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Using Mentimeter to promote student engagement and inclusion

Davina Hill¹, Lecturer in Zoology

Kelly Fielden², Lecturer in Occupational Therapy

¹Department of Science, Natural Resources and Outdoor Studies

²Department of Health, Psychology and Social Studies

Pedagogy in Practice Seminar - 18th December 2017

Overview

- ▶ Research on how online interactive quizzes improve student engagement and inclusion
- ▶ Quiz!
- ▶ Research on how anonymous questions improve inclusion
- ▶ How to set up quizzes
- ▶ Your questions

Promoting engagement

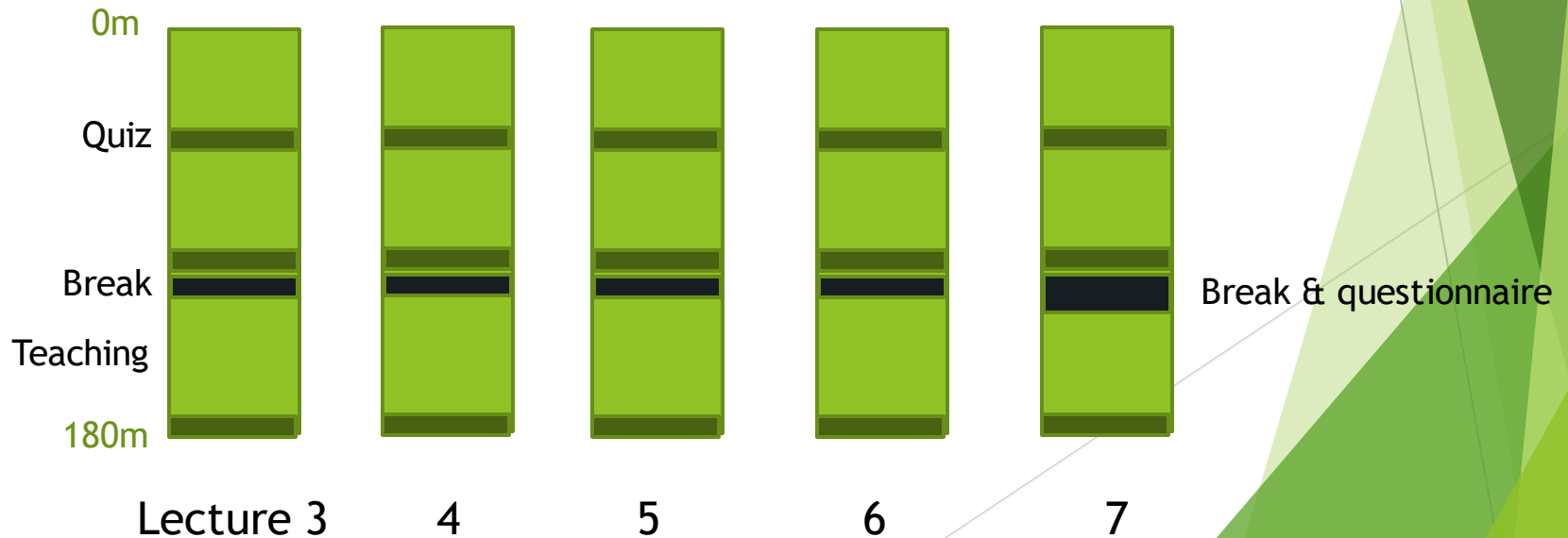
- ▶ Interactive activities can make learning more fun, shifting the focus from teacher to student
- ▶ Traditional teacher-centred lectures remain prevalent but may not meet the needs of modern students
- ▶ Technology-enhanced learning (TEL) aims to provide an effective learning environment that
 - ▶ engages students
 - ▶ reaches multiple learners simultaneously
 - ▶ offers anonymity
- ▶ Examples include ‘clickers’ and students own portable devices with browser-based software

Aims

- ▶ To investigate the perceptions of University students to interactive online quizzes
 - ▶ Do they improve engagement?

Methods - interactive quizzes

- ▶ I tested whether students in a lecture setting perceived short interactive quizzes to enhance engagement
 - ▶ Ecology module
 - ▶ 22 Level 4 students
- ▶ 3 quizzes about the lecture content were evenly spaced within each of five 2h lectures





Mentimeter

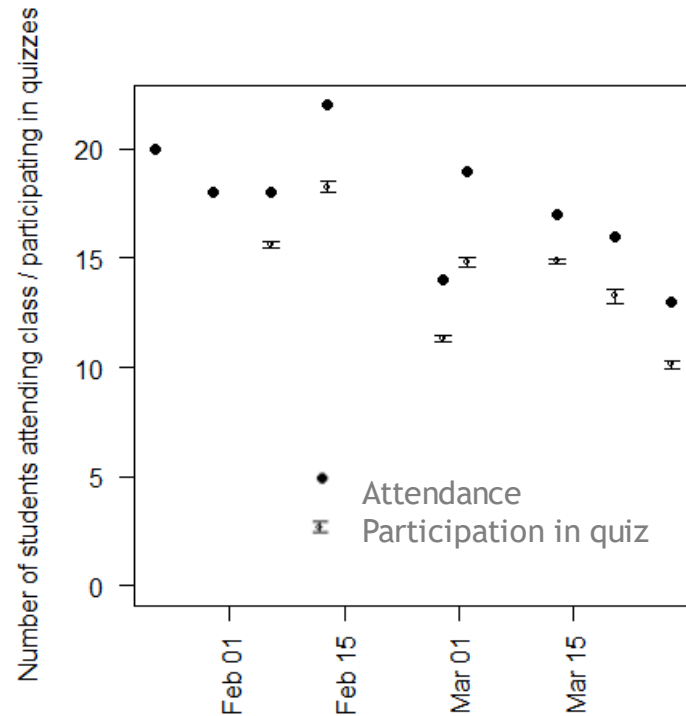
- ▶ Each quiz consists of 5 multiple choice questions
- ▶ Links to quizzes inserted into Powerpoint slides
- ▶ Participants respond by registering a unique quiz code on their device
- ▶ Each participant is allocated a unique anonymous avatar and name that is retained for the quiz
- ▶ Participants select a response from the choice offered on their device
- ▶ Scores are calculated on the basis of selecting the **correct answer** and **speed** of selecting correctly
- ▶ The top scores are presented with their avatar on the classroom projector between questions

Methods

- ▶ Following the intervention, students provided feedback voluntarily and anonymously to a series of closed and open questions
 - ▶ via a paper-based questionnaire
- ▶ Responses to open questions were analysed using Qualitative Thematic Analysis

Quiz results: attendance, engagement and anonymity

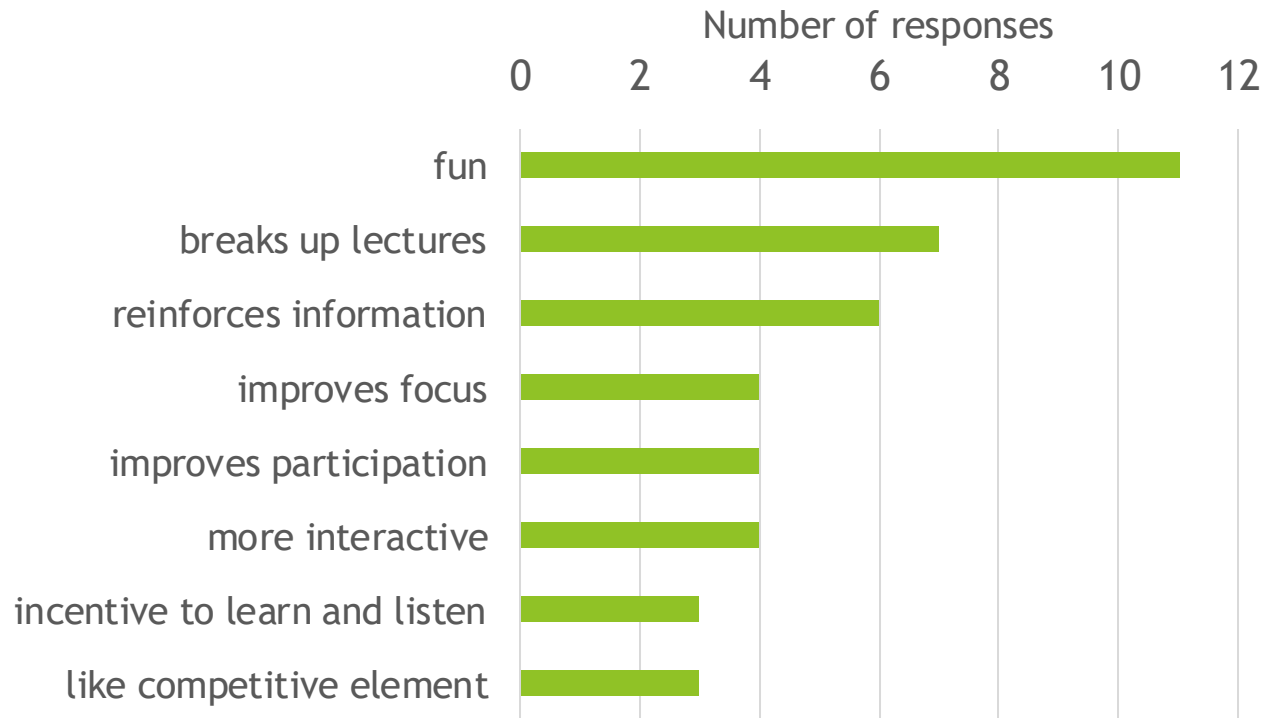
- ▶ Attendance was 17.4 ± 0.94 (mean \pm SE) students
 - ▶ $79.3 \pm 4.29\%$
- ▶ Attendance declined over time ($r_p = -0.668$, $t_7 = 2.37$, $P = 0.049$), but the proportion of students participating in quizzes did not ($r_p = -0.380$, $t_5 = 0.92$, $P = 0.400$)
- ▶ All students opted to remain anonymous



Quiz results: questionnaire

- ▶ 13 of 17 students responded to the questionnaire (76.5%)
- ▶ One student indicated that they had missed some quizzes because of a poor Internet connection or because they were low on data
- ▶ No student had used Mentimeter before

Student perceptions of Mentimeter quizzes



Student perceptions of Mentimeter quizzes

- ▶ All students said they would recommend Mentimeter to other lecturers
- ▶ "I have used them personally with my flat doing quiz night and they enjoyed it"

Discussion

- ▶ Students expressed favourable views towards Mentimeter and recommended it be used by other lecturers
- ▶ Students would like to see Mentimeter used again
- ▶ Mentimeter provides added-value to the lecturer
 - ▶ Immediate assessment of students' progress
- ▶ Increases participation for a diverse student population
 - ▶ Does not preclude routine questions and answers
- ▶ Limitations
 - ▶ Technological: internet connection, having a Smartphone, data or WIFI availability
 - ▶ Wrong answers in haste
 - ▶ Potential immaturity with questions

Let's try an interactive
Mentimeter quiz!

Go to **www.menti.com** and use the code **37 26 70**

[Link to quiz](#)

Aims

- ▶ To investigate the perceptions of University students to Mentimeter as an anonymous tool to encourage students to ask questions in class

Methods - Anonymous Questions

- ▶ An investigation looking at whether students valued the use of Mentimeter to ask anonymous questions in class.
- ▶ The intervention was implemented within one assessment question-and-answer tutorial.
- ▶ Students used the tutorial to ask questions about an upcoming assessment
- ▶ Cohort of 14, third year undergraduate Occupational Therapy students
- ▶ Students were given the option of using Mentimeter or if they preferred, post it notes.



ANONYMOUS QUESTIONS:

- ▶ Provides the option for students to ask anonymous, open questions
- ▶ Provide students with web address and code.
- ▶ Students are then directed to a question or topic for comment.
- ▶ For this study, students were asked “What questions would you like to ask about the assignment?”
- ▶ The anonymous questions come up “live” on the screen. The tutor can have the screen for students to view, or have it on a laptop which only the tutor can see.
- ▶ Students were able to post more than one question

Methods

- ▶ Following the intervention, students provided feedback voluntarily and anonymously to a series of closed and open questions
 - ▶ via a Bristol Online Survey (study 1)
- ▶ Responses to open questions were analysed using Qualitative Thematic Analysis

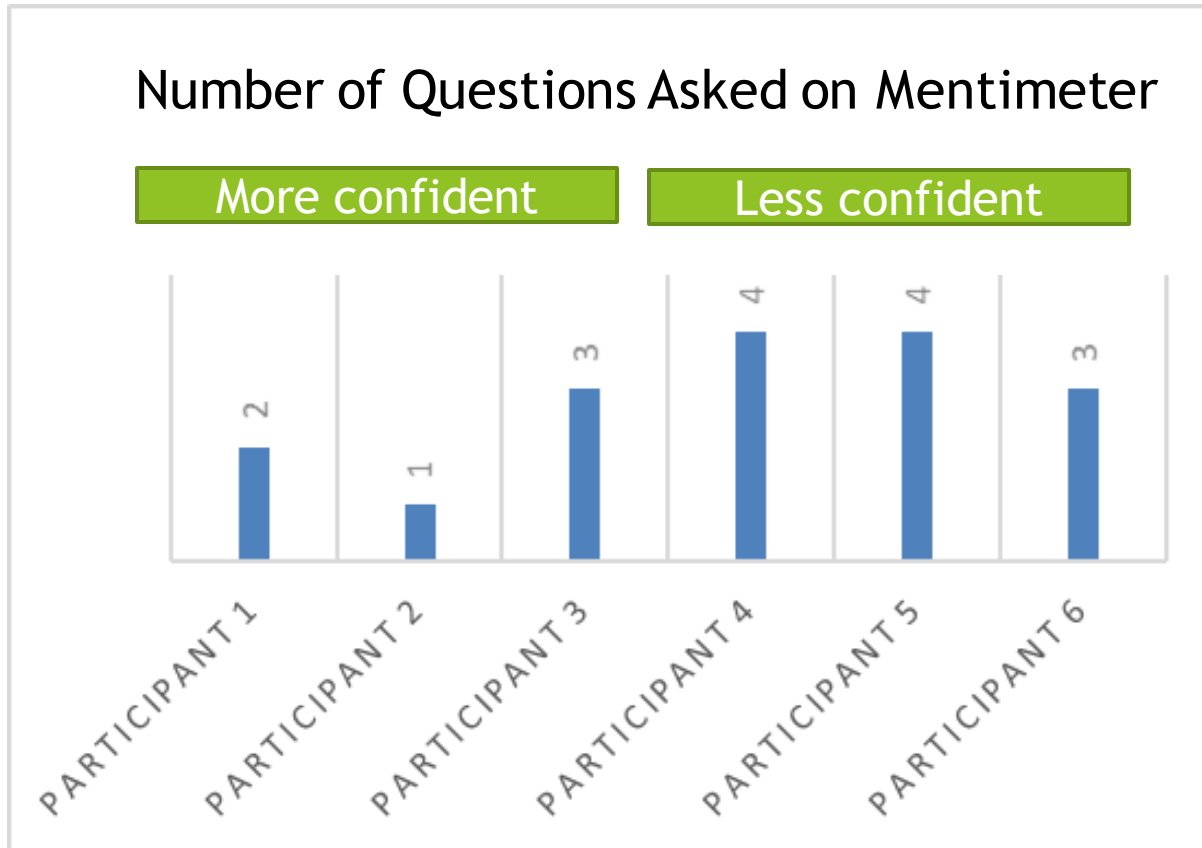
Anonymous Questions Results

14/15 students attended the session	93.33% attendance
11/14 students used Mentimeter in the session	78.57% used Mentimeter
0/14 students used post it notes in the session	0%
26 questions posted in total	2.36 (2) questions/student
6/14 students participated in the survey	42.85% response rate

Anonymous Questions Results

- ▶ Themes Identified:
 - Creating a voice and being heard
 - The learning context
 - Mentimeter ease of use
- ▶ All 6 students who participated advised they would like to see Mentimeter used again

Anonymous Questions Results



Some key quotes...

Creating a voice and being heard

“Yes, I feel it’s important that the least vocal of us are given the opportunity to have our voice heard as some members of the group can often dominate classes with questions and information that isn’t really relevant to the topic.”

The Learning Context

“Sometimes, but usually when the class is smaller. It’s embarrassing if you feel like you’re asking a stupid question that you should already know.”

Mentimeter Ease of Use

“I liked it because it enabled me to ask relevant questions which I wouldn’t normally do. I like how it’s simple and easy to use and didn’t have any technical glitches like most technologies that are introduced in class.”

Summary

- ▶ Mentimeter may have a role in enhancing participation by providing a means for students to ask anonymous questions in class.
- ▶ Participants identified that it allows them to have a voice and be heard and that their confidence to ask questions can depend on the learning context.
- ▶ Mentimeter was found to be generally easy to use, however some students did not like the “live feed” of questions
- ▶ Mentimeter would likely need to be used frequently in class to ensure its optimal use.
- ▶ Further research is recommended into the reasons some students prefer to interact anonymously in class.

Overall research summary

- ▶ Students perceived the quizzes to consolidate learning, break up the lecture, and increase focus and enjoyment
- ▶ Mentimeter increased class participation compared to standard questions and answers
- ▶ The value of Mentimeter in promoting engagement in class was recognised across two different levels, subject areas and research contexts (anonymous questions and quizzes)
- ▶ This suggests that an interactive technology-enhanced learning environment can promote student engagement and participation

How to get set up

Want to try Mentimeter?

Mentimeter is free for as long as you'd like!



or using email

E-mail

davina.hill@cumbria.ac.uk

Password

At least 6 characters.

First and last name

Sign up



How to get set up

Your presentations

- Inspiration
- Upgrade
- Account
- Help

Home

+ New presentation

+ New folder

Type to search

Name

Created

Last updated

Library Team Day Quiz 2017 5 0

16 minutes ago

3 minutes ago



E&B Week 14 Q2 5 11

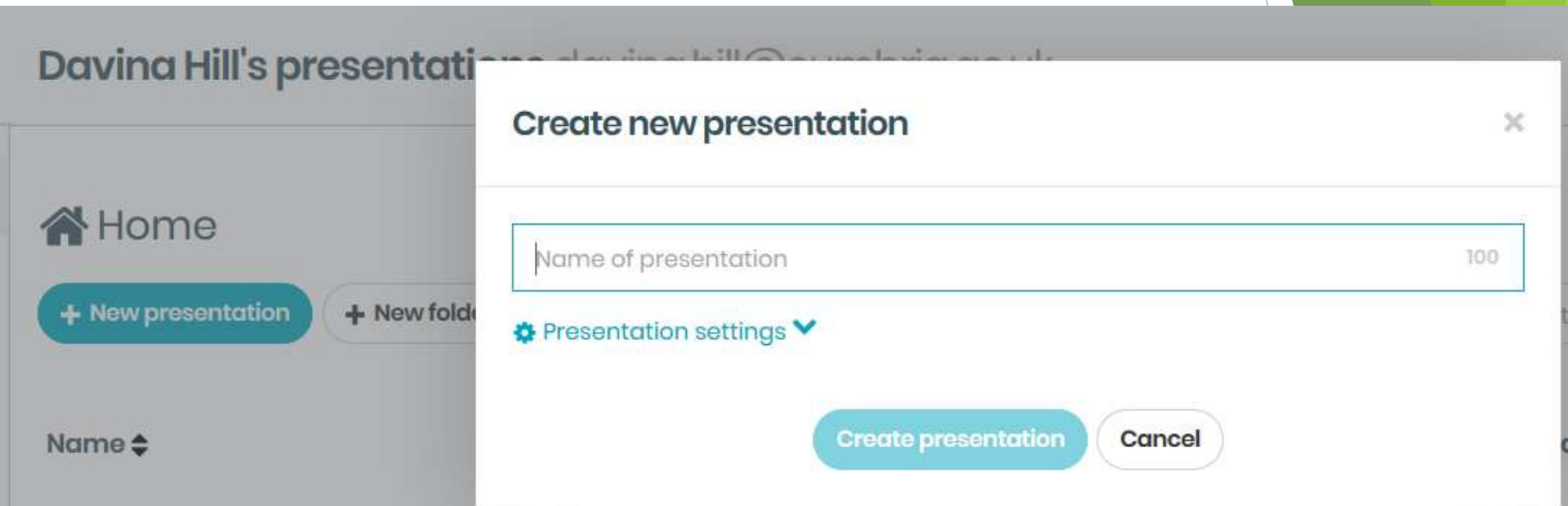
Nov 28, 2017

Nov 28, 2017




- ▶ Export results and post on Blackboard for revision
- ▶ Duplicate quizzes for use next year
- ▶ See how many people took part
 - ▶ But not who

Creating a new presentation



Choose presentation type

Question type ? **2 left for free**



Multiple Choice





Image Choice




Word Cloud




Scales




Open Ended



100 points




2 by 2 Matrix



Who will win?

Quiz ? **5 left for free**



Quiz

Examples of biomes



Mentimeter

Your question ?

Mentimeter multiple choice quizzes offer ar



Game Rules

1. There is an initial countdown of 10 seconds to get the participants ready, and for you to read the question out loud.
2. When the options are shown, everybody has a limited time to answer. You choose the number of seconds when you create the question (default is 20 seconds).
3. Remind your audience that the faster they answer, the higher the score.
4. The leaderboard shows the point totals of the quiz questions.

Options ?

↓	True	🗑️	✅
↓	False	🗑️	❌
+ Add			


Time to answer ?


20



the code 61 34 74 i

offer anonymity Mentimeter

 False

 0



Type Content

Audience size limit for Quiz



The Quiz works best for small to medium-sized groups (up to 500 participants). For presentations with larger audiences (500+), please contact us at hello@mentimeter.com!

Your question ?

Mentimeter multiple choice quizzes offer ar  

Game Rules

1. There is an initial countdown of 10 seconds to get the participants ready, and for you to read the question out loud.

Acknowledgements

- ▶ The Students
- ▶ Discussion: Ruth Mewis, Nicky Meer, Amanda Chapman, Katie Banks, Zoltan Hiezl, IT and Library team

Any Questions?

- ▶ You can use Mentimeter to try it out...
<https://www.mentimeter.com/s/c4f85eb41c94593fc4bc2c43af7533d9/aeab2f99e2ec>
- ▶ Or feel free to just ask!