## **CTL Newsletter**

Monthly Newsletter of the Centre for Teaching and Learning at IIM Udaipur



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# Leveraging AI in the classroom

Al and its numerous avatars are still the hot topic and we are revisiting the theme for this edition of the CTL Newspaper. There are as many juries as there are teachers and they are still out on this decision. But some articles crystallizing initial thoughts and approaches have emerged recently and that is what we are exploring here as we review some literature that you might find interesting. The first article that we have summarized gives very good pointers on how to use the generative AI tool.

There are many other non-generative AI-enabled tools that are projected as being useful for instructors but not everyone has the time to try them out. We looked at about 20 such tools and cherry picked the best that we think may be useful from an instructor's perspective. One disclaimer is that none of these recommended tools belong the family of generative AI.

Happy Reading, and please do share your comments and suggestions!

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STRATEGIES AND TACTICS FOR MANAGING CHALLENGING MOMENTS IN THE CLASSROOM RELATED TO SENSITIVE TOPICS

## Using AI to Implement Effective Teaching Strategies in Classrooms: Five Strategies, Including Prompts

Dr. Ethan Mollick, Dr. Lilach Mollick

Dr Ethan Mollich has been posting regularly since ChatGPT broke cover. His insights on how students might use ChatGPT, how instructors can use it and what strategies seem to work have been well received. In a recent paper, which you may have come across already, he along with Dr. Lilach Mollick provides guidance for using AI to quickly and easily implement evidence-based teaching strategies that instructors can integrate into their teaching. The authors themselves state that these 5 teaching strategies are decidedly hard to implement mainly due to time and effort constraints. Nevertheless, for those of us who want to try it out, here is a brief summary.

#### **Providing multiple examples**

The underlying premise here is that availability of multiple and varied examples facilitates understanding of complex concepts. Creating multiple examples is a time consuming process which can be driven through AI. This requires precise prompts to AI and a step by step guide is outlined in the paper.

#### Using AI to provide multiple explanations

Student misconceptions are an obstacle to students creating coherent mental maps of the topics they study. Multiple explanations for the same concept help better conceptal understanding - each student grasps a different explanation better. But multiple explanations again take time and effort. AI can be harnessed for uncovering and addressing student misconceptions and the authors suggest a set of guidelines to be used fo this purpose.

#### **Frequent low-stakes testing**

Low stakes testing is a known academic best practice which is not extensively used because of the time and effort involved. Low stakes testing by itself is a significant form of active learning with immediate feedback. AI can help reduce this effort by generatine the quizzes and questions that need to be deployed for such type of testing. The paper includes a set of prompts.

#### Assessing student learning

Classroom assessment techniques like 1 minute paper or muddiest point exercise encourage deep learning by provoking reflection and clarification to self. The authors suggest receiving such short summaries/ responses by students into an online document and using AI to summarise the responses to see what the class is struggling with the most.

#### **Distributed practice**

Having students practice and refine their conceptual understanding in events distributed over time and space allows development of robust and flexible knowledge. Most courses are designed for mass practice in a linear fashion. Authors recommend using AI to generate topic overviews and questions and change the difficulty level of questions over time.

This summary is just a brief window into an article that is rich with examples and step by step instructions. If any of these ideas make sense, please refer to the article for details about how to go about implementing the strategy.

- Joel Xavier

## Recommendations - Al tools for instructors

#### Knewton

<u>Knewton</u> is an adaptive learning platform from Wiley that uses machine learning algorithms to analyze student data and provide personalized learning paths.

Of the current courses offered by Knewton, the ones relevant to Management teachers are the courses on Economics and statistics. The Business statistics course covers fundamental concepts in Business statistics well and the three other statistics courses could be a useful learning support or option for parallel learning for advanced learners. There are 4 courses in the economics course list -Principles of economics, Principles of Microeconomics, Principles of Macroeconomics and Survey of Economics. The other subjects included like Biology, chemistry, Physics etc. are more suitable for a STEM student and may not be relevant from a management perspective. I do think the Psychology course would be a good option if we want to introduce students to the subject - Most incoming students at IIMU have never been exposed to psychology and even an introductory course has the potential to work wonders for developing reflection skills and self-awareness. The courses and their respective tables of contents can be found here.

Being an adaptive learning system, anyone using Knewton can expect to gain from the platform's focus on mastery by delivering personalized learning and testing and learning content based each student's strengths and weaknesses. Knewton can provide real-time feedback to both teachers and students on student progress, which can help teachers to adjust their teaching strategies. Knewton's ML algorithms analyze large amounts of student data to identify patterns and trends, which can help inform instructional decisions and curriculum design.

By automating some aspects of the teaching and learning process, Knewton can help teachers focus their energy on more strategic tasks, such as developing curriculum or engaging with students.

#### Knewton Demonstration video

#### Gradescope

is an online grading platform that can be used for higher education grading. Key benefit is that it can save instructors a lot of time and effort. Here are some of its key features and benefits:

One of the main advantages of <u>Gradescope</u> is its efficiency. It allows instructors to grade assignments quickly and easily, by allowing them to grade multiple submissions at once, and by providing tools such as rubrics and annotations. Another advantage of Gradescope is that it helps to ensure consistency in grading. Rubrics can be created and applied to assignments, which helps to standardize grading across multiple instructors or graders. Rubrics can be changed midway and can be applied to previously assessed papers.

Gradescope supports variable-length assignments (problem sets & projects) as well as fixedtemplate assignments (worksheets, quizzes, bubble sheets, and exams). In addition it has the usual features like online submission, immediate post-grading feedback, and data analysis at multiple levels. This tool could be very useful when grading for multiple sections or large numbers of students.

#### Edpuzzle

<u>Edpuzzle</u> is an interactive online platform that allows instructors to create engaging video lessons that can be used for teaching and learning, the tool also provides the flexibility to create lessons by recreating videos of other instructors.

The key breakthrough with edpuzzle is that it turns a video into a dynamic lesson. You can add questions for comprehension and get students to engage in critical thinking. Screen recording tools allow you to create your own video when one is not available.

Another thing that Edpuzzle does well is smoothen the process of editing and mixing different videos seamlessly into a single tailored interactive lesson. Many times, the teacher may have the video available from a public platform like Youtube/TED, but may want to play only a small 30 second clip from a longer 4 minute video for example. In such a scenario, forced ad countdowns, distracting ad banners, in-video ads can be a significant distraction with the potential to significantly mar the classroom experience. And if you have more than one video, then the overall effort to set it up (multiple tabs with videos preset to play from a particular point, etc) can be a significant pain. Edpuzzle simplifies this process and enables educators to effectively extract and present pertinent information from a specific video while disregarding extraneous material to maximize instructional value for students. Additionally, its features permit instructors to incorporate relevant questions to reinforce lesson comprehension.

If you like to use videos to enrich your classroom experience, Edpuzzle can help you remove the clutter and distraction causing elements and create a seamless experience.

#### Padlet

A meeting that could have been an email and a classroom that could have been a casual discussion both hit equally hard and if you can relate exactly where it hurts then Padlet can come to your rescue. <u>Padlet</u> provides an interactive wall for students to post up their views and can be monitored by the instructor at the same time with easy to use tools, you can get a better idea of it here. Padlet can be of use for formative assessment and to provide exit tickets, using which students can get a generalized report of where they stand in the class. The interactive Digital Bulletin Board with interactive interface will be helpful in promoting collaboration, creativity, and critical thinking.

#### Kahoot

<u>Kahoot</u> is an interactive, online learning platform that is widely used in classrooms. It is designed to make learning more engaging and fun for students by turning traditional classroom activities into game-like experiences. Key features include easyto-use interface, which allows teachers to create and customize quizzes, surveys, and other interactive learning activities. These activities can be accessed by students on any device with an internet connection, making Kahoot a flexible and versatile tool for both in-person and remote learning.

Another strength of Kahoot is its ability to foster student engagement and participation. The gamelike format, with timed questions and instant feedback, encourages focus and promotes active learning through competition and collaboration.

Joel Xavier and Vaidehi Sharma

#### ChatGPT has Aced the Test of Understanding in College Economics: Now What? (March 28, 2023)

Wayne Geerling, G. Dirk Mateer, Jadrian Wooten and Nikhil Damodaran

#### The American Economist (2023)

In the relatively short span of time since the buzz about ChatGPT started making the rounds, there arent many research articles published on faculty's take on approaches to remedy the use of CHatGPT by students for academic work. This recently published paper talks about an experiment where ChatGPT ranked in the 91st percentile for Microeconomics and the 99th percentile for Macroeconomics when compared to students who take the TUCE exam at the end of their principles course. ChatGPT outperformed the mean scores across institutions by a significant margin.

The authors agree that ChatGPT does pose a significant challenge to traditional assessment. Their recommendations include redesigning the curriculum with 3 major changes: reintroduction of proctored, in-person assessments; augmenting learning with chatbots; increase experiential learning projects which are difficult for AI tools to replicate.

## Strategies and Tactics for Managing Challenging Moments in the Classroom Related to Sensitive Topics

Summary of a resource created by the Christensen Centre for Teaching and Learning, HBS (<u>click here for the full article</u>)

Discussions on sensitive topics are an important part of a post graduate program. IIMU's learning goals include critical thinking and building ethical responsibility in its MBA cohort. Very often, this requires the discussion of sensitive topics in the classroom where students may be required to air opinions based on their values and beliefs which may be in conflict with the views of others or the faculty. Contextual examples include the topic of 'reservation' in various spheres of life or discussions about ethical behavior. HBS provides a helpful note to help teachers manage challenging moments in the classroom related to sensitive topics (link to note). A brief summary is presented below.

It is important to develop students' leadership skills by discussing sensitive topics that challenge their values and perspectives. Instructors can prepare for these conversations by establishing discussion guidelines and helping students improve their argumentation, listening, and judgment skills. Instructors can encourage students to raise sensitive issues and approach them with curiosity, candor, and respect. Effective management of discussions on sensitive topics can sometimes involve intentional actions, however to monitor the actions of the students a few measures can be taken by the instructor. Beginning of the Class: In the event that a class session pertains to a topic that is potentially sensitive or controversial, pertains to a specific industry, organization or protagonist, or involves problematic language or characterizations, the instructor may find it advantageous to:

 Introduce the class to the issue beforehand that is to be discussed in the class and should suggest that the discussion can continue after the class if anyone is uncomfortable in voicing their opinion during the class. The primary objective of the discussion should be to put up ideas and arguments and it should not be shadowed by the person presenting them.

2. Put up the examples from previous discussions and encourage students to maintain the same zeal while being sensitive towards the issue.

**During the Class**: During the discussion if a challenging moment arises, the instructor has the option to respond minimally or engage with the student who raised the point. The instructor should pay attention to verbal and nonverbal reactions from the class and consider the nature of the comment before responding. Potential responses can include:

- Asking the students to mold their responses in a better manner for the students who do not speak the native language and might have misunderstood the comments made earlier. The intentionally outrageous or offensive comment can also be asked to be explained further with an inquiry. Example: "How did you come to that conclusion?"
- Ask the fellow students to express their views on a controversial statement made by the students, the former might view the statement made earlier in a different light after the discussion.



3. Encourage the students to share their personal experiences by thanking them.

At the end of the discussion: Instructors should have a plan to end challenging discussions or debates in the classroom. This can include summarizing the key points, thanking students for sharing their views, encouraging further discussions outside of class, or sharing resources for after-class discussions or speakers. Instructors can also follow up with individual students through email or in person after a difficult moment in the discussion.

Some friendly closing statements can be: (i) "This is an important topic. Although we have not been able to discuss all of the issues in depth, we should recognize [key arguments]. I'd encourage you to continue discussing and reflecting upon these issues outside of class." (ii) "This is an important topic. We won't be able to talk about it more today, but I will carve out time at the beginning of tomorrow's class so we can discuss it further."

- Vaidehi Sharma

## Updates from CTL

IIM Udaipur welcomed the new cohorts of the 1 yr MBA programs - MBA-DEM and MBA - GSCM. After arriving on campus on 5th April, the cohorts had an eventful week of Orientation. There was a special element to the activities of the first week -The involvement of their senior cohort who stayed back after their convocation and the incorporation of two new traditions into the 1 Yr MBA program.

Team dynamics is one of IIMU's key learning goals. Normally, the groups are created and informed to the participants in a very dry and perfunctory manner by the Program office. The senior cohort decided to turn this into a memorable activity by organizing a game around it. Group membership was not announced, rather in a separate session coordinated by the seniors, the incoming batch students were given clues to discover their group members, and once they were found, they had an icebreaker and introduction of groups to the class by the group members.



The second activity was held over the weekend where each member of the incoming cohort gave a brief presentation about their achievements, aspirations, special interests and other, sometimes very personal aspects of their personality to their batch. The batch then poured in suggestions about giving a new nickname to the person and these were captured in a word cloud on the screen. The final 'new identity' nicknames were decided by the study group and announced in the welcome party over the weekend. We will know next year if both these traditions stand the test of time!

-Joel Xavier

#### Feedback

Please click on the link below to share your feedback and comments and to let us know what kind of content you would like to read about in future newsletters.

#### https://forms.gle/oT73PwW9tafiTmXb7

For queries or for making a guest contribution, please contact the Centre for Teaching and Learning at <u>ctl@iimu.ac.in</u>

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