

# Artificial Intelligence Tools in Teaching and Learning

## Overview

Artificial intelligence (AI) has become part of the teaching and learning routine. There are many benefits that AI-based tools offer to improve education quality, such as automation of administrative work, including grading and providing feedback, and personalized/adaptive learning. However, the integration of AI also brings with it a set of challenges that must be addressed.

In this article, we will discuss the AI-based tools that are available and supported at the University of New Hampshire and provide pedagogical recommendations for adopting AI-based tools, such as ChatGPT in your class.

## AI-based Tools supported at UNH

### Canvas Mastery Paths

Mastery Paths is an AI-based feature within myCourses (Canvas) that uses machine learning algorithms, data analysis and predictive modeling to identify the most effective learning pathways for individual students.

When Mastery Paths is set up correctly, it allows students to progress through the course at their own pace and receive tailored content that meets their unique needs. Mastery Paths provides instructors with real-time insights into student progress and performance, which can inform instructional decisions and interventions. Mastery Paths can also be used as an engagement tool to gamify the learning content in a scenario-based environment.

*Getting Started with Canvas Mastery Paths*

[How do I use Mastery Paths in course modules?](#)

### GradeScope

GradeScope is an AI-assisted grading tool capable of handling bubble sheets, hand-written assignments, and Canvas submissions. With GradeScope, you can create on-the-fly rubrics and feedback based on the students' work.

GradeScope can be extremely helpful in the following situations:

- Teaching a large class: GradeScope grades assignments more quickly and consistently while allowing detailed feedback. GradeScope can save time by automating certain aspects of the grading process.
- Teaching STEM courses that require students to write formulas, equations, or draw diagrams on paper. GradeScope allows students to submit handwritten work, which can then be graded quickly and efficiently.

### [Getting Started with GradeScope](#)

#### Kaltura Captioning and Localization

With AI-based speech recognition technology, Kaltura offers auto-captioning for better accessibility and automated video localization into multiple languages via machine-translated subtitles.

#### *Getting Started with Kaltura Captioning*

- [Kaltura: Requesting Machine Captions](#)
- [Kaltura - Editing Captions in a Video](#)

#### Other AI-based Tools

There are other AI-based tools that are not supported at UNH, but students have access to them, such as Grammarly and ChatGPT. Grammarly can help students identify and correct grammar, spelling, and punctuation errors in their writing, but critics argue that using this tool may prevent students from developing their own writing skills.

To better integrate AI-based tools in your class, it's important to go beyond simply banning or allowing them. Instead, try the following:

1. Familiarize yourself with these tools and consider how they can be used to support your pedagogical goals. For instance, ChatGPT can be leveraged as an idea generator to spark conversation and deepen students' critical thinking skills.
2. Have an open discussion with your students about the ethical use of AI in your class so you can help your students understand the role that technology plays in their learning and encourage them to use it responsibly.
3. Consider pedagogical strategies when adopting AI-based tools in your class. You should ask yourself how the tool will support your teaching goals and how it will help students achieve their learning objectives. For example, ask students to review and critique the suggestions from Grammarly instead of accepting them blindly. By doing so, students can develop their critical thinking skills and become more discerning in their use of AI tools.
4. Design instructional activities that foster collaboration and critical thinking. AI-based tools like ChatGPT or Bing Chat can compile existing content from the internet but cannot generate original ideas or content.

Please reach out to the [Learning Development & Innovation \(LDI\)](#) team if you have any questions about the use of AI-based tools in your class.