

AI Building Blocks Series

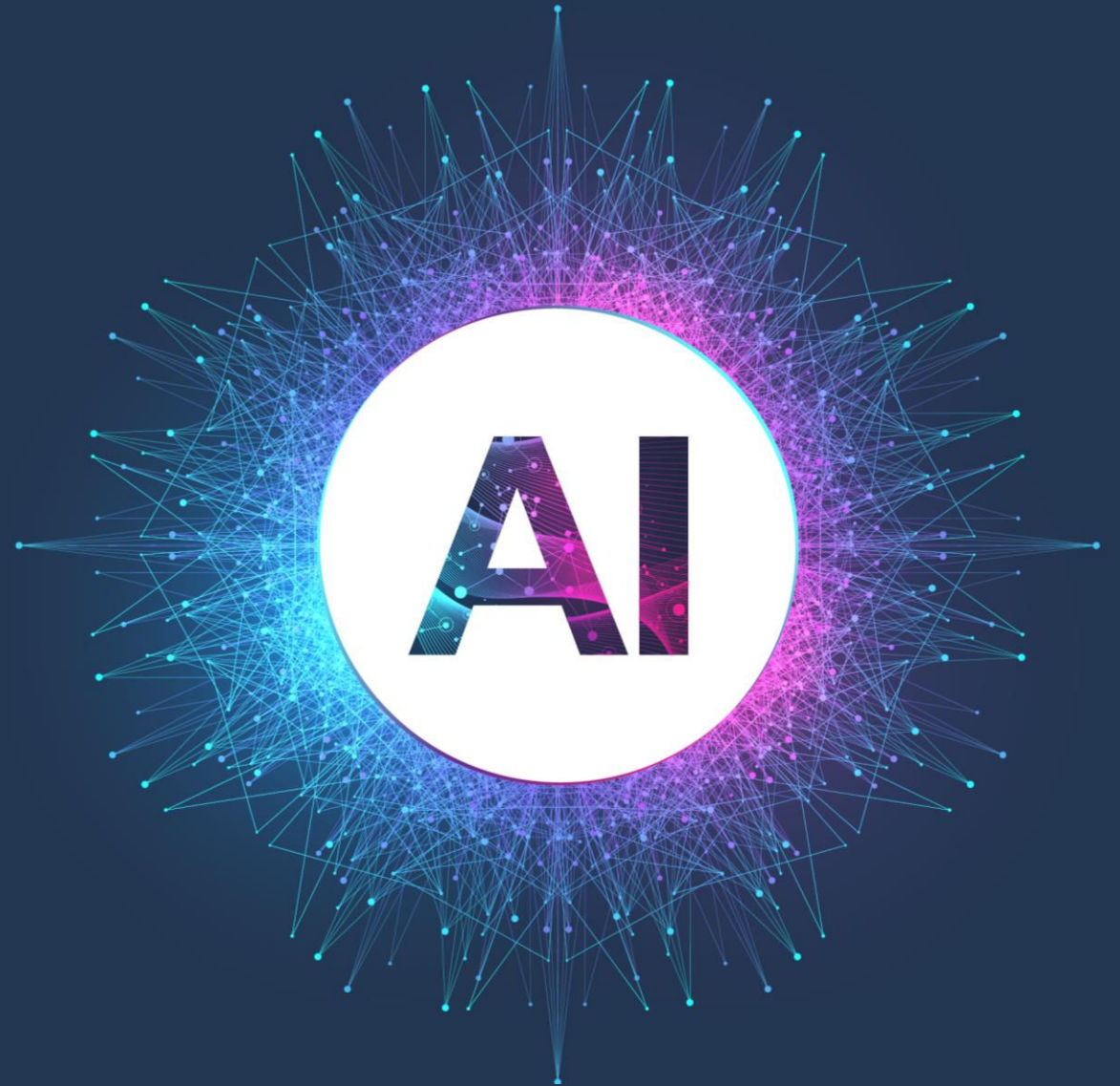
AI for Teaching and Learning

Kirsty Gillen

Digital Learning Developer • AHSS Faculty



QUEEN'S
UNIVERSITY
BELFAST





AI Building Blocks Series

AI Foundations

13 Feb, 11am

Aidan Deery

AI Ethics

20 Feb, 11am

Aidan Deery

AI for Everyday Tasks

27 Feb, 11am

Una Lynch

AI for Teaching and Learning

13 Mar, 11am

Kirsty Gillen

Pedagogy Over Tech

7 Steps for Active Learning with AI

20 Mar, 11am

Patrick Phillips

AI and Accessibility

25 Mar, 11am

Sarah Stewart

AI for Research

27 Mar, 11am

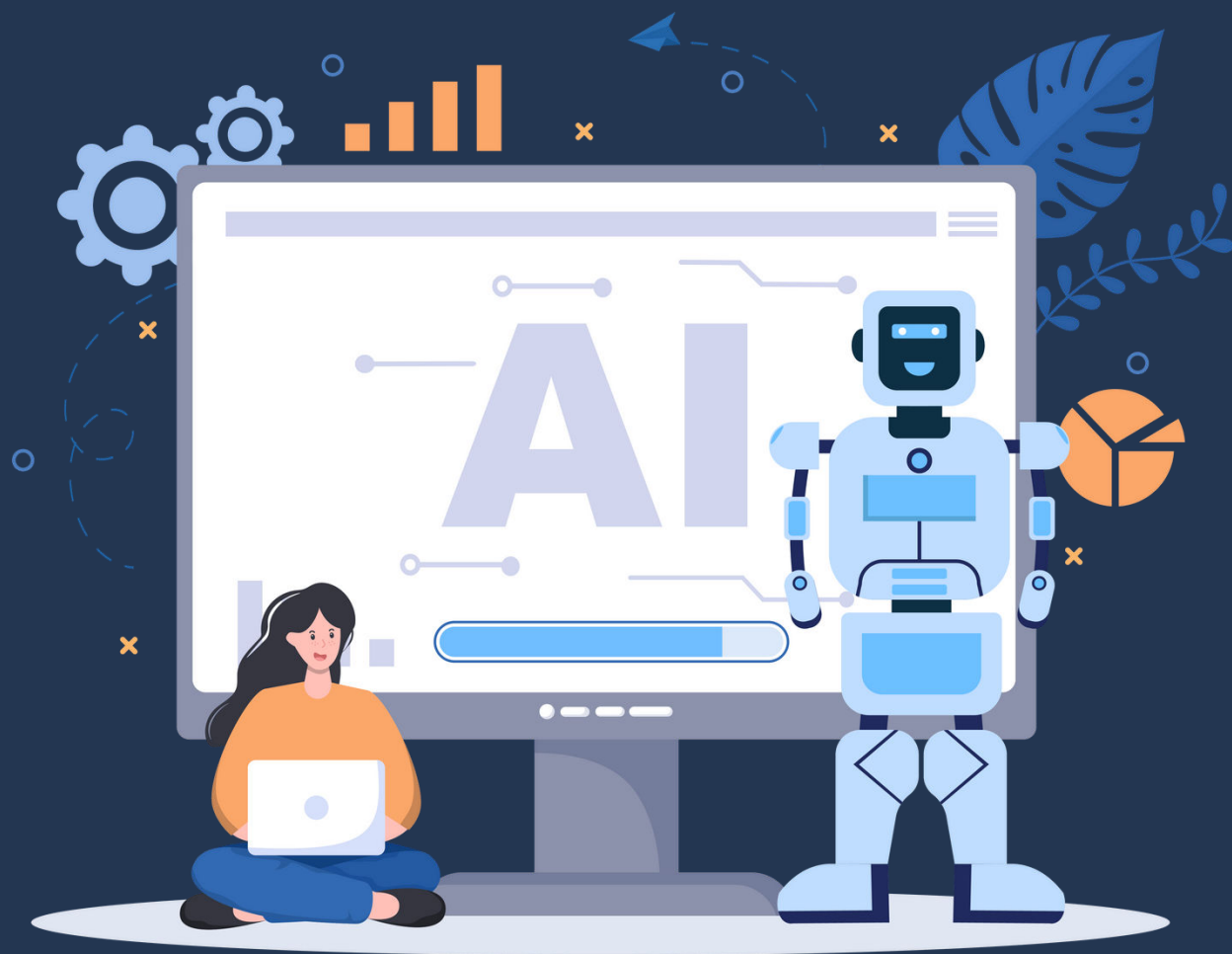
Vilinda Ross, Aidan Deery



[Live Sessions: Sign up here](#)



[Recorded Sessions: Catch up here](#)



QUB Guidance on Use of AI

Prompt Optimisation

AI Practical Demonstrations

R-A-I-S-E

Our guidance is based on the RAISE Principles:
**Responsible Use, AI Best practice, Integrity,
Support, and Equitable Access.**

Key Guides

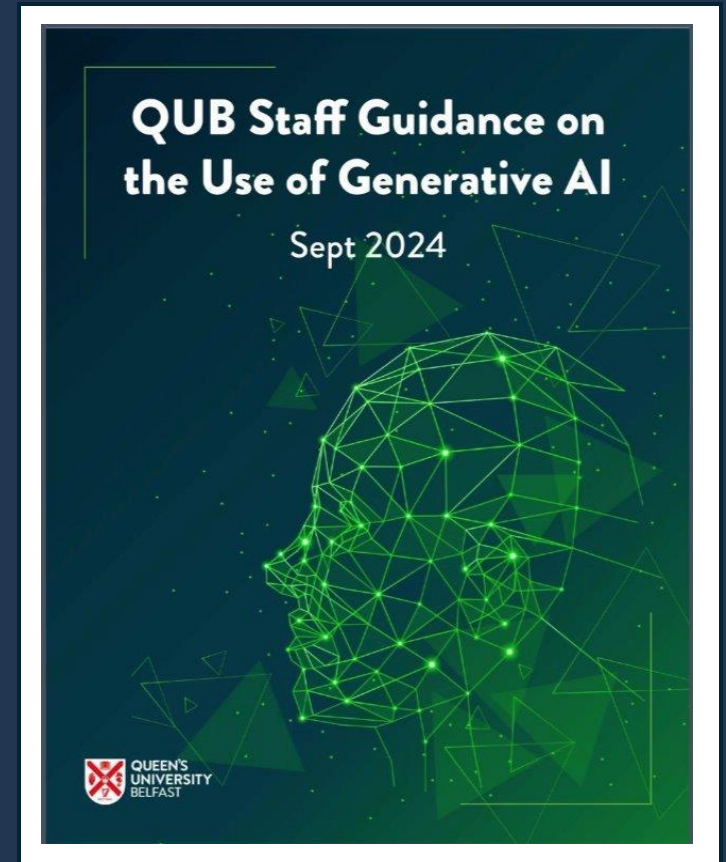
- [QUB Position on AI](#)
- [RAISE Principles: QUB Staff Guidance on the use of Generative AI](#)
- [Trailblazers Guide: AI as Your Partner](#)

AI and Assessment

- [Guidance on the use of AI in Assessment: 24-25](#)
- [Use of Gen AI in Dissertation Projects](#)
- [Use of AI Detection Tools](#)
- [AI Assessment Self-help Guide](#)

Video

Watch our short video for advice on what to look out for when starting to use Generative AI: [Click here](#)





Prompt Optimisation

Enhanced Prompts Considerations for Text

Assign a
role

Define
the task

Specify the
format

Style
of output

Set
restrictions

Define and
refine

Who or what do
you want AI to
embody?

What do
you want
AI to do?

Indicate how you
want the
response to
appear.

Assign a style
or tone of
voice.

Set instructions
for AI to follow
or tell it not to
do.

Modify the
response or ask
for
clarification.

HUMAN REVIEW

Simple Prompt Example



Create a step-by-step guide
on how to use Padlet.



Advanced Prompt Example

Role

Task

You are a **Digital Learning Developer**, proficient in creating clear, engaging and well-structured learning guides for students. Your task is to **produce a step-by-step guide on how to use Padlet as a reflection blog**. The guide is **aimed at final year University students doing an assessment that requires them to document and reflect on the work they have done for their final year project.**

Restriction

The guide should be **structured in a clear and logical manner, with each step outlined in detail. Use headings, subheadings, and bullet points to organise the content.**

Format

Tone

The **guide should be written in a professional yet approachable tone, making it easy for students to follow**. Include **5 key steps in the guide: How to create a Padlet account. How to navigate around Padlet, How to set up a Padlet board, How to use a Padlet board for a reflection blog (including steps). How to share a Padlet board with someone.**

Restriction

Define and Refine

Follow up
Questions

Ask for estimated activity
times

Ask to extend the
outline to include more
content

Question a
response that you
feel isn't right

Ask AI to edit, take out or include
content

Ask for the output
to be in a
downloadable file

Human Review

Examine Results

Check for factual errors, inconsistencies, biases, or illogical reasoning

Verify Sources

Cross-check the information with reliable sources. Reports, academic papers, etc.

Check Dates & Relevance

Is the information up-to-date or relevant to the specific context

Test for Consistency

Ask AI the same question in different ways to check if the answer remains consistent

Transparency & Explainability

Ask AI to provide sources, explain its reasoning or how it arrived at the response

Compare Across Models

Ask multiple AI systems the same question to spot inconsistencies

Prompt Library

PROMPT NAME	DESCRIPTION	CHATBOT	PROMPT	VARIABLES	WRITER
Respond to email	Writes a response to an email based on your bullet-pointed requests. Use Bing to bring in fresh relevant information, like weather and relevant news articles	Bing	You are an eloquent and professional executive known for your effective and pers I want you to: - List of requests (inc. make comment about weather in their area, find relevant r {email):	Requests, Email	Dave Birss
Plan a project	Creates a project plan and timeline, based on information given	GPT 3.5 and over	You are a highly experienced project manager who has a reputation for running Start by listing project objectives that are specific and measurable, list the succes If I say yes, show a timeline as a table. The timeline will include the different stag {project title): {details):	Project title, details, start date, end date	Dave Birss
Convert text to HTML markup	Takes text and adds html tags. And gives you the option to optimise the text based on a keyword.	GPT 3.5 and over	You are an expert HTML coder with a thorough understanding of formatting text {text):	Text	Dave Birss
Turn a document into a presentation	You input the text from a document and you get a suggested presentation including slide content and speaker's notes.	GPT 3.5 and over	You are an expert presenter who knows how to communicate clearly and keep a {audience): {action): {time): {text):	Audience, action, time, text	Dave Birss
Come up with relevant social posts	Searches for high authority articles and studies relevant to your topic and then suggests five social posts for each one.	Bing	Imagine you are a social media expert who knows exactly how to keep an audien {topic): {audience): {tone of voice):	Topic, audience, tone of voice	Dave Birss
BONUS: Come up with relevant LinkedIn posts	Searches for high authority articles and studies relevant to your topic and then suggests five possible LinkedIn posts for each one.	Bing	Imagine you are a LinkedIn expert who knows exactly how to keep an audience e {topic): {audience): {tone of voice):	Topic, audience, tone of voice	Dave Birss
Generate ideas	Describe what you would like ideas for. The better you describe your situation, the better the	GPT 3.5 and over	You are a highly experienced and awarded creative thinker with the ability to cor {subject):	Subject	Dave Birss

{Variables}

Allows you to create flexible and customisable outputs using the same prompt.

When you use a template prompt with AI, variables help structure to your request to allow AI understand what you want.

For example, if you're telling AI to create a custom story, you might use variables like:

{Character Name}: variable that stores the name

{Story Genre}: variable that holds whether it's a mystery, adventure, etc.

{Setting}: variable that holds where the story takes place



Prompt Example using Variables

You are an expert **{SUBJECT}** academic, proficient in creating engaging, well-developed and effective lesson plans for your students. Your task is to produce **{NUMBER}** lesson plans the module **{TOPIC}** and should **{BUILD ON EACH OTHER / STAND ALONE}**.

The lessons should focus on: **{SPECIFIC TOPICS}**. Each lesson should be engaging and appropriate for **{LEVEL}** students. Each lesson should be aligned to **{COURSE OUTLINE}** and should include learning objectives; a list of key vocabulary; a lesson outline that includes direct instruction, an engaging activity, and a closure with a synthesis/summary of student learning.

Prompt Example using Variables

{SUBJECT}: Media Production

{NUMBER}: 12

{TOPIC}: Storytelling

{AMOUNT}: 60 minutes

{BUILD ON EACH OTHER / STAND ALONE}: build on each other

{SPECIFIC TOPICS}: Foundations of Media Production & Storytelling, Storytelling Techniques and Media Formats, Practical Production Skills, and Ethical Considerations and Emerging Trends

{LEVEL}: second year university

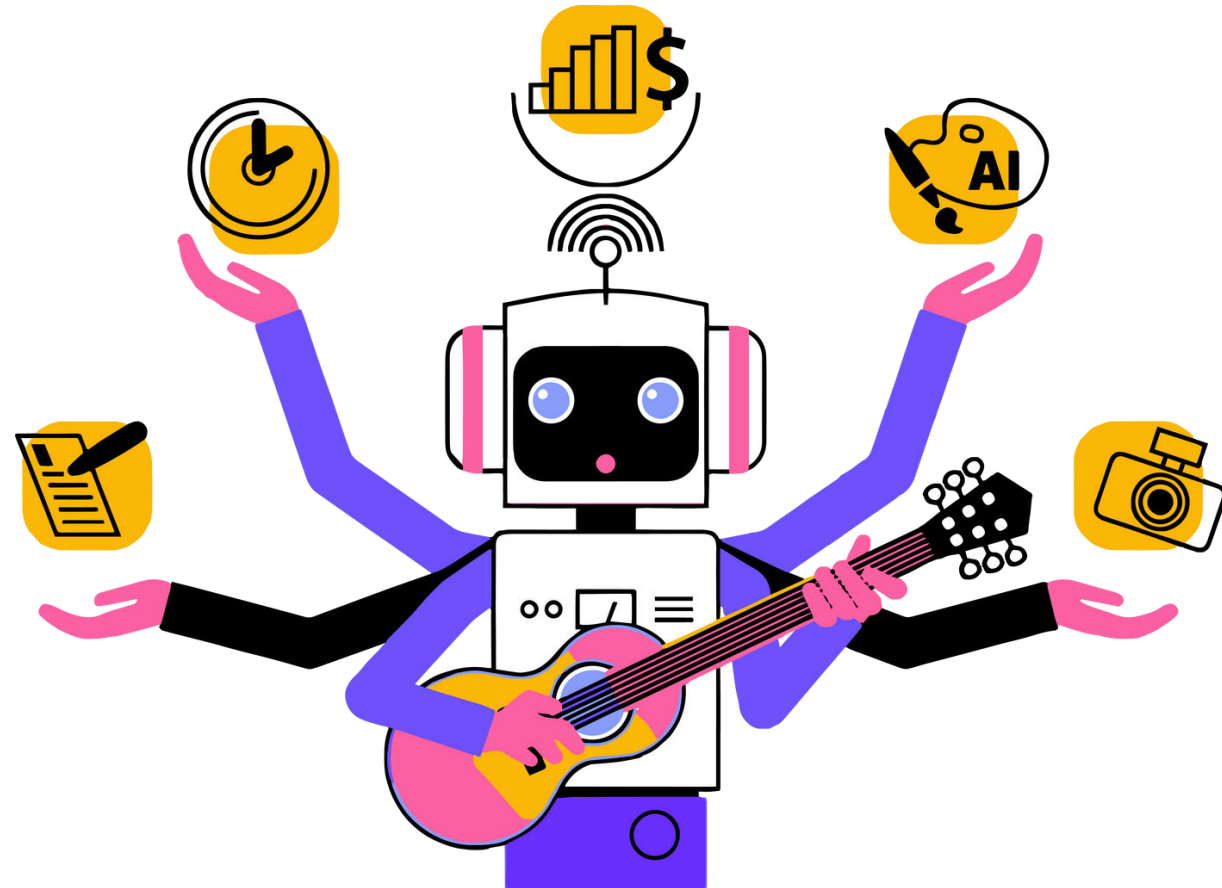
{COURSE OUTLINE}: This module explores the art and craft of storytelling within the context of media production. Students will delve into the fundamental principles of narrative construction, character development, and plot dynamics, while examining how these elements are adapted for various media formats such as film, television, and digital platforms. Through a combination of theoretical study and practical exercises, students will gain insights into the techniques used by professional storytellers to engage audiences and convey compelling stories. The module also emphasises the importance of visual storytelling, sound design, and editing in creating impactful media content. By the end of the course, students will be equipped with the skills to create their own narratives and understand the critical role of storytelling in media production.



Practical Demonstrations

AI Practical Demonstrations

- Step-by-step Guide
- Create a Lesson Plan
- Document Summary
- Presentation Creation
- Generate a Quiz
- Translation
- Gamification: Personalised Learning
- Canvas HTML Code



Prompt Example – Document Summary

Can you create me a summary overview of this PowerPoint presentation. Present the information into a table with headings and the summary information. Keep the information clear, concise and to the point. Put this summary table into a word document that I can download. Before we begin, I want to make sure you understand the task. Also, ask me two questions that you think is important about the creation of this task. Do not create the table until I have said I am ready for it to be created.

Prompt Example – Generate a Quiz

Generate a quiz from the PowerPoint presentation file. I want you to create 10 questions. 5 of those questions should be multiple choice and the other 5 should be open-ended questions. Provide the answer underneath the question for each presentation, questions. For the open-ended questions, provide me with prompt words that students are expected to include in the answer. Before I upload the presentation document, ask me questions that you think is needed in order to enhance the outcome. Once I am happy, I will upload the presentation, and you can then begin to create the quiz

Prompt Example – Translation Table

Can you create me a translation table for students whose first language is Chinese and are looking to enhance their English language. I have a list of English words, along with their definitions. I need you to translate it all into Chinese. Can you then place the English words and descriptions into a table with the Chinese translation to the right side of the table. The table should have 4 columns. First column is the English word. Second column is the English description. Third column is the Chinese translation of the English word. Forth column is the Chinese translation of the English description.

Title the table: Digital Learning Terminology Translation

Can you then create a basic HTML code of the table and its contents.

Here are the list of words and definitions to use in the table (see in PPT notes).

Prompt Example – Canvas Flash Cards

Create 10 interactive study cards to help university students learn the English language. Students using these study cards are from an Asian background and Chinese is their native language. Each study card should feature: An English definition will appear on the front with the word relating to that definition on the back. Students will have to type in the word in a text box to guess the answer. There should be a submit button to reveal if the student got it right. Use a flip animation when click submit to reveal the word on the card. Quiz-style validation, where students confirm whether they got the answer right or wrong after the word is revealed. Additional features: A scoring system to track correct and wrong answers. A progress bar to indicate how many cards remain. Add a fun, vibrant colour scheme to the cards. Each card should have a different bright background colour while keeping the text easy to read. Display a positive, encouraging quote at the end when students receive their final score. Add a rotating list of motivational quotes to reveal a new quote after each attempt. Use famous quotes and provide the name of the person who said the quote. Scores reset after each session (no local storage). The final output should be HTML, CSS, and JavaScript for easy web deployment. Shuffle the flash cards after each session so they are in random order. Above the flash cards, include an introductory message to example what the student must do. Make the message clear, concise and easy to follow. Here is a list of words and definitions to use. There is more than 10 so randomly select from the list for each session. Do not use a word and definition more than once per session. Please provide the Chinese translation below the definition and word please.

Prompt Example – Gamification (Escape Room)

Can you develop a digital escape room called Trapped in a Book, based on Alice in Wonderland.

Students are trapped inside a famous novel and must solve riddles from the Mad Hatter, decode a passage from the book, and answer comprehension questions about the themes of the story to escape the Queen of Hearts' castle. Add visual elements relating to the Alice in Wonderland story.

Students cannot move onto the next room until they have completed the puzzle in the first room.

Create 3 rooms in total. Students can ask for hints to help them solve the puzzle if they are stuck.

Students are allowed 5 hints altogether. The escape room should be easy to navigate, and the buttons should easily link to the next room.

I require the format to be HTML and Javascript for web deployment.

Feedback Form

Please take a couple of minutes to tell us your thoughts on the session, and AI support at Queen's:

forms.office.com/e/pqf5g8jh9Z

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