How Mentimeter increases and enhances engagement and learning in an educational environment

Overview of few educational research papers on how Mentimeter and student response systems improve the classroom experience and outcome
Engaging students on their devices with Mentimeter

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The article shares three key multi-disciplinary strategies that can be supported by Mentimeter to engage students: ‘gauging opinion’, ‘engaging discussion’ and ‘voicing concerns’. The authors offer their ideas for future plans for the tool, with the hope of inspiring other higher education colleagues to trial Mentimeter or integrate it further – into lectures and seminars – in order to promote student engagement and enhance the teaching and learning experience for all.

Key quotations

Engaging discussion
The authors found that application of this technique exploits well the otherwise wasted minutes at the start of a session when students are settling – it provides a written stimulus for immediate discussion.

Voicing concerns
Like Little (op.cit.), the authors found that students seemed more confident when asking questions using Mentimeter than doing so verbally in front of peers, which shows that Mentimeter could be particularly helpful when boosting confidence and comprehension regarding assessment tasks and when offering opportunities to voice concerns.

Possible areas for further exploration include Mentimeter and its ability to enhance team work, collaboration, engagement and the promotion of peer learning.
Lectures with large cohorts tend to be didactic in nature (Huggins & Stamatel, 2015), resulting in numerous authors (Howard, 2002) deeming them to be ineffective at engaging students in academic knowledge (Laurillard, 2002). This is particularly problematic for the current generation Z students who enjoy interactive learning (Hussin, 2018).

**Key quotations**

On an undergraduate employability skills module, I use the “Who Will Win” question type to encourage students to vote on the most appropriate answer in a job interview situation. The new “Ranking” enables students to realise the most common skills required by graduate employers, and as Mentimeter provides real time cumulative response rates, I encourage more students to provide an answer accordingly (Cline, Zullo, Huckaby, Storm, & Stewart, 2018). Regardless of the question type, I always give immediate feedback on answers, otherwise as Schmid (2006) warns, students’ enthusiasm for learning tapers.

In sum Mentimeter and the multitude of question types and quiz elements for large lectures can be utilised to significantly enhance student enjoyment and engagement. For academics and students, the simple format and facilitation of deep learning opportunities, means that the benefits far outweigh some of the minor areas for development and I am excited to know what next lies in store in Mentimeter’s offering.
Technological Review: Mentimeter Smartphone Student Response System

https://journals.gre.ac.uk/index.php/compass/article/view/328/pdf

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Web Based systems reduce the logistical burden on the instructor by letting students use their own mobile devices to participate in the activity via the device’s internet browser and a six-digit code sign-in to the quiz. This removes the process of handing out and collecting voting devices, thereby saving valuable time for teaching and learning.

Key quotations

For students, softwares such as this offer an opportunity to participate and engage without fear of making mistakes in front of peers, as well as giving an insight into the thoughts, feelings and knowledge of the rest of the group.

A small sample of evaluative students comments, from an induction session delivered to international students in January 2016, demonstrates the potential of interactive voting software such as Mentimeter:

“The word quizzes helped me see how everyone else felt and it kept me focussed”
“The interactive nature of it kept you engaged the entire time”
“I liked using my phone for the questions”

For staff, Mentimeter offers highly-customisable activities which can facilitate an instant analysis of responses, provide downloadable data sets and create an interactive teaching and learning experience for groups of varying sizes.
Interactive presentation digital tool Mentimeter perceived as accessible and beneficial for exam preparation by medical students


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By analyzing satisfaction surveys, this study looked at the utilization of Mentimeter in a medical physiology course. Medical students overwhelmingly agreed that Mentimeter is a useful tool for exam preparation in clarifying difficult concepts and appreciated an instructor-led readiness assessment several days before their first exam. We believe that the use of this application can help explain basic concepts, make office hours more constructive, and bring a paradigm shift in readiness assessment for medical students in both preclinical and clinical curriculum.

Key quotations

Few aspects give an educator more anxiety than the fear that the audience is not understanding the topic as intended. By polling anonymously and in real time, an ARS gives educators a way to assess students' knowledge more accurately.

The use of Mentimeter will promote mastery learning a teaching and learning strategy based on the premise that students will achieve a high level of understanding in each domain if they are given enough time.

The following percentages of students reported either a 4 or 5 when asked about the following metrics of Mentimeter: 76.7% (n = 43) found it “helped prepare [students] for their exam”, 80.9% (n = 42) found it “beneficial”, and 87.5% (n = 40) found it “accessible via [their] cell phones”.

Combining the survey data with encouraging student narratives, these data suggest that using Mentimeter could be a beneficial tool for educators to use, especially when preparing for exams or assessing students’ understanding of historically challenging concepts (as medical physiology tends to be). The students commented on the value of these tools appreciating the Mentimeter quizzes that provided instant real time feedback on their knowledge retention and potential areas to review before exams.

“The readiness assessments with Mentimeter have been a great way for me to evaluate how much of the material I've learned and potential areas to focus on before the exam.”
No Longer a Silent Partner: How Mentimeter Can Enhance Teaching and Learning Within Political Science


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New cohorts of students expect universities to meaningfully incorporate the use of technology-enhanced learning within their provision and they respond particularly well to an active approach to learning.

A growing body of pedagogical literature, across a range of discipline areas, suggests that active and student-centered approaches are more effective than passive learning methods (Michael 2006; Knight and Wood 2005). Understanding and learning gain increase when the process of learning includes interaction which requires active student engagement.

Key quotations

Word cloud—the whole cohort can collaboratively create a word cloud to brainstorm a topic.

Open ended—students submit comments which are instantly displayed, anonymously, in speech bubbles, one by one or in a flowing grid. This is a particularly useful tool to gather questions from a lecture class or in a large academic conference to encourage mass engagement.

Question and Answer—students can ask questions using a separate dedicated slide or throughout a presentation, on each slide. Each question can be marked as answered as they are addressed.

2-by-2 matrix—students are able to enter items within a simple matrix where each axis label is determined by the instructor. This might be used to explore causal relationships or in the form of an action priority matrix to gauge which topic to address first, for example.

Quiz—individual students or groups can answer timed questions, score points and win a place on the leaderboard to gauge knowledge and understanding.
Using audience response systems to enhance student engagement and learning in information literacy teaching

https://ojs.lboro.ac.uk/JIL/article/view/PRA-V11-I2-2/2573

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A controlled study was carried out on two cohorts of medical students at Queen Mary University of London comparing the use of clickers, online response tools, or a mixture of the two, to teaching without ARSs. Class observation and student evaluation were used to measure student engagement, and quizzes and student confidence levels to measure student learning. Results of the study showed that ARSs, when used as part of an active learning pedagogy, are an effective tool in terms of increasing student engagement, and have a generally positive impact on student learning.

Key quotations

Didactic teaching and passive learning do not provide opportunities to develop IL skills which require practical application.

Active learning approaches are highlighted as being important and effective within higher education, as they encourage deep learning and enable students to take responsibility for their own learning.

Active learning in IL teaching has been shown to engage students and increase motivation by enhancing interactivity, getting them involved in the classroom, combating the IAKT syndrome and stopping them from getting bored. Utilising a range of interactive methods helps to facilitate learning and improve understanding by ensuring that teaching is fully inclusive; accommodating a variety of learning styles and enabling involvement of those with disabilities, and others who could potentially feel excluded.

Observations in class suggested that the students were more engaged in the groups using ARSs, which was supported by increased levels of satisfaction.
Communication Theories Applied in Mentimeter to Improve Educational Communication and Teaching Effectiveness

https://www.researchgate.net/publication/340300196_Communication_Theories_Applied_in_Mentimeter_to_Improve_Educational_Communication_and_Teaching_Effectiveness

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Two observations were carried out in two different classes. Since the Mentimeter is usually used at the beginning of the class as a recap, the observations lasted for about ten minutes from the beginning of the class. The observations were done at the same university in China with the same number of students, which was 30, in each class. The two classes both were teaching knowledge about English Education. The same teacher taught two different classes separately by using different recapping method. In one class, the teacher applied a traditional quiz as a recap, while the Mentimeter was used in the other class.

Key quotations

By using Mentimeter, the core knowledge in the last class could be asked in different kinds of questions again and again. Students used the knowledge to solve various questions which helped them review the knowledge repeatedly. The impression of the knowledge was strengthened. Therefore, after the recapping part, most of them could grasp the knowledge firmly. The purpose of enhancing the core knowledge of the recapping part could be reached.

Last, for the benefits those educational digital tools can bring to educational communication and teaching effectiveness, they are mostly shown during the interaction process. Because of the automatic answer-collecting function, all the answers are collected in a short period. Teachers do not need to waste time to collect answer sheets or pick up students during the class. They can talk about the answers shown on the screen immediately and give feedback to the whole class. During the process of discussion, teachers grasp the chance to scaffold students. They can use questions and explanations to guide students step by step. With this kind of scaffolding and discussing, students can solve their problems efficiently and independently in the end.
Interactive presentations with Mentimeter - Activation, Activity, Motivation, Focusing


Herr POE
ipad-in-der.schule

The clearest lesson development happens with tools whose potential is often only recognized at second glance. In my opinion, Mentimeter is such a program that, with its simple and intuitive interface, initially looks quite simple, but unfolds its full effect in the classroom: students turn from passive listeners into active co-designers.

Key quotations

With Mentimeter, teachers have a highly functional solution at their fingertips, enabling them to incorporate various trainings more than ever before; aggregate assessments, prior knowledge and opinions; and achieve impressive results in a short time and in a seamlessly collaborative manner.

Mentimeter thus enables a fundamental change in the way lessons are delivered in a rather fast-paced and continuously changing world.

The lessons become more flexible, more adaptive in terms of student interest, by also increasing the engagement and motivation level of the students in a more target and collaborative approach.

The information on this page has been translated from German - the original language of the article.