

Learning Design for Educators

Integrating Artificial Intelligence in Teaching Practices



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Joshua Hotchin

Department of Curriculum and Instruction
University of Victoria

EDCI 565: Research and Practice of Learning Design
Instructor: Dr. Michael Paskevicius

March 26th, 2024

Learning Design for Educators

Integrating Artificial Intelligence (AI) in Teaching Practices

Introductory Workshop on AI-based Tools for Educators

Modality: Face-to-Face

Participants: Educators (Teachers, EAs, Administrators, etc.)

Participants' AI Ability: From beginners to those experienced but haven't used AI in teaching.

Technology Requirements:

- Projector
- Internet
- Individual Computers

Workshop Timing: 90 minutes

Scope of Project:

- Introductory Workshop

This workshop will be the first session of a series on AI-based tools for educators.



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“Professional development (PD) remains the primary method for teachers to expand their practices, but one-day PD continue to fail to impact the practices of teachers” (Craig et al., 2022, p. 34).

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Why Did I Choose this Topic for a Learning Design?

Address Knowledge Gaps

Enhance AI Utilization

Boost Job Satisfaction



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“The majority of the teachers perceived themselves as having limited (45% of participants) or basic knowledge regarding AI (35% of participants).” (Chounta et al., 2022, p. 744)

“More than 40% estimate that they do not have the necessary technological qualifications for using new technologies in their teaching” (Hasse, 2017, p. 367)

This can be attributed to “teachers [feeling] left behind because they [have] received very few guidelines on how and why new technologies should be coupled with professional matters” (Hasse, 2017, p. 371).

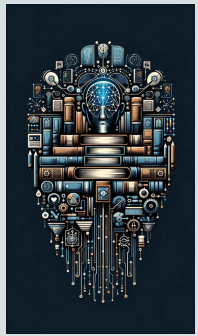
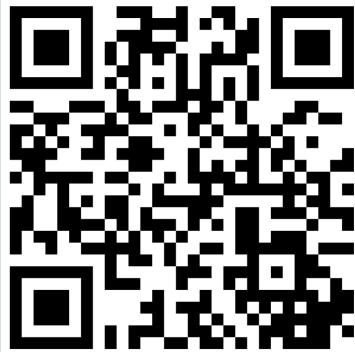


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Academic Literature and Artificial Intelligence

Increase Teacher Efficiency

Reduce Educator Burnout

Improve Teacher Practices

The effective utilization of AI-based tools requires education, support, and understanding, which teachers may not yet have (Celik, 2023; Celik et al., 2022; Kuleto et al., 2022; Ottenbreit-Leftwich et al., 2023).



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Integrating Artificial Intelligence (AI) in Teaching Practices

Theoretical and Conceptual Framework

UDL Guidelines

ADDIE Framework

Constructivist Principles

Learning Design Model

Instructional Design Model

Learning Theory

Student-centred, innovative, authentic, accessible, engaging and inclusive learning resources (Branch, 2009; Dalton et al., 2019; Trust & Pektas, 2018)



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Bloom's Taxonomy

Remember

Understand

Apply

Analyze

Evaluate

Create



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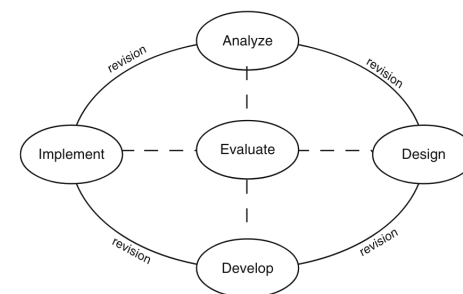


Fig. 1 The ADDIE concept

(Branch, 2009, p. 2)



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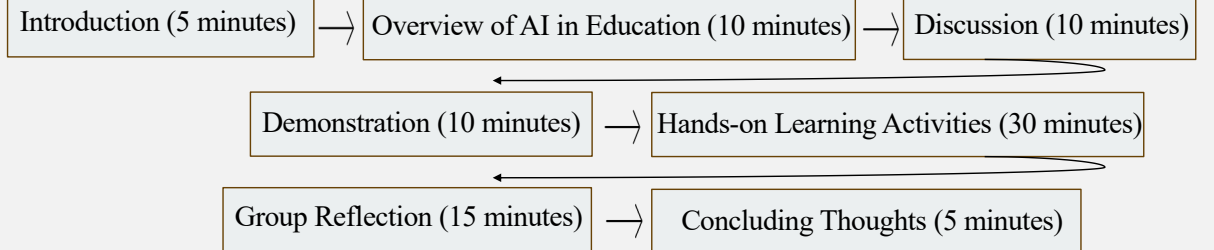
**By the end of the workshop,
participants will be able to...**

1. Define AI & identify potential in education
2. Communicate their ethical perspectives on AI
3. Identify AI's role in education and teaching
4. Use an AI-based tool as an educator
5. Describe how they will use AI-based tools

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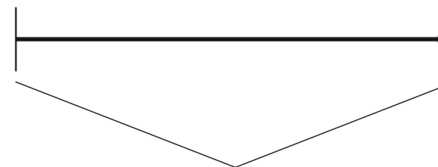
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Learning Outcomes & Outline for the Learning Design



Actual Performance

Desired Performance



- Performance Gap
- > Lack of Resources (not allowed)
 - > Lack of Motivation (don't want to)
 - > Lack of knowledge and skill (don't know how)

Fig. 1.1 Three main causes for a performance gap

(Branch, 2009, p. 17)

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Assessment and Evaluation

Taras (2005) stated, "Assessment refers to judgements of students' work, and evaluation refers to judgements regarding courses or course delivery" (p. 467).



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Formative Assessment	Summative Assessment	Evaluation
<ul style="list-style-type: none"> Instructor's observation of participants' interactions with the AI-based tools. Instructor's observations of participants' engagement in reflective and constructive conversations. Instructor providing one-on-one support to participants. 	<ul style="list-style-type: none"> Instructor's final observations of participants' understanding and abilities with AI-based tools. Evaluation of the depth and relevance of reflective group discussions. Information gathered from participants' self-reflection and feedback. 	<ul style="list-style-type: none"> Participants' immediate post-workshop comments and reflections. Participants' online form evaluation of content, activities, and instructor. Follow-up check in one month post workshop.

Why Assess and Evaluate a Workshop?

Improving Future Workshops

- Utilize Participant Feedback.
- Enhance Learning Design.
- Boost Participant Engagement and Learning Outcomes in Future Workshops.

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Conclusion

The thoughtful education and implementation of AI-based tools for teachers can positively impact teachers' jobs, increase student engagement, and ensure educators do not fall further behind in technological understanding and knowledge.

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Artificial Intelligence Introductory Learning Activities Guide

For the hands-on learning portion of the workshop



Artificial Intelligence for Teachers

Introduction:

Welcome to our AI workshop! Through this workshop, we will discover how different AI tools can support teachers' teaching, enhance student engagement, and reduce teacher time on non-teaching tasks.

Please check the document's left side for the outline of the different AI programs, activities, and sections (please refer to the right-side image for guidance).



If the outline is not visible, click the icon on the upper left side of the document to view it easily.

The purpose of this document is to guide you in selecting an appropriate AI application for what you need support with — ChatGPT, MagicschoolAI, or Eduaide. You will then (with your chosen application) experiment with the different activities provided.

Outline

Artificial Intelligence for Tea...

Introduction ×

Explore... Test out one, two, ...

Additional Resources

ChatGPT Activities

Link for ChatGPT

Lesson Plan Generation: (Ch...

Unit Plan Generation: (Chat...

Miscellaneous Thoughts, Ac...

Report Card Comments Gen...

Specific Tasks to Complete

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