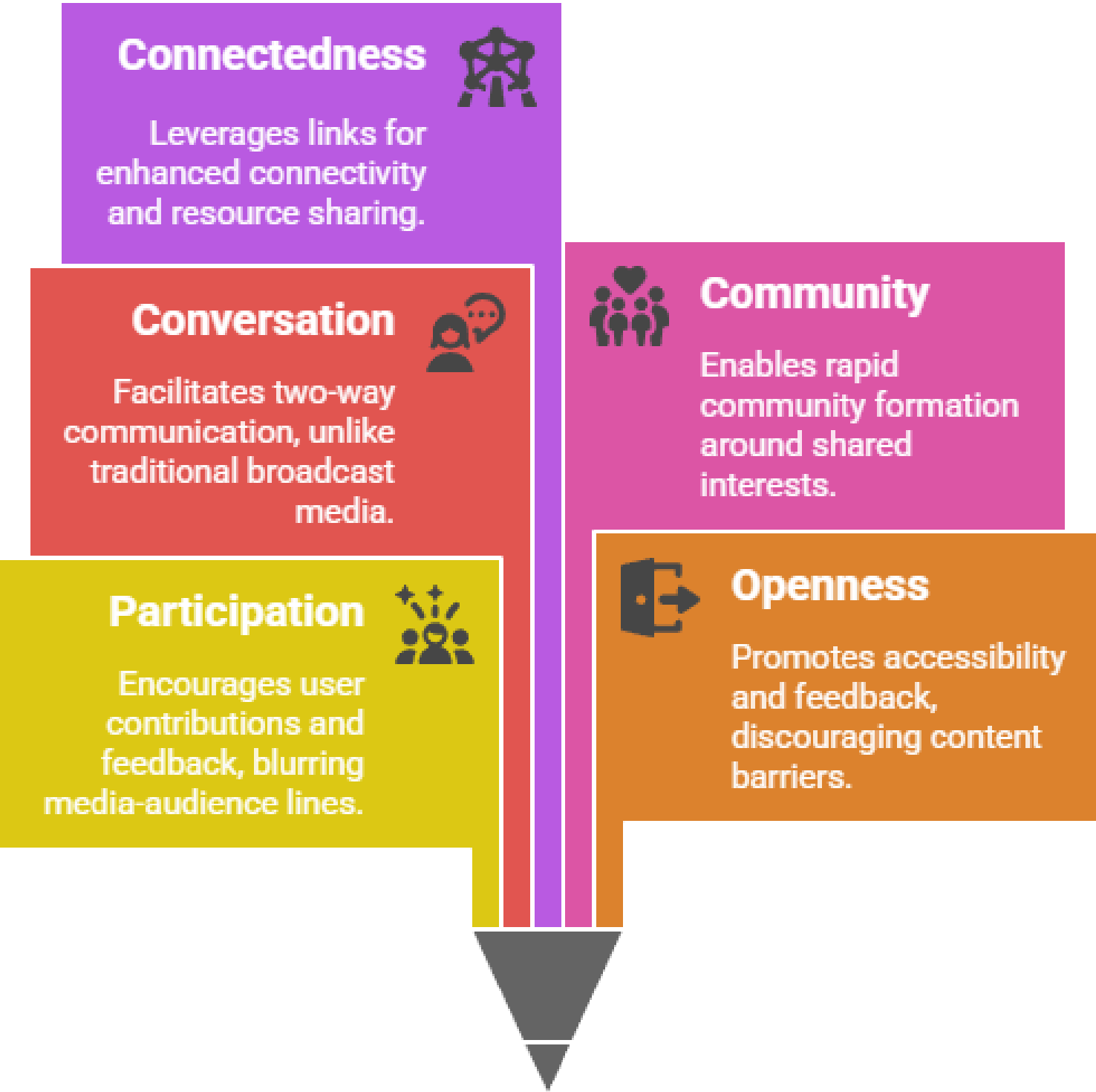
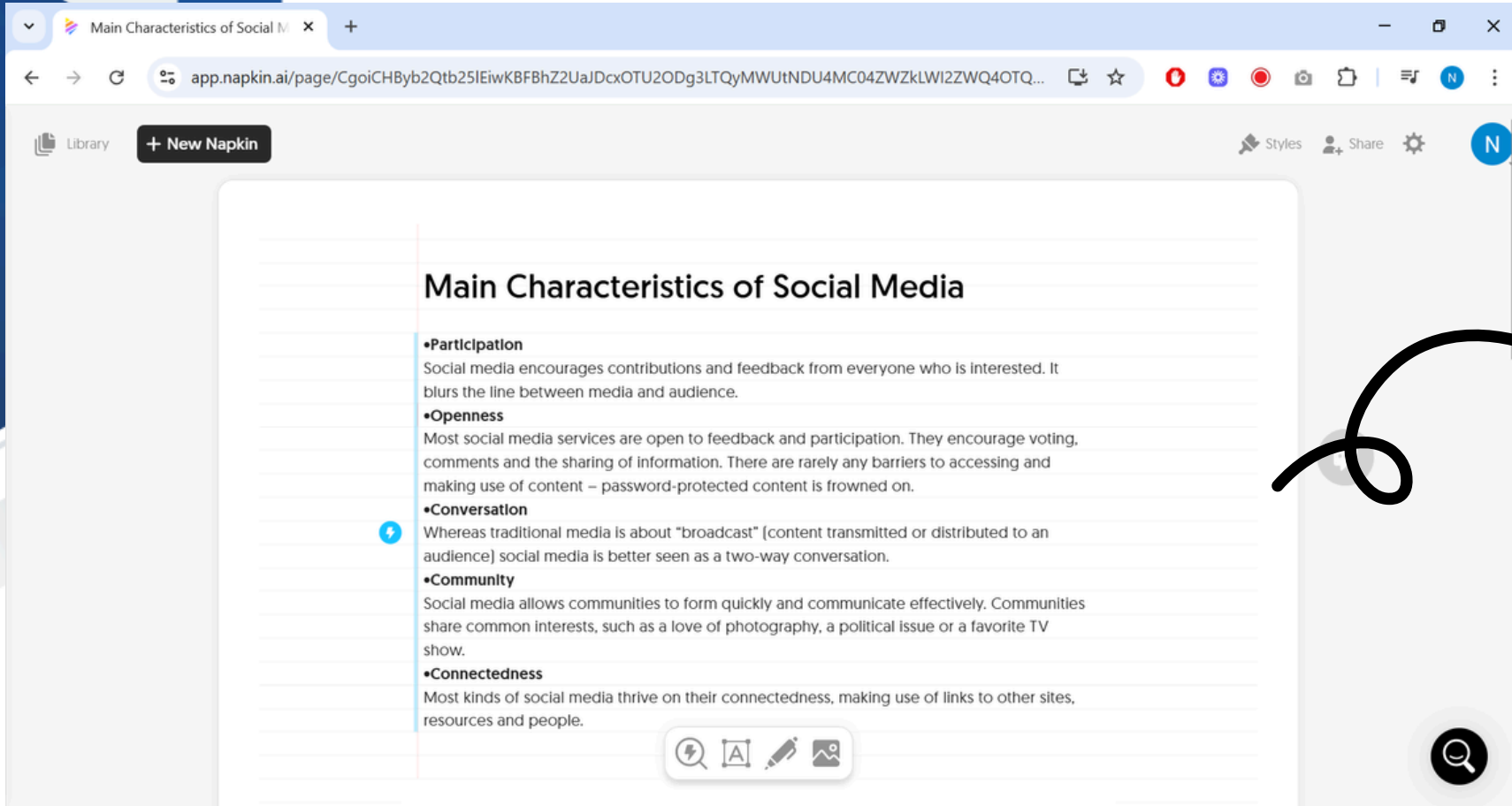
Correlations and Impact

- Enjoyment & Activity**
Strong positive correlation (0.83).
- Critical Thinking & Competency**
High correlation (0.84) shows deeper learning.
- Incentive System**
Points motivate increased student involvement.





Pillars of Social Media Interaction



Connectedness



Leverages links for enhanced connectivity and resource sharing.

Conversation



Facilitates two-way communication, unlike traditional broadcast media.

Participation



Encourages user contributions and feedback, blurring media-audience lines.

Community



Enables rapid community formation around shared interests.

Openness



Promotes accessibility and feedback, discouraging content barriers.



Computing Machinery and Intelligence: The Imitation Game

Share

Settings



Sources



+ Add

Discover

Select all sources



Mind.pdf



Chat



Computing Machinery and Intelligence: The Imitation Game

1 source

The provided text, "Computing Machinery and Intelligence" by A. M. Turing, explores the fundamental question of whether machines can think. Turing proposes the **"imitation game,"** now known as the Turing Test, as a practical method to assess machine intelligence, circumventing ambiguous definitions of "machine" and "think." He **addresses several objections** to the idea of thinking machines,

Start typing...

1 source



What constitutes "thinking" in machines and how can it be objectively evaluated?



Studio



Audio Overview



Video Overview



Mind Map



Reports



Flashcards



Quiz



Generating Audio...

Come back in a few minutes



Add note

NotebookLM can be inaccurate; please double check its responses.



ACTIVITIES AND ASSESSMENTS

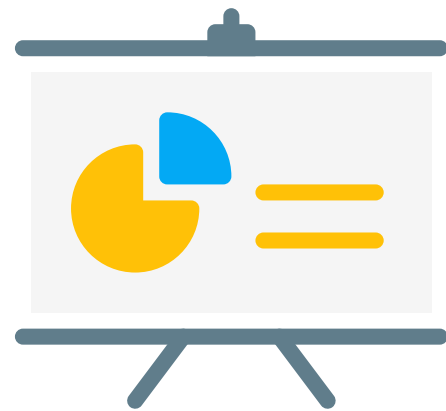
WHAT IS H5P?

- HTML 5 Package
- Open source
- Enable content to be responsive, interactive and mobile friendly
- Allows for the same interactive content regardless of device





4 CATEGORIES OF H5P



Presentation



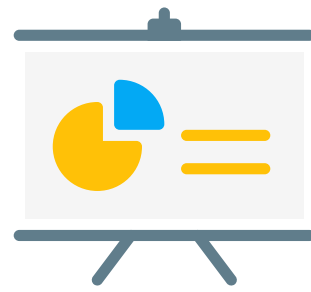
Assessment



Organization



Gamification



PRESENTATION

- A wide variety of content can help make an online presentation more than just a video or a page of words and pictures.
- Content types can be used individually or combined with each other to convey information in an engaging way.



ASSESSMENT

- Regular assessment helps us know the level of student understanding.
- H5P has various types of assessment that can be embedded directly in ULearn.
- Suitable for use in formative assessment for continuous assessment.



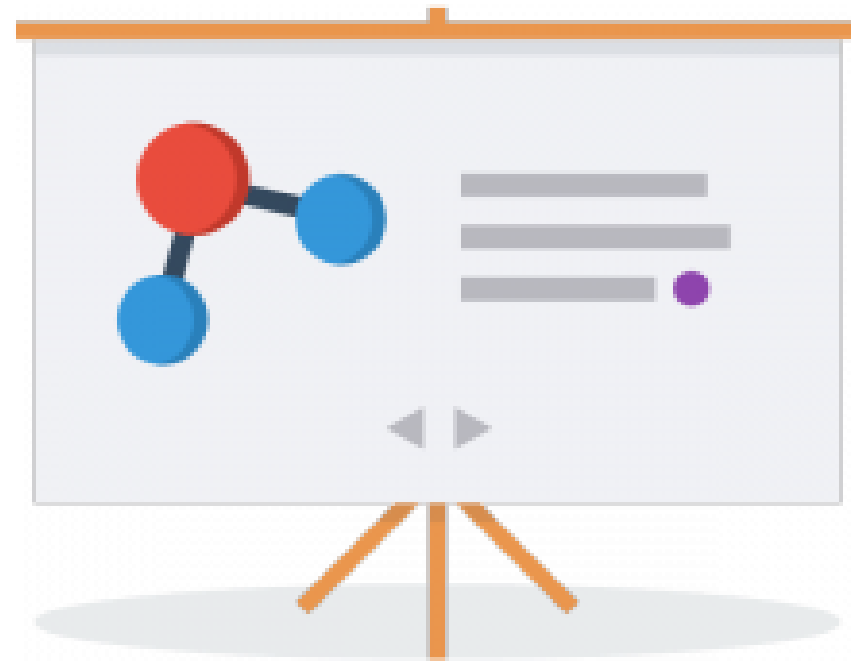
ORGANIZATION

- ULearn contains a variety of content that is sometimes overwhelming, it is important to keep the content organized and easy to navigate.
- H5P can help keep things organized with a variety of ways to organize and display content.



GAMIFICATION

- Adding game elements to lessons makes interacting with content more fun.
- When the interaction is fun students will spend more time engaging with the material which can lead to better learning outcomes.



Course Presentation

DISCOVERY

3. FRAMING THE PROBLEM

- Process of **stating (in writing)** the analytics problem to be solved and all related info so that all team members will understand/have similar understanding about the project.

Goal is to have a document of all related info regarding the analytics problem to be solved (outcomes from business problem understanding and resources assessment).



SETTING UP COURSE PRESENTATION

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource

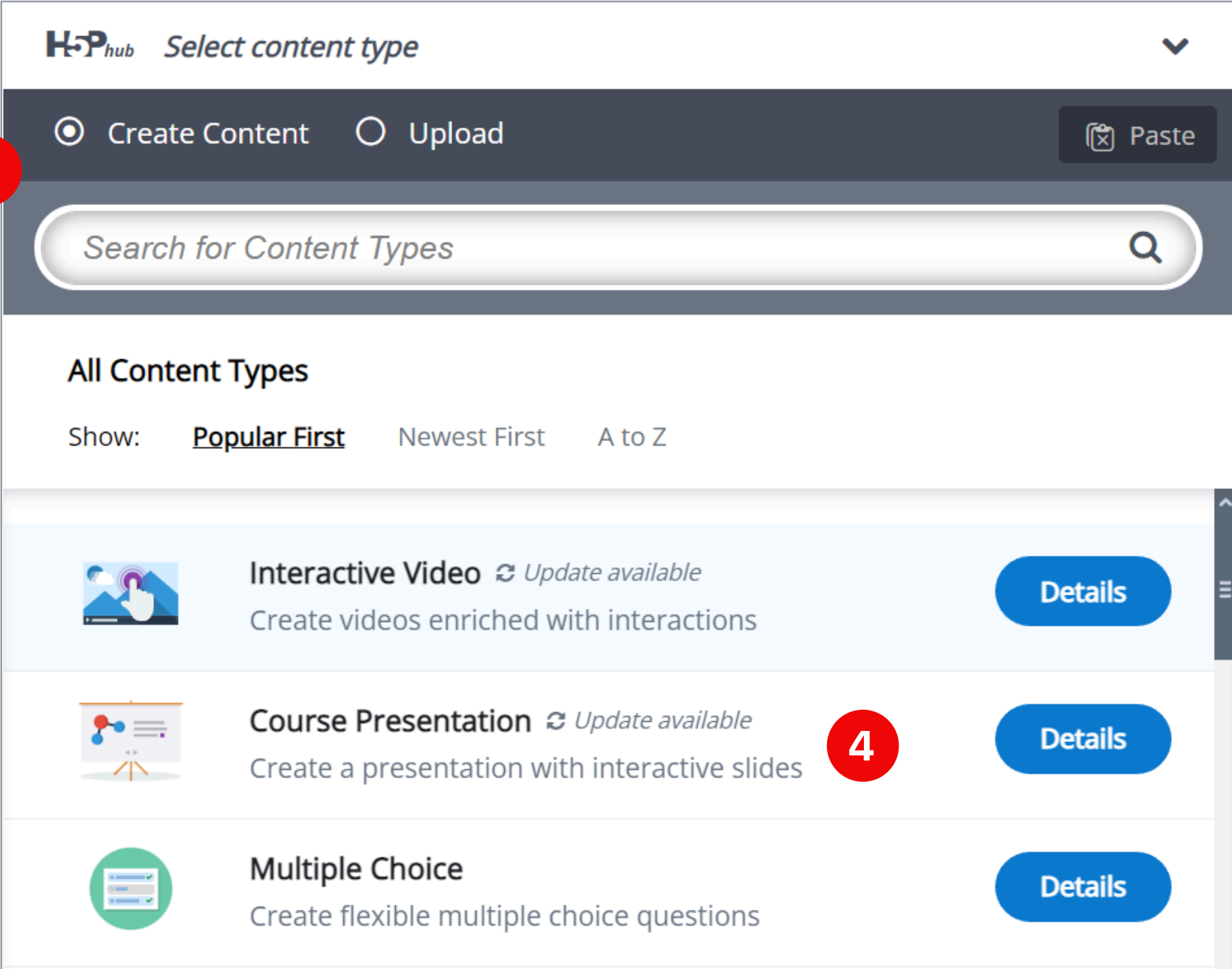
Search

All Activities Resources

 Assignment ☆ ⓘ	 Attendance ☆ ⓘ	 Book ☆ ⓘ	 Choice ☆ ⓘ	 Database ☆ ⓘ	 External tool ☆ ⓘ
 Feedback ☆ ⓘ	 File ☆ ⓘ	 Folder ☆ ⓘ	 Forum ☆ ⓘ	 Glossary ☆ ⓘ	 Group choice ☆ ⓘ
 H5P ☆ ⓘ	 Interactive Content ☆ ⓘ	 Label ☆ ⓘ	 Page ☆ ⓘ	 Peer Assessment ☆ ⓘ	 Quiz ☆ ⓘ

**Step 3: Choose
'Create Content'**

**Step 4: Choose 'Course
Presentation'**



H5P hub Select content type

☒ Create Content ☐ Upload Paste

Search for Content Types

All Content Types

Show: Popular First Newest First A to Z

	Interactive Video Update available Create videos enriched with interactions	Details
	Course Presentation Update available Create a presentation with interactive slides	Details
	Multiple Choice Create flexible multiple choice questions	Details

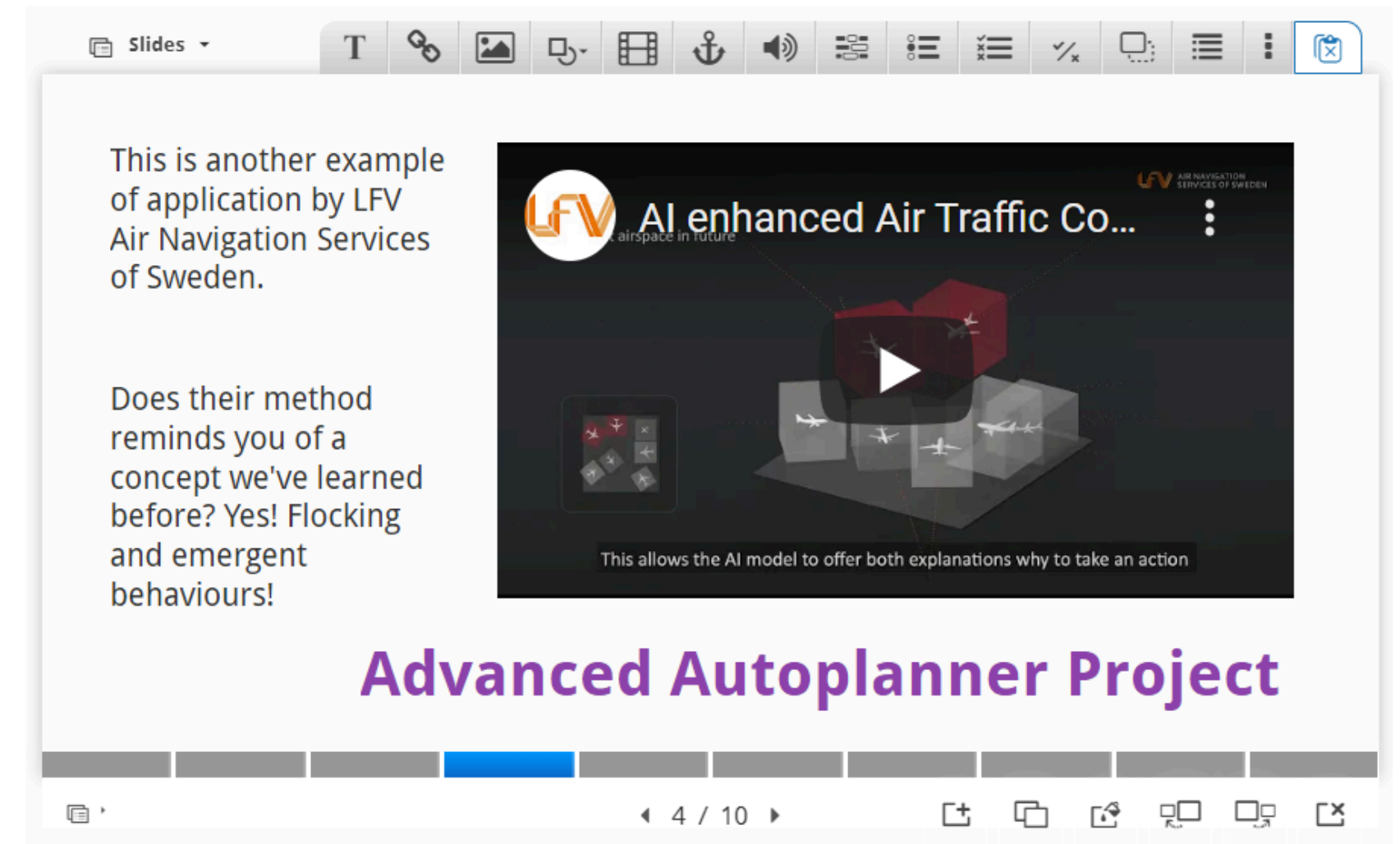
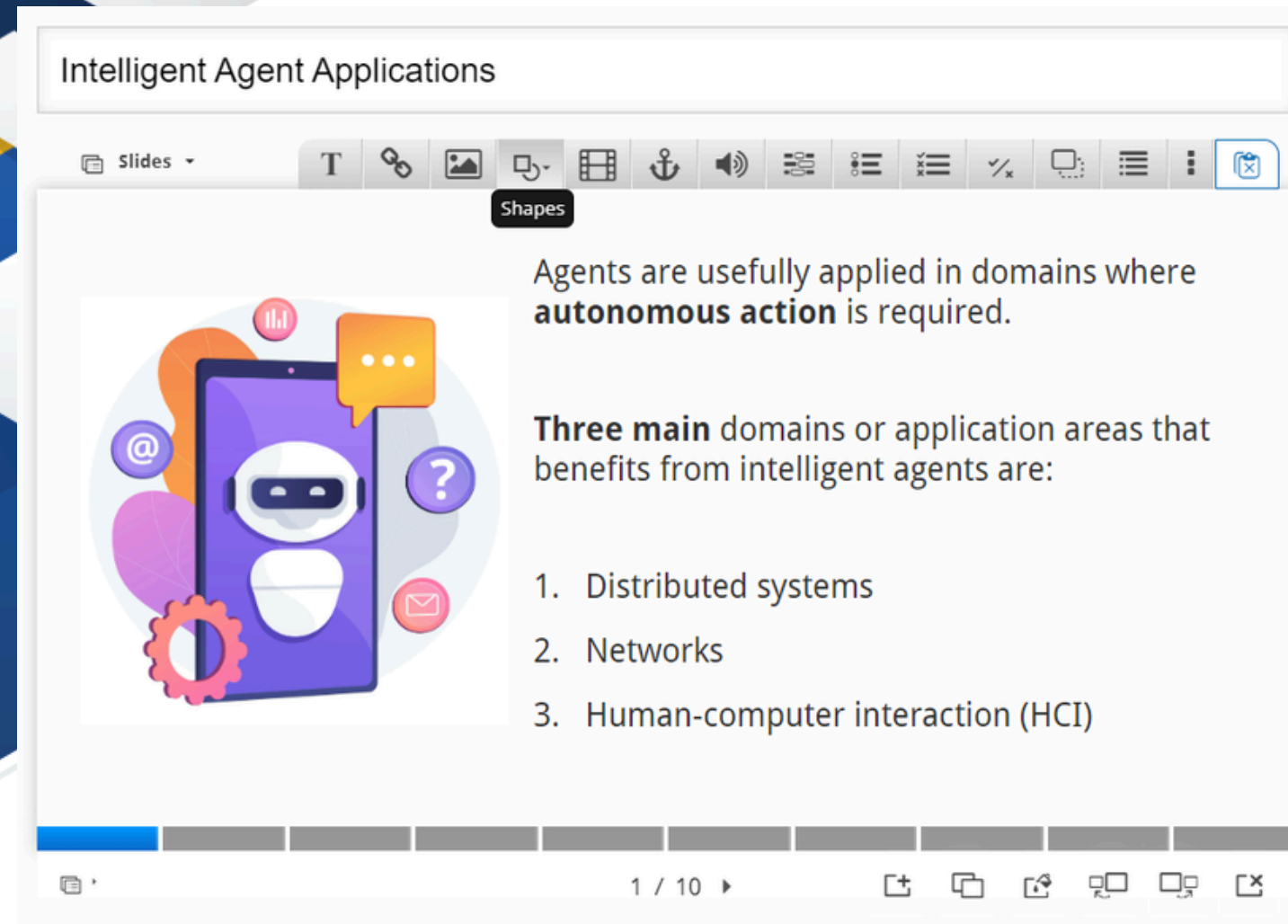
Step 5: Insert presentation title

Step 6: Design presentation in the empty space given

The screenshot displays the H5P Course Presentation interface. At the top, the header shows the H5P logo and the title "Course Presentation". Below the header, there are two tabs: "Tutorial" (highlighted in green) and "Example" (highlighted in purple). To the right of these tabs are two buttons: "Copy" and "Paste & Replace".

The main content area is titled "Course Presentation" and contains a "Title" field with a red asterisk and a "Metadata" button. Below the title field, a text description reads: "Used for searching, reports and copyright information". A red circle with the number "5" is placed over the title input field.

Below the title field is a toolbar with various icons for adding content (text, image, video, audio, etc.). Below the toolbar is a large, empty rectangular area for designing the presentation. A red circle with the number "6" is placed over this empty area.



There are a variety of elements to be used.

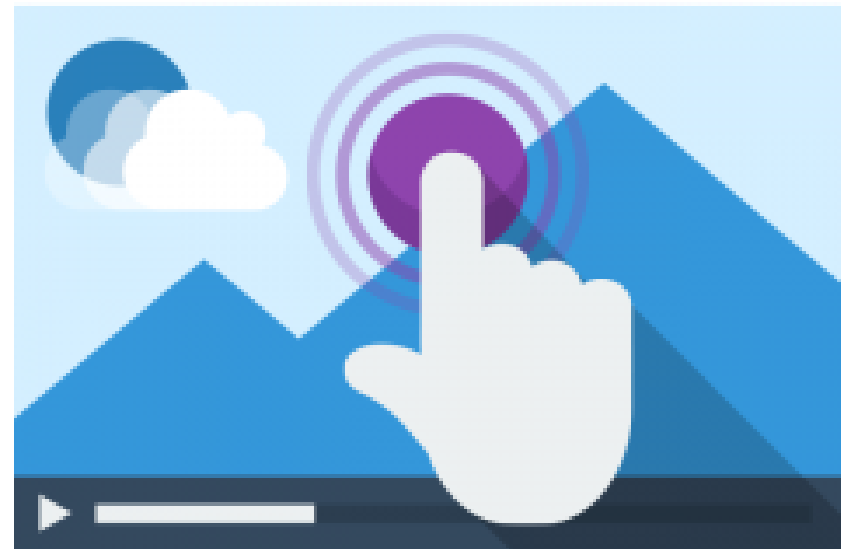
7

Save and return to course

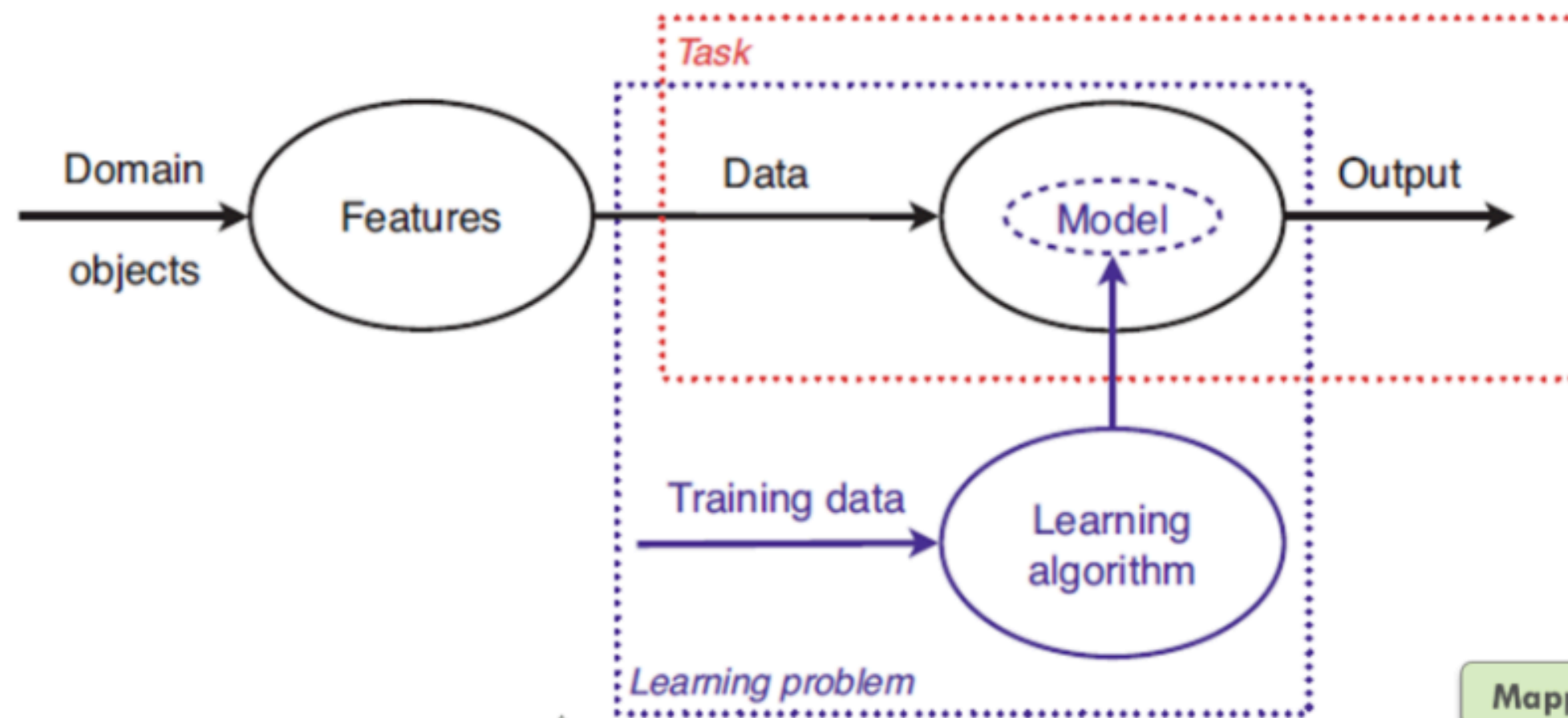
Save and display

Cancel

Step 7: Click 'Save and return to course' once done



Interactive Video



Abstraction of Problem to be solved

Object descriptor

The method used

Mapping / Relations

✓ Check



1:40 / 4:20



SETTING UP INTERACTIVE VIDEO

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource

Search

All

Activities

Resources



Assignment



Attendance



Book



Choice



Database



External tool



Feedback



File



Folder



Forum



Glossary



Group choice



H5P



Interactive Content



Label



Page



Peer Assessment

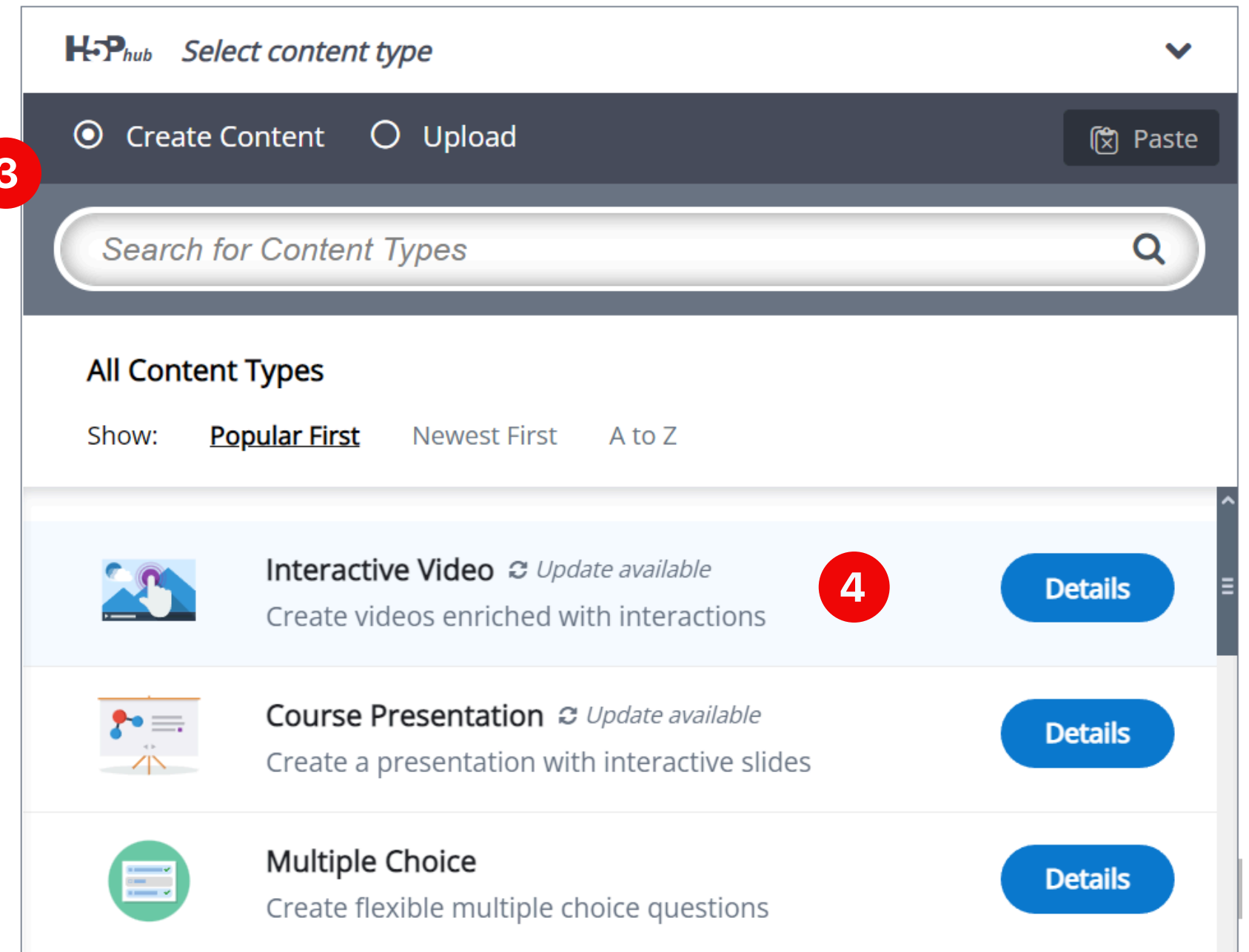


Quiz



Step 3: Choose 'Create Content'

Step 4: Choose 'Interactive Video'



H-P hub Select content type

☒ Create Content ☐ Upload Paste

Search for Content Types

All Content Types

Show: Popular First Newest First A to Z

	Interactive Video Update available Create videos enriched with interactions	4 Details
	Course Presentation Update available Create a presentation with interactive slides	Details
	Multiple Choice Create flexible multiple choice questions	Details

Step 5: Insert video title

Step 6: Upload video or insert video link

Title * Metadata

Ⓢ Tour

Used for searching, reports and copyright information

Calculating Intensity 5

Step 1
Upload/embed ...

Step 2
Add interactions

Step 3
Summary task

Add a video *

Click below to add a video you wish to use in your interactive video. You can add a video link or upload video files. It is possible to add several versions of the video with different qualities. To ensure maximum support in browsers at least add a version in webm and mp4 formats.

Upload video
file



6

or

Paste YouTube link or other video source
URL



<https://youtu.be/kPkxcYSumTs>

H5P supports all external video sources formatted as mp4, webm or ogv, like Vimeo Pro, and has support for YouTube and Panopto links.



Question Set



Test Yourself! - The Turing Test



To do: Complete the activity

How can a computer pass a Turing Test?

- ☐ Able to fool other players to change the result of the test.
- ☐ Replicate players without changing the overall result.
- ☐ Able to voice out conversation like other players.
- ☐ Replicate players action but slightly changes the result.

✓ Check



SETTING UP QUESTION SET

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource



Search

All

Activities

Resources



Assignment



Attendance



Book



Choice



Database



External tool



Feedback



File



Folder



Forum



Glossary



Group choice



H5P



Interactive Content



Label



Page



Peer Assessment



Quiz



Step 3: Choose 'Create Content'

Step 4: Choose 'Quiz (Question Set)'

H5P hub Select content type 

3 ☒ Create Content ☐ Upload  Paste



All Content Types

Show: Recently Used First Newest First A to Z

	Quiz (Question Set)  Update available Create a sequence of various question types	4 
	Single Choice Set  Update available Create questions with one correct answer	
	Summary Create tasks with a list of statements	

Question Set

Title * Metadata

Used for searching, reports and copyright information

Test Yourself! - The Turing Test 5

Step 5: Insert suitable title

Step 6:
Choose type of questions

Step 7: Insert question title

Step 8: Insert question

1. Q1 (Multiple Cho... x)

2. Q2 (Multiple Cho... x)

3. Q3 (Multiple Cho... x)

+ ADD QUESTION

Question type *

Library for this question.

Multiple Choice 6

Copy Paste & Replace

Title * Metadata

Used for searching, reports and copyright information

Q1 7

Media

Question *

8

How did Cleverbot manage to pass the Turing Test?

▼ By mimicking other participants in their conv...

✕

^

▼

Text*

9

By mimicking other participants in their conversation.

☐ Correct

▸ Tips and feedback

▼ By statistically analysing huge database of r...

✕

^

▼

Text*

By statistically analysing huge database of real conversation and selecting appropriate ones.

☒ Correct10

▸ Tips and feedback

Step 9: Insert answer choices

Step 10: Check 'Correct' at the correct answer



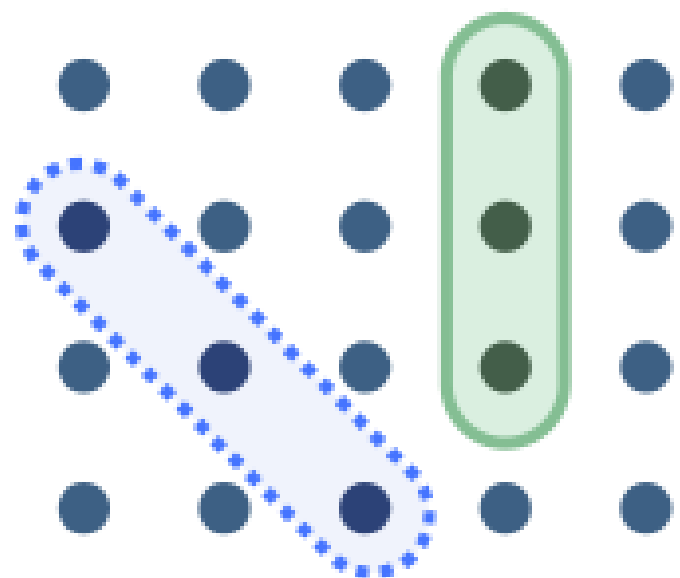
11

Save and return to course

Save and display

Cancel

Step 11: Click 'Save and return to course' when done



Find the Words



N	K	P	N	C	S	P	D	U	T	C	H
O	S	R	O	P	A	R	A	D	O	X	P
I	N	O	I	T	A	U	L	A	V	T	K
S	C	T	T	W	P	A	R	E	T	O	I
U	G	O	A	E	N	G	L	I	S	H	X
L	A	C	I	T	C	A	T	G	X	S	N
L	L	O	T	G	V	I	C	K	R	E	Y
O	O	L	O	P	E	N	C	R	Y	N	U
C	V	Y	G	O	T	J	U	X	Z	O	S
V	X	S	E	A	L	E	D	B	I	D	A
F	C	O	N	D	O	R	C	E	T	E	V
E	L	B	I	S	I	V	I	D	N	I	G

⌚ Time Spent : 0:00

0 of 15 found

✓ Check



PROMPT EXAMPLE

List 12 technical terms related to "Automotive Cooling System Components" in Malay. Each term must be only one word. Separate them with commas, without numbers or any other punctuation.

Pemampat, kondensor, penyejat, termostat, radiator, hos, kipas, penapis, gegelung, suis, pemeluwap, pendingin



SETTING UP

FIND THE WORDS

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource

Search

All Activities Resources

 Assignment ☆ ⓘ	 Attendance ☆ ⓘ	 Book ☆ ⓘ	 Choice ☆ ⓘ	 Database ☆ ⓘ	 External tool ☆ ⓘ
 Feedback ☆ ⓘ	 File ☆ ⓘ	 Folder ☆ ⓘ	 Forum ☆ ⓘ	 Glossary ☆ ⓘ	 Group choice ☆ ⓘ
 H5P ☆ ⓘ	 Interactive Content ☆ ⓘ	 Label ☆ ⓘ	 Page ☆ ⓘ	 Peer Assessment ☆ ⓘ	 Quiz ☆ ⓘ

**Step 3: Choose
'Create Content'**

**Step 4: Choose 'Find the
words'**

H5Phub *Select content type* 

3 ☒ Create Content ☐ Upload  Paste

Search for Content Types 

All Content Types

Show: Recently Used First Newest First A to Z

	Find the words 4 Grid word search game	Details
	Interactive Book  <i>Update available</i> Create small courses, books and tests	Details
	KewAr Code Create QR codes for different purposes	↓ Get

 Find The Words 

Title *

Metadata

Used for searching, reports and copyright information

Find the Concepts 5

Task description *

Description of the Game

. 6

Word list *

7

Comma Separated list of words. Special Characters, White Spaces and Numbers Not allowed

negotiation, opencry, dutch, english, valuation, tactical, vickrey, oneshot, collusic

Step 5: Insert title

Step 6: Insert description

Step 7: Insert list of words

Step 8: Click 'Save and return to course' when done

Save and return to course 8

Save and display

Cancel



Fill in the Blanks



Fill in the missing words

The larger the applied voltage, the larger the .

The larger the , the smaller the current.

If you double the and the resistance the same, the current also doubles.

An open circuit has resistance.

The 2 different voltage symbols are represented as and

If 125 V is applied to a resistor and 5A is the result. The resistance is Ohms

The ohms formula is represented in $V=IR$. The I in this formula is the symbol for

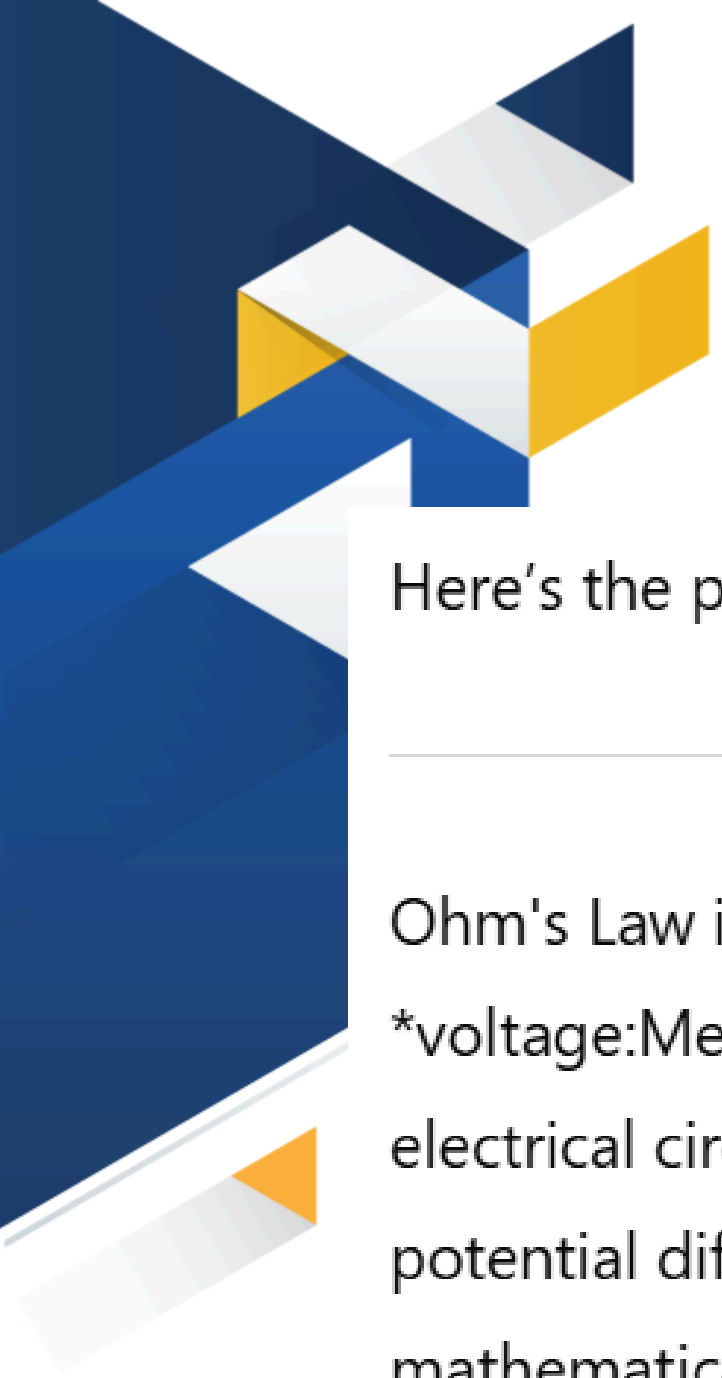
For a fixed Resistance, is directly proportional to

☒ Check



PROMPT EXAMPLE

Write one paragraph (5–6 sentences) about "Ohm's Law Principle" in English. Mark 8 important words to be turned into blanks using the H5P format: "Blanks are added with an asterisks (*) in front and behind the correct word/phrase. Alternative answers are separated with a forward slash (/). You may add a textual tip, using a colon (:) in front of the tip." Make sure to show all asterisks as literal asterisks by escaping them.



PROMPT EXAMPLE

Here's the paragraph with literal asterisks escaped so they will display correctly for H5P blanks:

Ohm's Law is a fundamental concept in `*electronics*` that explains the relationship between `*voltage:Measured in volts*`, `*current:Measured in amperes*`, and `*resistance:Measured in ohms*` in an electrical circuit. It states that the current in a circuit is directly proportional to the `*voltage/Electrical potential difference*` across it and inversely proportional to the `*resistance/Opposition to current flow*`. The mathematical formula for Ohm's Law is `*V/voltage* = *I/current* × *R/resistance*`, where V represents voltage, I represents current, and R represents resistance. Engineers and `*technicians:Electrical professionals*` use this principle to design, test, and troubleshoot electrical systems. By applying Ohm's Law, one can determine how a change in voltage or resistance will affect the `*current/Flow of electric charge*` in a circuit. This principle remains essential for both theoretical understanding and practical `*applications/Real-world uses*` in electrical engineering.

SETTING UP

FILL IN THE BLANKS

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource



Search

All

Activities

Resources



Assignment



Attendance



Book



Choice



Database



External tool



Feedback



File



Folder



Forum



Glossary



Group choice



H5P



Interactive Content



Label



Page



Peer Assessment



Quiz



Step 3: Choose
'Create Content'

Step 4: Choose 'Fill in
the Blanks'

3

 *Select content type*

☒ Create Content

☐ Upload

 Paste

Search for Content Types

All Content Types

Show: Recently Used First Newest First A to Z



Fill in the Blanks

Create a task with missing words in a text

4

Details



Find the Hotspot  Update available

Create image hotspots for users to find

Details



Guess the Answer  Update available

Create an image with a question and answer

Details

Title * Metadata

Used for searching, reports and copyright information

Ohm's Law fill in the blanks **5**

► Media

Task description *

A guide telling the user how to answer this task.

Fill in the missing words **6**

Text blocks *

Line of text × ^ ∨

7 i Show instructions

The larger the applied voltage, the larger the *current/amps/amp*.

Step 5: Insert title

Step 6: Insert description or instruction

Step 7: Insert question

Step 8: Click 'Save and return to course' when done

8

Save and return to course Save and display Cancel



Drag the Words

Drag the words into the correct boxes

The raw facts and figures that are collected and stored.

A characteristic or property that can take on different values.

A summary of the main features of a dataset, including measures of central tendency and variability.

The process of identifying and handling errors, inconsistencies, and missing values in a dataset.

The process of examining and summarizing the main characteristics of a dataset

A statistical technique that measures the strength and direction of a linear relationship between two variables.

Values in a dataset that are significantly different from the majority of the other values.

A graphical representation of data to help understand patterns, trends, and relationships.

✓ Check

Descriptive Statistics

Outlier

Data

Correlation

Data Cleaning

Data Visualization

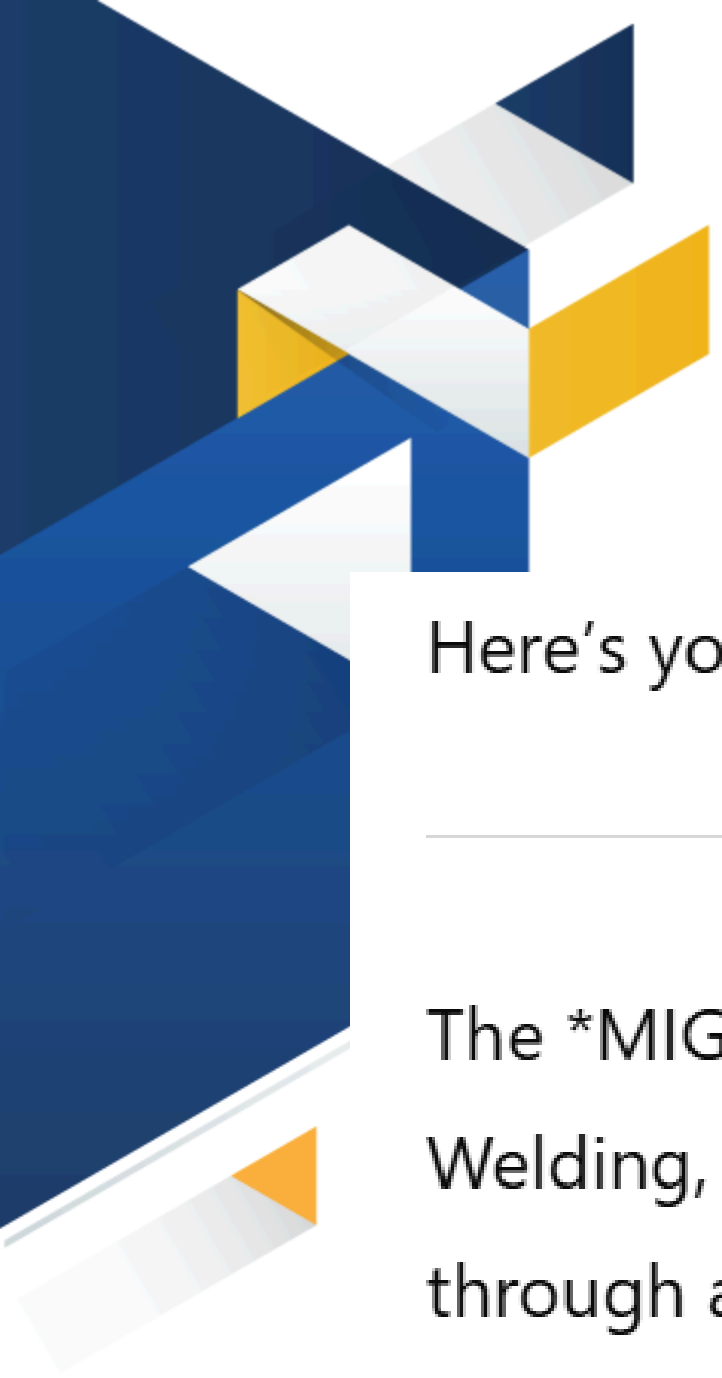
Variable

Exploratory Data Analysis (EDA)



PROMPT EXAMPLE

Create a short text about "MIG Welding Process". Insert 6 words that students need to drag into the blanks. Use the H5P format: "Droppable words are added with an asterisk (*) in front and behind the correct word/phrase. You may add a textual tip, using a colon (:) in front of the tip. For every empty spot there is only one correct word. Make sure to show all asterisks as literal asterisks by escaping them.



PROMPT EXAMPLE

Here's your short text with **literal escaped asterisks** for H5P format:

The *MIG:Metal Inert Gas* welding process, also called *Gas:Type of shielding* Metal Arc Welding, uses a continuous solid wire *electrode:Feeds filler metal into the weld* fed through a welding gun. An inert or semi-inert shielding *gas:Protects weld from air* is supplied to prevent *contamination:Impurities in the weld*. This method is widely used for its *speed:Fast welding process* and ease of learning, making it suitable for both beginners and professionals.

SETTING UP

DRAW THE WORDS

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource



Search

All

Activities

Resources



Assignment



Attendance



Book



Choice



Database



External tool



Feedback



File



Folder



Forum



Glossary



Group choice



H5P



Interactive Content



Label



Page



Peer Assessment



Quiz



Step 3: Choose
'Create Content'

Step 4: Choose 'Drag
the Words'

H5P hub *Select content type* 

☒ Create Content ☐ Upload  Paste

drag 

Search Results

	Drag and Drop  <i>Update available</i> Create drag and drop tasks with images	Details
	Drag the Words Create text-based drag and drop tasks	Details
	Image Pairing Drag and drop image matching game	Details

Title * Metadata

Used for searching, reports and copyright information

5

► Media

Task description *

Describe how the user should solve the task.

Drag the words into the correct boxes 6

Text * Show instructions

Oslo is the capital of Norway, *Stockholm* is the capital of Sweden and *Copenhagen* is the capital of Denmark. All cities are located in the *Scandinavian:Northern Part of Europe* peninsula. 7

Step 5: Insert title

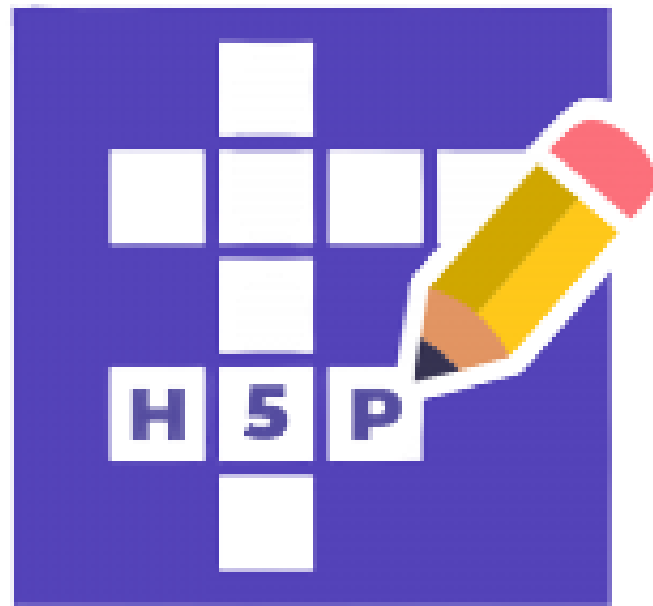
Step 6: Insert description or instruction

Step 7: Insert question

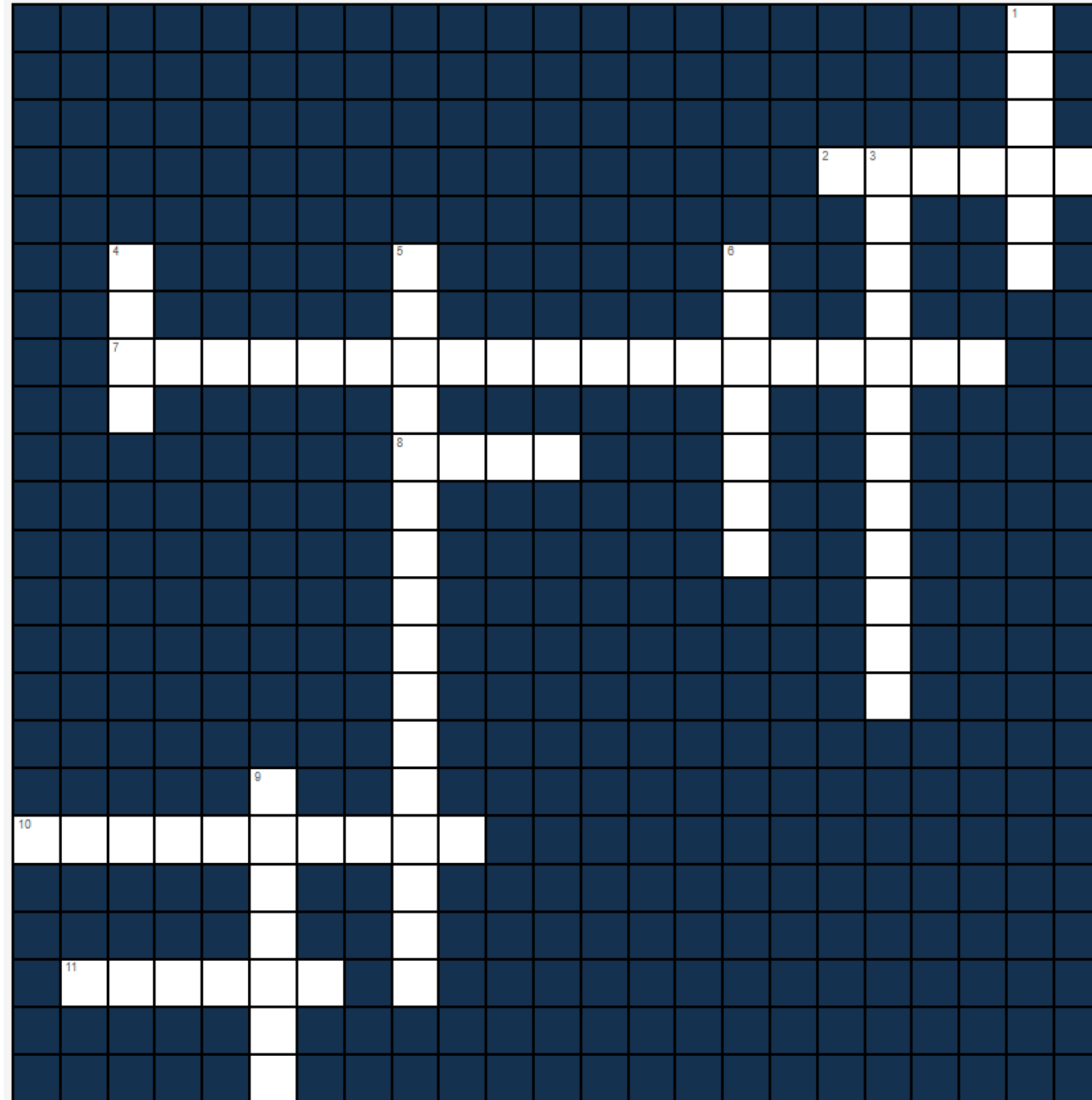
Step 8: Click 'Save and return to course' when done

8

Save and return to course Save and display Cancel



Crosswords



Across

2 The measure of task performance error. (6)

7 One of the key elements of ANN. (10,8)

8 The output in neural network is equivalent to which part of the human brain? (4)

10 Ability to adapt to its environment. (10)

11 The information processor in the human brain. (6)

Down

1 It modifies the strength of each input. (6)

3 Why is activation function needed? (12)



PROMPT EXAMPLE

Create 10 questions and answers for a crossword puzzle on the topic "Main Components of an Automotive Engine". The answer length should be between 4 and 10 letters. Format: Question – Answer.



PROMPT EXAMPLE

Here's a set of 10 questions and answers for your crossword puzzle:

1. Transfers power from the engine to the wheels – Clutch
2. Component where fuel is burned to produce power – Cylinder
3. Controls the flow of air and fuel mixture – Carburetor
4. Regulates engine temperature – Radiator
5. Converts reciprocating motion into rotational motion – Crankshaft
6. Provides the spark to ignite the fuel mixture – Sparkplug
7. Stores electrical energy for starting the engine – Battery
8. Filters air before entering the engine – Airfilter
9. Lubricates engine parts to reduce friction – Oilpump
10. Opens and closes to control gas flow in the engine – Valves

Do you want me to also make a **ready-to-use crossword grid** for these Q&A? That would make it instantly playable.



SETTING UP CROSSWORDS

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource



Search

All

Activities

Resources



Assignment



Attendance



Book



Choice



Database



External tool



Feedback



File



Folder



Forum



Glossary



Group choice



H5P



Interactive Content



Label



Page



Peer Assessment



Quiz



**Step 3: Choose
'Create Content'**

Step 4: Choose 'Crossword'

H5P hub *Select content type* ▼

3 ☒ Create Content ☐ Upload Paste

Q

All Content Types

Show: Recently Used First Newest First A to Z

	Crossword Create a crossword puzzle 4	Details
	Sort the Paragraphs Create a set of paragraphs to be sorted	Details
	Image Choice ↻ Update available Create a task where the alternatives are images	Details

 Crossword

Title*

Metadata

Used for searching, reports and copyright information

Neural Network Puzzle5

Task description

Describe your task here.

Step 5: Insert title

Step 6: Insert clue

Step 7: Insert answer

words*

1. Ability to adapt t...x

2. Thin gap betwee...x

3. The output in ne...x

4. The measure of t...x

5. It modifies the st...x

6. Arrangement of ...x

7. It is used to incre...x

8. The information ...x

9. One of the key el...x

10. One example of...x

Clue*

Clue that should point to the answer.

Ability to adapt to its environment.6

Answer*

Answer to the clue.

PLASTICITY7

Extra clue

-

CopyPaste

☐ Fix word on grid

Check if you want to fix the word to a particular position on the grid.



9. One of the key el... ✕

10. One example of... ✕

11. Why is activatio... ✕

+ ADD WORD

☐ Fix word on grid
Check if you want to fix the word to a particular position on the grid.

Step 8: Click 'Add word' to insert the next word

Step 9: Repeat steps 6-8 until all words have been inserted

Step 10: Click 'Save and return to course' when done

10

Save and return to course

Save and display

Cancel

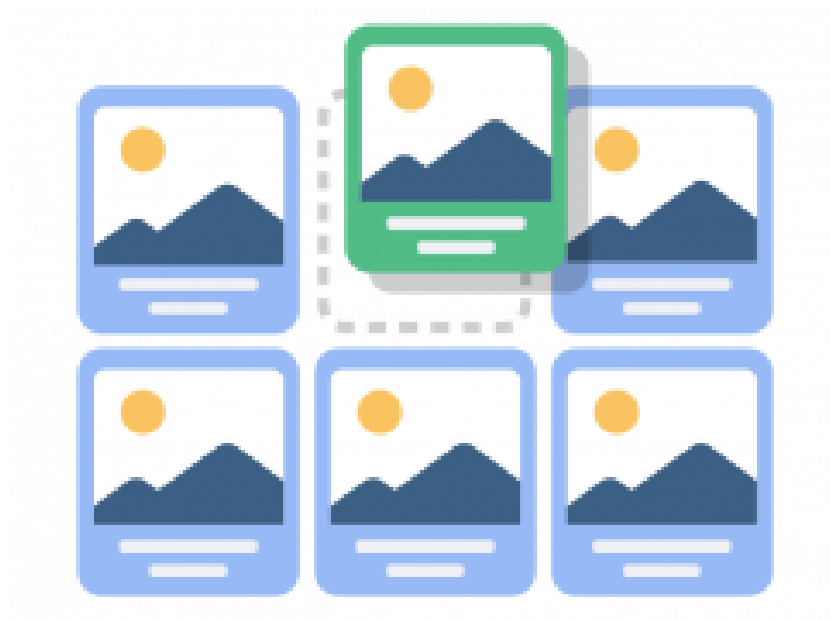


Image Sequencing

H-P Arrange the Sequence

Done: Complete the activity



Drag to arrange the images in the correct sequence

3	1	2
4	5	8
6	7	

3-1-2-4-5-8-6-7-/-

	1	2
3	4	5
6	7	8

/-1-2-3-4-5-6-7-8

3	1	2
4	5	8
6		7

3-1-2-4-5-8-6-/-7

3	1	2
	4	5
6	7	8

3-1-2-/-4-5-6-7-8

3	1	2
4		5
6	7	8

3-1-2-4-/-5-6-7-8

3	1	2
4	5	
6	7	8

3-1-2-4-5-/-6-7-8

Time spent

0:00

Total Moves

0

✓ Check

👁 ShowSolution

SETTING UP IMAGE SEQUENCING

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource



Search

All

Activities

Resources



Assignment



Attendance



Book



Choice



Database



External tool



Feedback



File



Folder



Forum



Glossary



Group choice



H5P



Interactive Content



Label



Page



Peer Assessment



Quiz



**Step 3: Choose
'Create Content'**

3

H-P hub *Select content type* ▼

☒ Create Content ☐ Upload Paste

All Content Types

Show: Recently Used First Newest First A to Z

	Image Sequencing Place images in the correct order	4	Details
	Flashcards ↻ Update available Create stylish and modern flashcards		Details
	Speak the Words Set ↻ Update available Create a series of questions answered by speech (Chrome only)		Details

**Step 4: Choose 'Image
Sequencing'**

Title *

Metadata

Used for searching, reports and copyright information

Arrange the Sequence

5

Step 5: Insert title

Task Description *

A guide telling the user how to solve this task.

Drag to arrange the images in the correct sequence

6

Step 6: Insert description

Alternate Task Description *

A guide intended for visually impaired users on how to solve this task.

Make the following list be ordered correctly. Use the cursor keys to navigate throu

7

Step 7: Insert alternative description

Images*

1. 3-1-2-4-5-8-6-/-7

2. 3-1-2-4-5-8-6-7-/-

3. 3-1-2-4-5-/-6-7-8

4. 3-1-2-4-/-5-6-7-8

5. 3-1-2-/-4-5-6-7-8

6. /-1-2-3-4-5-6-7-8

+ ADD IMAGE

Image*



Edit image

Edit copyright

Image Description*

An image description for users who cannot recognize the image

3-1-2-4-5-8-6-/-7

Audio files

An optional audio for the card to play



Step 8: Insert pictures and descriptions following the correct order of the pictures



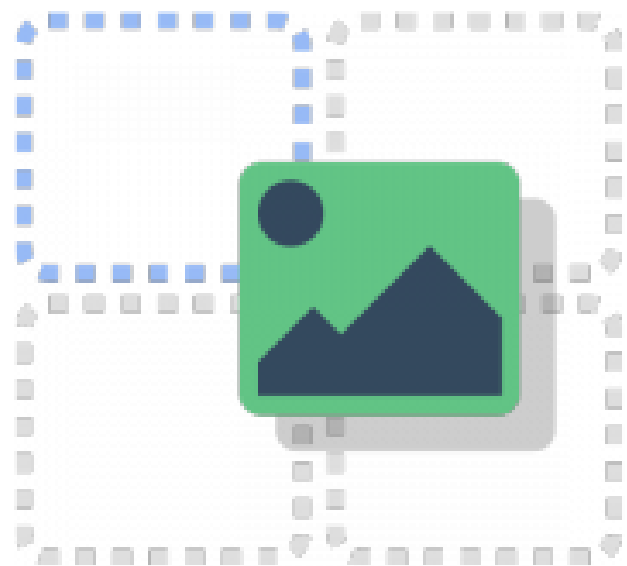
9

Save and return to course

Save and display

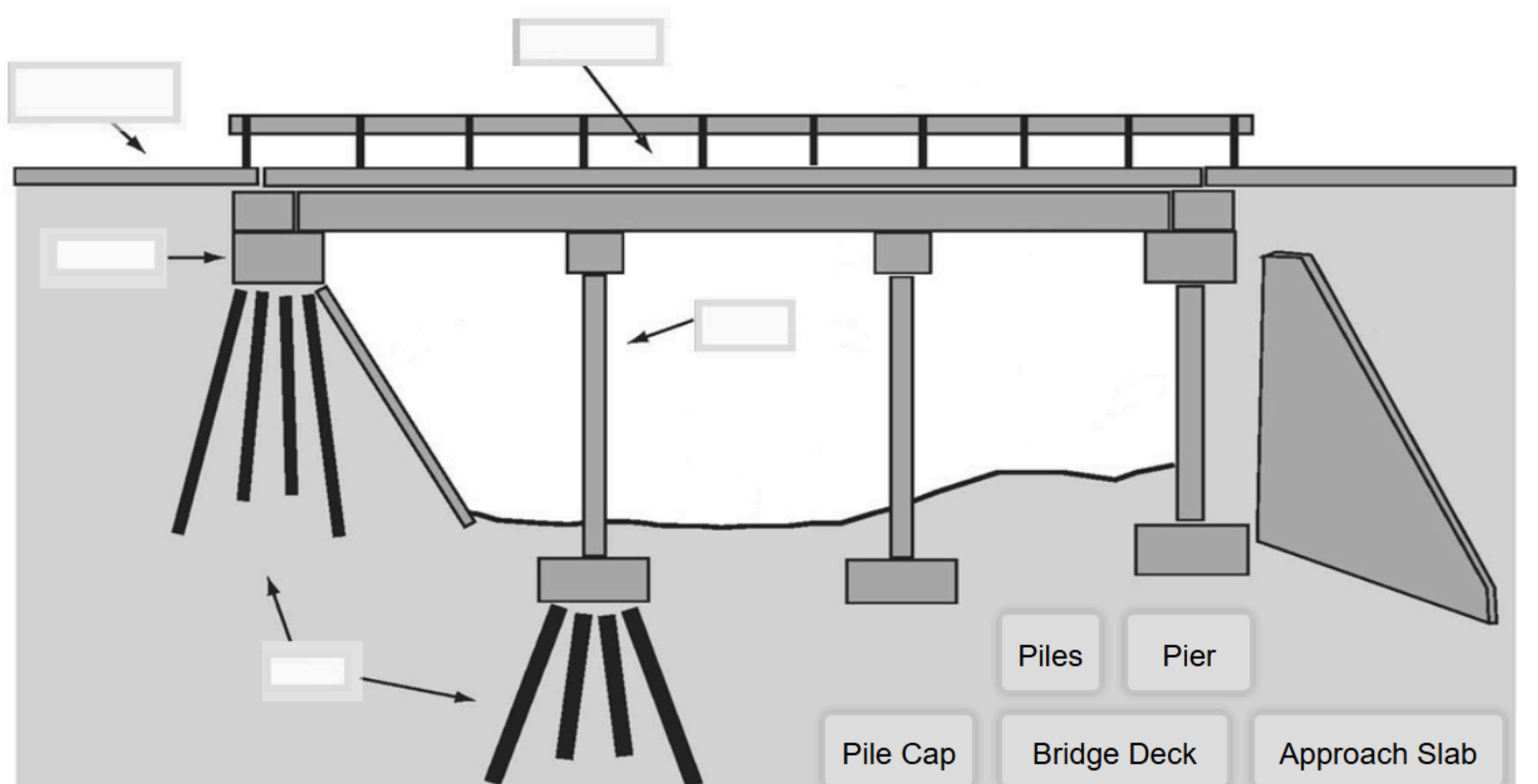
Cancel

Step 9: Click 'Save and return to course' when done



Drag and Drop

Match the Structural Parts of the Bridge!



✓ Check



SEDIMENTARY ROCK

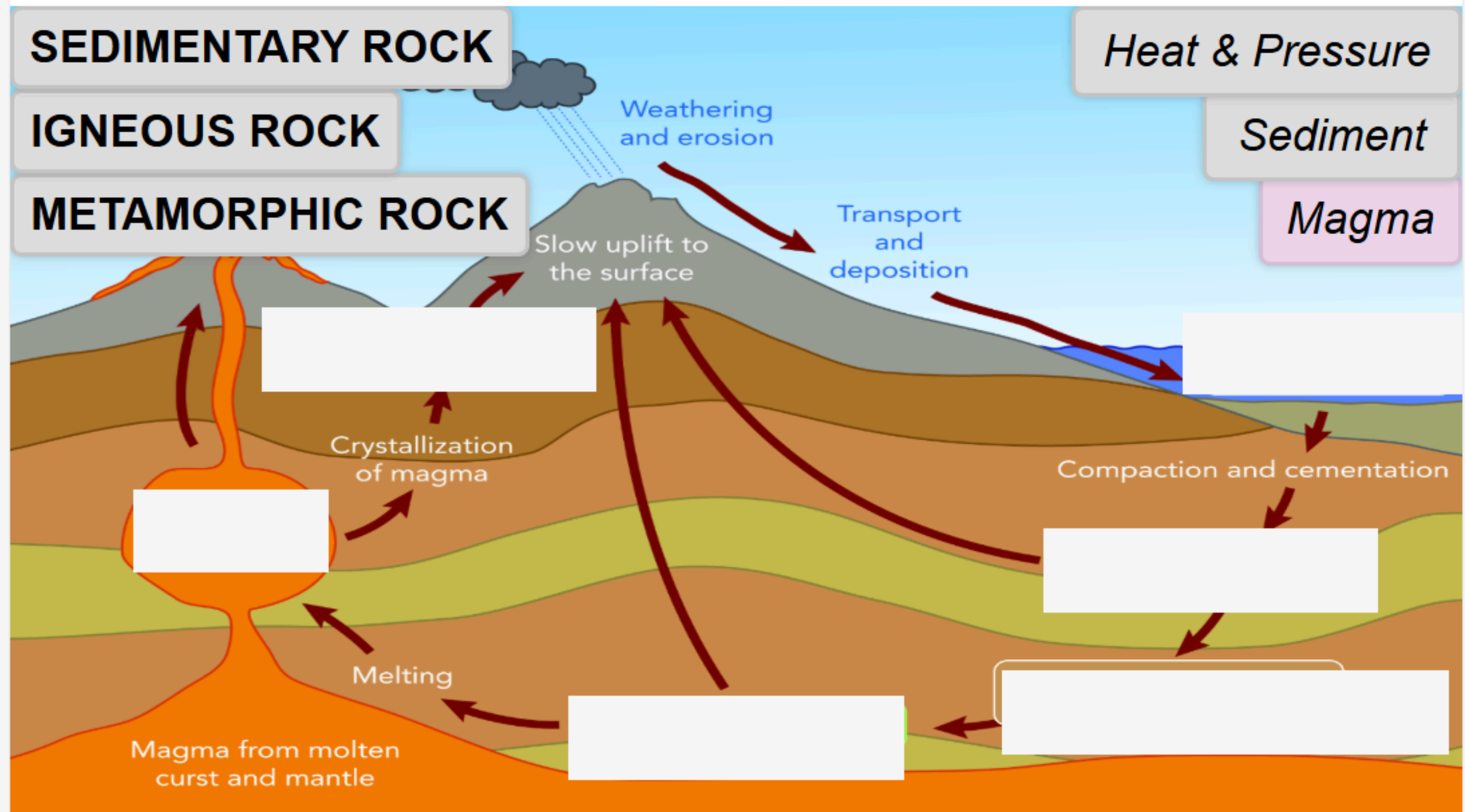
IGNEOUS ROCK

METAMORPHIC ROCK

Heat & Pressure

Sediment

Magma



"Rock Cycle" by [Siyavula Education](#) is licensed under [Creative Commons Attribution 2.0 Generic](#).

✓ Check

Exercise 1: Match the name of the basic strokes

diǎn

nà

shù

tí

héng



✓ Check

Characteristics and Skills to Pursue AI



Pursuing AI



The most important thing is to have .

Non-technical skill needed

Academic knowledge needed	
Mathematics	Science



It's also an added bonus to have skill.

programming

physics

mechanics

logic

curiosity

calculus

critical thinking

cognitive learning

problem solving

passion

creativity

algebra

statistic

☒ Check

Given the following wave equation

$$\frac{\partial^2 u}{\partial t^2} = 3 \frac{\partial^2 u}{\partial x^2}, \quad 0 \leq x \leq 2, \quad t > 0$$

with boundary conditions

$$u(0, t) = u(2, t) = 0, \quad 0 \leq t \leq 1$$

and initial condition

$$u(x, 0) = x(2 - x), \quad 0 \leq x \leq 2$$

$$\frac{\partial u}{\partial t}(x, 0) = 1, \quad 0 \leq x \leq 2.$$

Given $h = 0.5$ and $k = 0.25$. By using the central-difference formula, find the following

a) boundary points.

i. $u_{0,0}, u_{0,1}, u_{0,2}, u_{0,3}$ and $u_{0,4}$

ii. $u_{4,0}, u_{4,1}, u_{4,2}, u_{4,3}$ and $u_{4,4}$

b) initial points.

i. $u_{1,0}, u_{2,0}$ and $u_{3,0}$

c) internal points

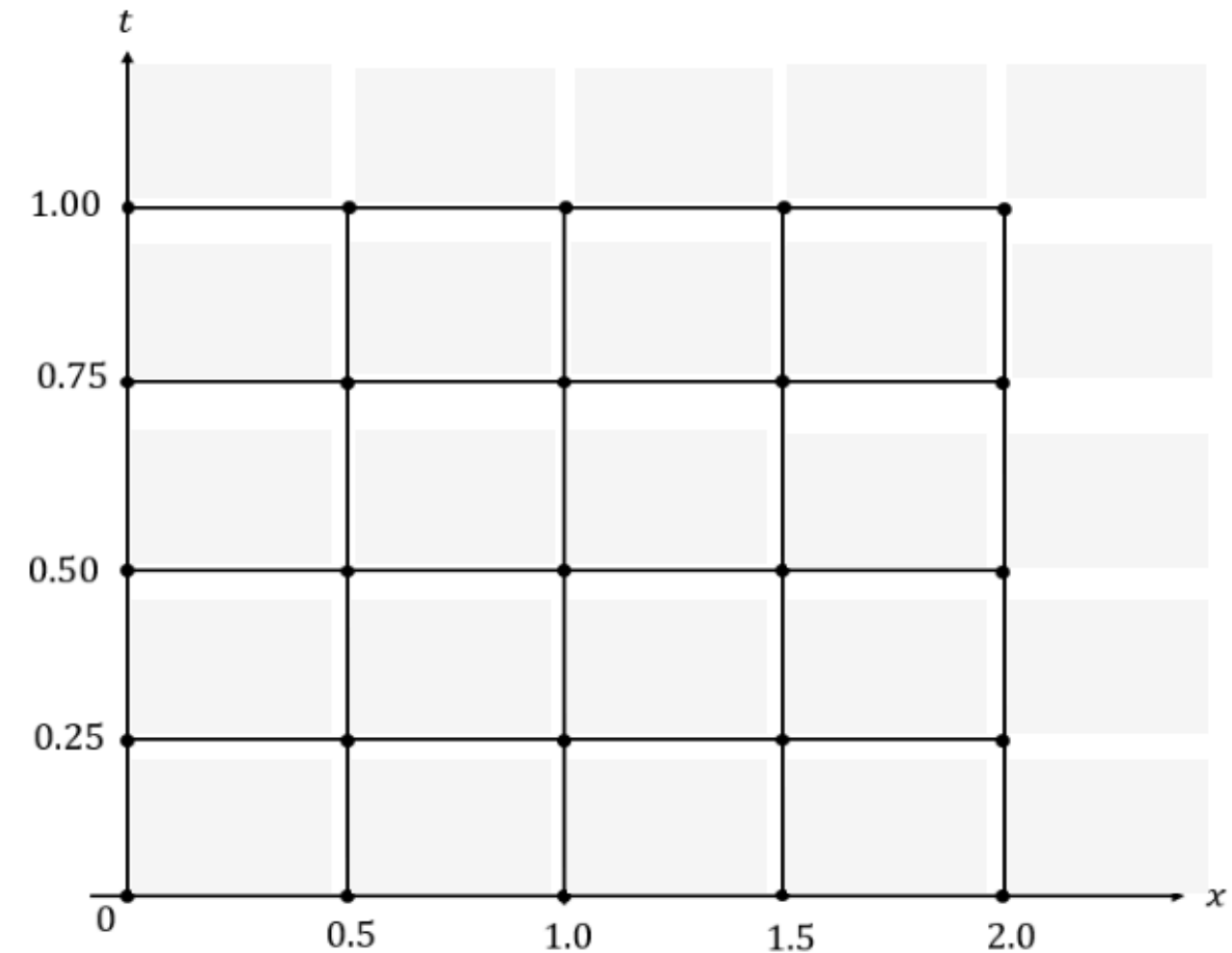
v. $u_{1,1}, u_{2,1}$ and $u_{3,1}$

vi. $u_{1,2}, u_{2,2}$ and $u_{3,2}$

vii. $u_{1,3}, u_{2,3}$ and $u_{3,3}$

viii. $u_{1,4}, u_{2,4}$ and $u_{3,4}$

Drag and drop the correct answers in the following answer space.



-0.0235

-0.789

-0.4707

0.4531

-0.0079

0

1

0.75

1.0625

0.8125

✓ Check

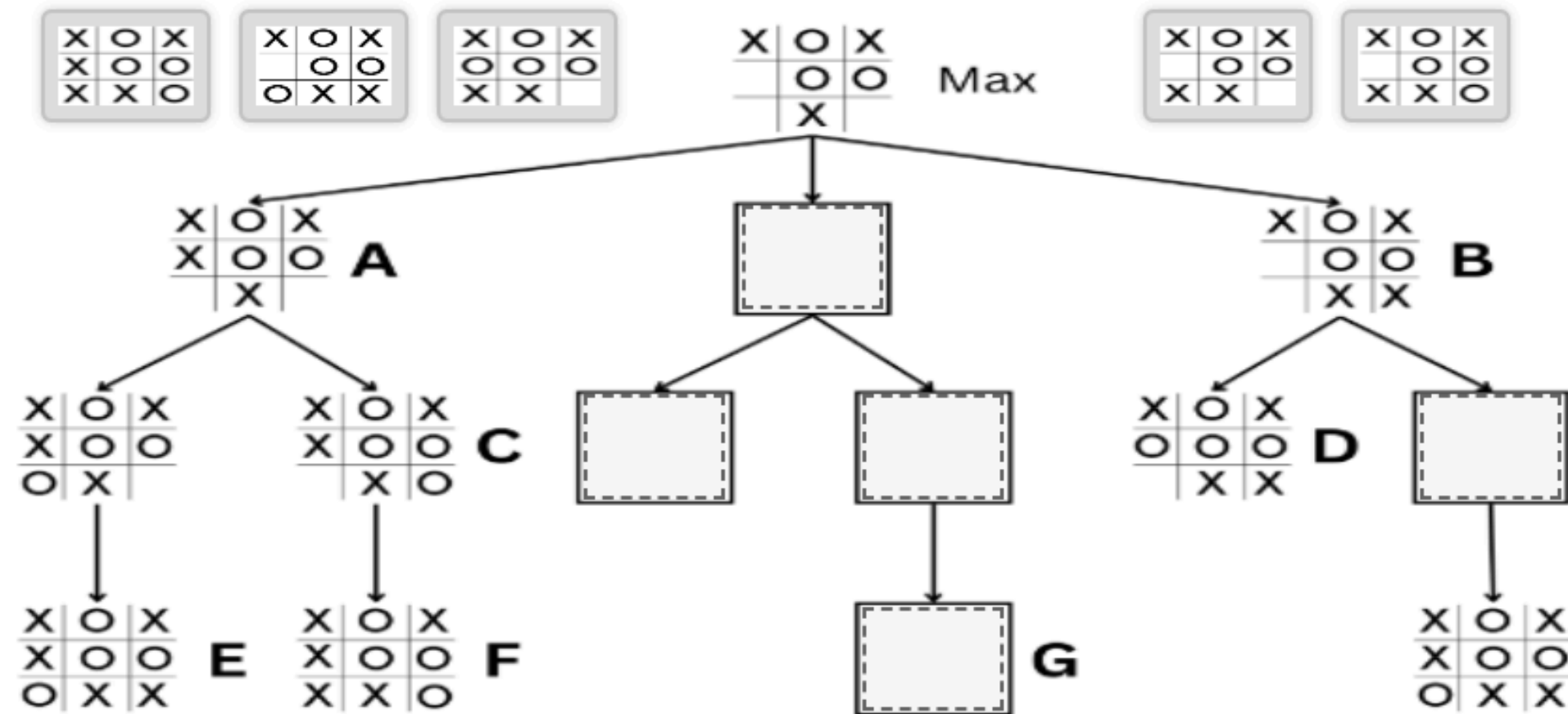
Task 1: Tic-Tac-Toe

a) Complete the tree by dragging and dropping the correct tic-tac-toe board. Ignore the A, B, C, D, E, F, G in the figure.



Tic-Tac-Toe

✓ **Done:** Complete the activity



✓ Check

SETTING UP DRAG AND DROP

1 + Add an activity or resource

Step 1: In edit mode, click 'Add an activity or resource'.

Step 2: Choose 'Interactive Content'

Add an activity or resource

Search

All Activities Resources

 Assignment ☆ ⓘ	 Attendance ☆ ⓘ	 Book ☆ ⓘ	 Choice ☆ ⓘ	 Database ☆ ⓘ	 External tool ☆ ⓘ
 Feedback ☆ ⓘ	 File ☆ ⓘ	 Folder ☆ ⓘ	 Forum ☆ ⓘ	 Glossary ☆ ⓘ	 Group choice ☆ ⓘ
 H5P ☆ ⓘ	 Interactive Content ☆ ⓘ	 Label ☆ ⓘ	 Page ☆ ⓘ	 Peer Assessment ☆ ⓘ	 Quiz ☆ ⓘ

Step 3: Choose
'Create Content'

Step 4: Choose 'Drag
and Drop'

H-P Hub Drag and Drop ▼

☒ Create Content ☐ Upload Paste

drag 🔍

Search Results

	Drag and Drop 🔄 Update available Create drag and drop tasks with images	4	Details
	Drag the Words Create text-based drag and drop tasks		Details
	Image Pairing Drag and drop image matching game		Details



 Drag and Drop



Title *

Metadata

Used for searching, reports and copyright information

Tic-Tac-Toe 5

Step 5: Insert title



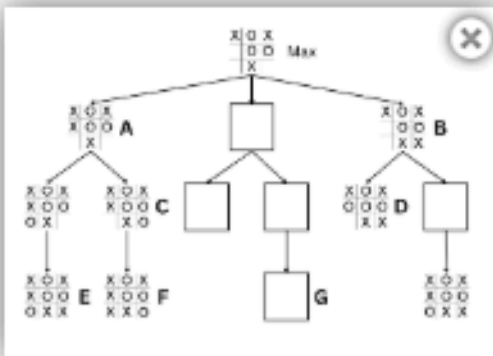
Step 1
Settings



Step 2
Task

Background image

Optional. Select an image to use as background for your drag and drop task.



Step 6: Insert description



Step 1

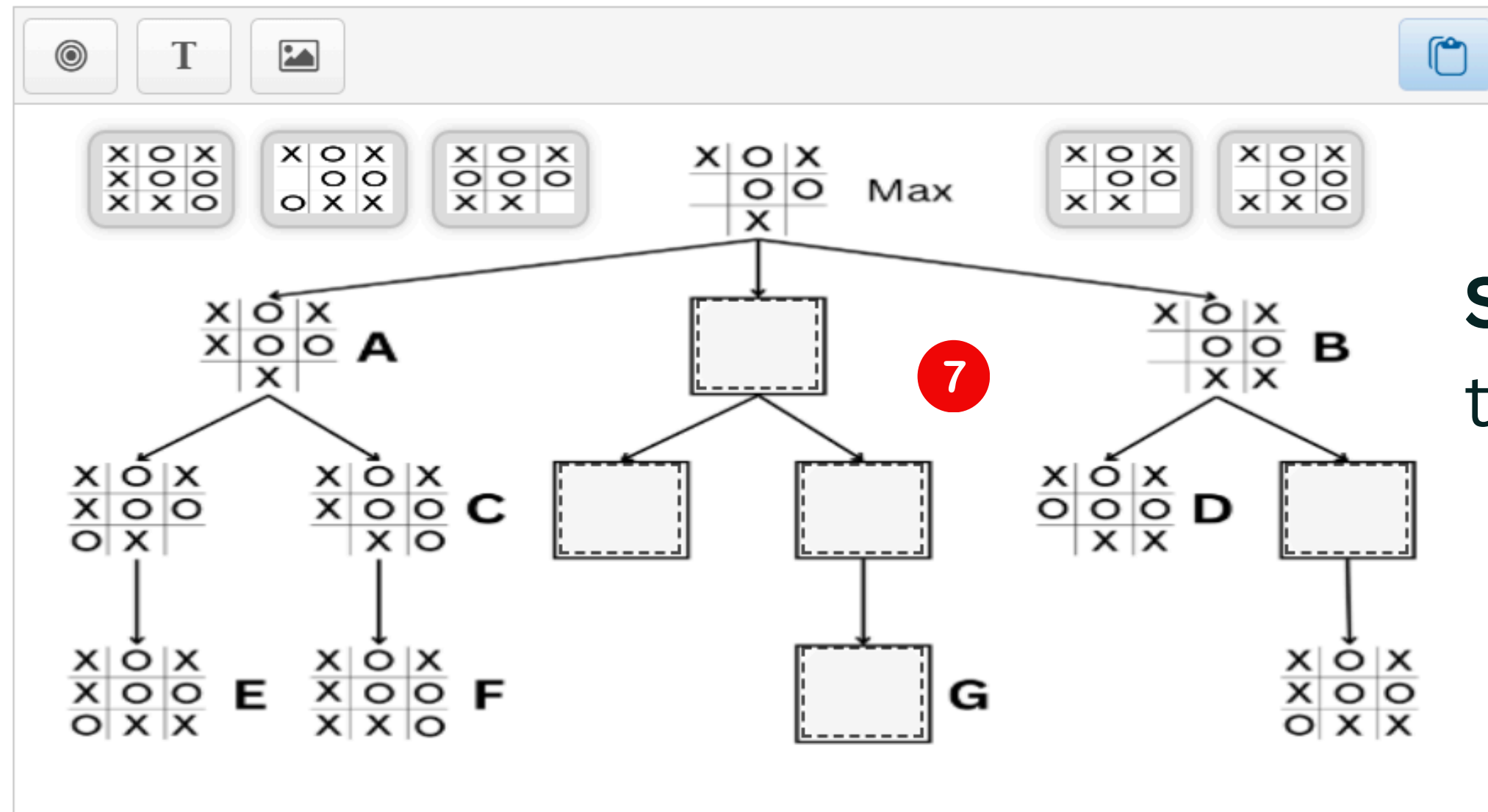
Settings



Step 2

Task

Task*



Step 7: Insert picture for the H5P background

Start by placing your drop zones.
Next, place your droppable elements and check off the appropriate drop zones.
Last, edit your drop zone again and check off the correct answers.

Step 8: Determine drag zones and droppable elements

 **Step 1**
Settings

 **Step 2**
Task

Task*

X	O	X
X	O	O
X	X	O

X	O	X
O	O	X
O	X	X

X	O	X
O	O	O
X	X	

X	O	X
	O	O
	X	

 Max

X	O	X
	O	O
X	X	

X	O	X
O	O	O
X	X	O

X	O	X
X	O	O
	X	

A

X	O	X
	O	X
	X	X

B

X	O	X
X	O	O
O	X	

X	O	X
X	O	O
X	X	O

C

8

X	O	X
O	O	O
X	X	

D

X	O	X
X	O	O
O	X	X

E

X	O	X
X	O	O
X	X	O

F

G

X	O	X
X	O	O
O	X	X

Start by placing your drop zones.
Next, place your droppable elements and check off the appropriate drop zones.
Last, edit your drop zone again and check off the correct answers.



9

Save and return to course

Save and display

Cancel

Step 9: Click 'Save and return to course' when done



Reusing H5P

Fill in the missing words

The larger the applied voltage, the larger the .

The larger the , the smaller the current.

If you double the and the resistance the same, the current also doubles.

An open circuit has resistance.

The 2 different voltage symbols are represented as and

If 125 V is applied to a resistor and 5A is the result. The resistance is Ohms

The ohms formula is represented in $V=IR$. The I in this formula is the symbol for

For a fixed Resistance, is directly proportional to

 Check

STEPS TO REUSE

 Reuse  Rights of use  Embed

1

Step 1: Click 'Reuse'

Step 2:
Download
.h5P file

Fill in the missing words

The larger the applied voltage, the

The larger the , the sm

If you double the and

An open circuit has resistance.

The 2 different voltage symbols are represented as and

If 125 V is applied to a resister and 5A is the result. The resistance is Ohms

Reuse Content [More Info](#)



Download as an .h5p file

2

.h5p files may be uploaded to any web-site where H5P content may be created.

3 + Add an activity or resource

Step 3: In edit mode, click 'Add an activity or resource'.

Add an activity or resource



Search

All

Activities

Resources



Assignment



Attendance



Book



Choice



Database



External tool



Feedback



File



Folder



Forum



Glossary



Group choice



H5P



Interactive Content



Label



Page



Peer Assessment



Quiz



Step 4: Choose 'Interactive Content'

H5P hub *Select content type* ▼

☐ Create Content ☒ Upload 5 📋 Paste

Upload an H5P file.

6

You may start with examples from [H5P.org](https://h5p.org).

Step 5: Choose 'Upload'

Step 6: Upload H5P file

Upload an H5P file. 7

7

Step 7: Click 'Use'

Step 8: Click 'Save and return to course' when done

8

<https://h5pstudio.ecampusontario.ca/>

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Catalogue of H5P Content					Displaying 1 - 20 of 7571
Filters					
Title	Type	Author	Subject	Last Updated 	License
Noise Exposure Test	Question Set	Shivani Rajeshbhai Prajapati	Health & Development	46 minutes ago	OCL-ND, U
Inside an offset printing unit	Image Hotspots	Martin Habekost	Technology & Engineering	21 hours ago	OCL, U
1.7 Wetter und Jahreszeiten	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA
1.5 Was haben Sie schon gelernt...	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA
1.7 Himmelsrichtungen	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA
2.1 Gegenstände im Seminarraum	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA
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2.1 Im Seminarraum	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA
2.2 Was ist das?	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA
2.2 Im Seminarraum	Drag and Drop	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA

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Title	Type	Author	Subject	Last Updated	License			
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Inside an offset printing unit	Image Hotspots	Martin Habekost	Technology & Engineering	21 hours ago	OCL, U			
1.7 Wetter und Jahreszeiten	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			
1.5 Was haben Sie schon gelernt...	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			
1.7 Himmelsrichtungen	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			
2.1 Gegenstände im Seminarraum	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			
2.1 Im Seminarraum	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			
2.1 Im Seminarraum	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			
2.2 Was ist das?	Course Presentation	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			
2.2 Im Seminarraum	Drag and Drop	Amitoj Aujla	Language & Linguistics	1 day ago	CC BY-NC-SA			

Search and Filter

Title & Description

Search for keywords in title and description.

Type

Filter by H5P activity type

Keywords

Filter by author-supplied tags.

Subject

Filter by subject.

Author

Search by author name.

Catalogue

FR

Login

Register

Catalogue of H5P Content

Displaying 1 - 20 of 7573

Type	Author	Subject	Last Updated ⌵	License
Drag the Words	Melanie Leganchuk	Business & Management	14 hours ago	OCL, U
Question Set	Jasmine Paul	Health & Development	14 hours ago	OCL-ND, U
Question Set	Shivani Rajeshbhai Prajapati	Health & Development	15 hours ago	OCL-ND, U
Image Hotspots	Martin Habekost	Technology & Engineering	1 day ago	OCL, U
Course Presentation	Amitoj Aujla	Language & Linguistics	2 days ago	CC BY-NC-SA
Course Presentation	Amitoj Aujla	Language & Linguistics	2 days ago	CC BY-NC-SA
Course Presentation	Amitoj Aujla	Language & Linguistics	2 days ago	CC BY-NC-SA
Course Presentation	Amitoj Aujla	Language & Linguistics	2 days ago	CC BY-NC-SA
Course Presentation	Amitoj Aujla	Language & Linguistics	2 days ago	CC BY-NC-SA
Course Presentation	Amitoj Aujla	Language & Linguistics	2 days ago	CC BY-NC-SA



THANK YOU

