**Technology Reviews** 

### Engaging students on their devices with Mentimeter

Katharine Vallely, Poppy Gibson University of Greenwich

#### Abstract

This technology review builds upon the work of Little (2016), who introduced Compass readers to the student response system (SRS) *Mentimeter*. Within this original article, Little compared *Mentimeter* to similar SRSs and, with a SWOT analysis, explored its strengths and limitations. Fast forward two years and, with its focus on student engagement, this review provides an interesting insight into snapshot cases of *Mentimeter's* incorporation into sessions with students from the Teacher Education Department. The article presents the use of *Mentimeter* in both lectures and seminars and provides three illustrative screenshots; it discusses, with reference to recent literature, the advantages and disadvantages of *Mentimeter* as a form of student engagement; it 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.

Keywords: Mentimeter, mobile devices, Student Response Systems, voting tool

#### Introduction to the technology

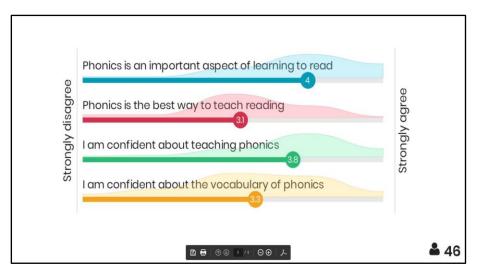
As outlined by Little (2016), *Mentimeter* is a type of Student Response System (SRS) voting tool – similar to *TurningPoint* or 'clickers' and the slightly more game-based *Kahoot!* – which encourages students to engage with discussions and debates through their portable devices, such as mobiles, laptops or tablets. *Mentimeter*, like *Poll Everywhere* and *Socrative*, enables quick and anonymous feedback from both quantitative and qualitative questions posed during a teaching activity. Using their devices, students access the *Mentimeter* webpage and enter a unique six-digit code, so that they may submit their answers. The group's responses are instantaneously and anonymously displayed on the teaching screen and stored in a bank of presentations that the tutor can access at a later date.

#### **Possible application**

In the Teacher Education Department, *Mentimeter* has been used across a range of courses and degree programmes, including the three-year BA in Primary Education with QTS, the two-year accelerated degree in Primary Education and the PGCE programmes. The authors have found that the student-participation element of *Mentimeter* lends itself to both lectures and seminars. This review presents and discusses three *Mentimeter* opportunities for engaging students: **'gauging opinion'**, **'engaging discussion'** and **'voicing concerns'**. By way of demonstration, the authors share snapshots of the application of *Mentimeter* to each of these three styles and make some explicit links to particular subject or course areas, in order to highlight to the reader the flexibility and adaptability of this tool.

### Gauging opinion

The introduction of *Mentimeter* to the students on the three-year teaching training programme generated a rippling buzz of excitement. As previous studies have reported (Burnett and Collins, 2007; Walker and Pearce, 2014), students were intrigued by the new teaching tool and keen to use it. To many of the first-year students, who can find large lecture theatres rather daunting, this SRS offered a voice with which they could express their opinions quickly and anonymously. Its deployment during the previous academic year – in accordance with findings from Wang (2016) and Funnell (2017) – suggested that students are more engaged when they can use portable devices in seminars and lectures to gain real-time feedback. (See Screenshot 1, from a session with first-year students on the three-year degree in Primary Education.)

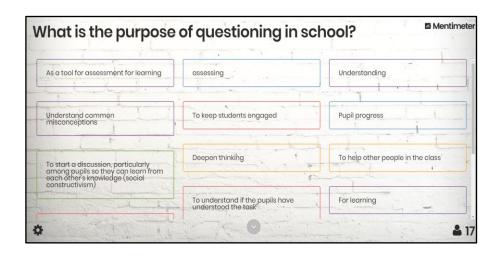


Screenshot 1: Gathering views of students to inform future planning

From a teaching point of view, the tool has proved useful for asynchronously collecting student responses and using these to shape future teaching. For example, at the start of their English course, students in a second-year cohort were asked to submit a maximum of three words explaining how they felt children should be taught to read. Although worrying at first glance, these responses gave tutors an insight into the gaps in student pedagogical knowledge and led them to adjust elements of the programme in order to address, appropriately and consistently, any such weaknesses; these reactions reflect research findings by Burnett and Collins (*op.cit.*), who concluded that using SRSs helped to tailor teaching to the needs of the students.

# Engaging discussion

*Mentimeter* provides a beneficial soundboard at the start of a lecture or seminar: simply display a question on the board as students arrive and their answers give instant content for discussion and debate. (See Screenshot 2, from a lecture.)



## Screenshot 2: Stimulus at the start of a lecture as students arrive

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. The useful participant total (bottom right in Screenshots 1,2 and 3) also reveals how many students have contributed and offers the lecturer an instant insight into current discussion engagement levels.

Interestingly, teaching students who work on placement as part of their degree – i.e. those on the Postgraduate Certificate in Education (PGCE) – have shown that *Mentimeter* can also be taken into the primary classroom to trigger meaningful discussion with pupils. Although not all degrees have placement components, the authors mention this example to illustrate the innovatory potential of this technological tool. The authors have found that *Mentimeter* can certainly contribute to the professional development of PGCE students, who, with only one year to complete their programme, are keen to apply what has proved engaging to themselves to their own teaching in school classrooms during their three allocated teaching experiences.

Although there is an optional paid version (Little, *op.cit.*), the freeware version of *Mentimeter* has encouraged and enabled students to set up their own account and use this SRS as a teaching tool in the primary classroom. Students who have successfully used the tool have done so with older children, aged from eight to eleven. When asked about the benefits of using *Mentimeter* in the primary classroom, the students reported findings similar to those acknowledged by Burnett and Collins (*op.cit.*) and Funnell (*op.cit.*): the SRS injected an increased level of fun into lessons and helped to provide variety within a session, thereby sustaining pupil concentration and interest. Although no students reported using *Mentimeter* with children below the age of eight, they felt the SRS had the potential to be used with younger children. From an educational perspective, the authors feel that there is a need for future research into using *Mentimeter* with younger primary school children.

#### Voicing concerns

One way to help improve student satisfaction is through open dialogue and strong professional relationships, creating a safe learning environment where students feel they can voice concerns and ask questions. In the authors' work with students on a two-year

accelerated degree, *Mentimeter* has shown itself to be useful, particularly as it offers a forum for asking questions in an anonymous way. One example of this is through providing students with a platform on which they can ask questions related to an assignment. (See Screenshot 3.)

| Do you have to link the theorists to<br>the factors or just talk about them?   | is it best to talk about the present<br>day thoroughtout the essay or at<br>the end of the essay   | Do we have a seminar next Friday?  |
|--|--|--|
|  |  |  |
| l am struggling to find a definition<br>for psychological development_is<br>there any sources I can use?   |  | If we're talking about the role of<br>education should we be talking<br>about all 3? Or just focus on one?   |
| 5  | The second second  | i la la  |
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Screenshot 3: Students on the two-year accelerated degree ask questions anonymously

Voicing concerns in this way allows for 'dialogic teaching' and 'dialogic talk'; dialogic talk refers to a developing dialogue between teacher and student, not just teacher-led presentation (Alexander, 2008). The teacher can then deal openly and sensitively with these questions, allowing other students the chance to answer or expand upon their own related concerns and questions. 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.

# Key advantages and disadvantages

#### Advantages:

- Anonymous answers allow students to feel that they can contribute in a safe, nonjudgemental environment.
- It is quick for lecturers and tutors to create the slides needed for the *Mentimeter* presentation.
- Students say that they find the tool easy and quick to use.
- An increase in real-time feedback has enabled tutors to develop and shape future teaching.
- It can be used as a learning and assessment tool, pinpointing any misunderstandings that students may have and consequently enabling staff to alter the content of lectures and workshops or to publish additional online support.

#### Disadvantages:

- Because *Mentimeter* responses are anonymous, it is not possible to identify which students have contributed.
- Students can contribute only if they have a WiFi-connected device.
- Not all students will contribute: as use in seminars shows, participation varies, but it is usually between 50%-75% of the class on average.
- Once students have submitted their answers, they are unable to retrieve or edit their responses; this has left some students feeling frustrated and, occasionally, embarrassed over errors that have been made.
- If the use of the tool is not well planned within a programme, staff may use it too often with the same group, risking SRS oversaturation and consequent student disenchantment.

## **Conclusions and further plans**

With its quick and simple interface, there are several future plans for using *Mentimeter* in the Teacher Education Department. The authors propose training more students to use this technology in their group presentations; in fact, some of our teacher-training students have been inspired enough by *Mentimeter* that they have gone on to use it in school whilst on placement. It is also recommended that future research be conducted into the impact that online sharing tools such as *Mentimeter* can have both on students in higher education and on pupils in the primary classroom. Possible areas for further exploration include *Mentimeter* and its ability to enhance team work, collaboration, engagement and the promotion of peer learning.

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