A brief review of Mentimeter – A student response system

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As this is the inaugural tech review, it is perhaps worthwhile to emphasise that, although the editorial team of JALT tends to embrace technology, our tech review section is not at all in the spirit of 'Faster, Better, Cheaper' and certainly not created in the spirit of 'tech for tech's sake'. We view technology as a mere enabler of best practices in teaching and learning, and we believe that the facilitator (a.k.a. lecturer a.k.a. teacher a.k.a. tutor) remains absolutely critical for positive student outcomes in the context of constructive alignment.

Our tech review section is of a reflected yet practical nature and thus not necessarily written in an academic style – more journalistic pieces are also welcome. Historically, many technological innovations have been supposed to be 'the end of traditional-education-as-we-know-it' – a euphoric, and rather irrational, infatuation with technology – from motion pictures, through radio and television, to the Internet. For instance, in 1885, it was predicted "that mail-correspondence students would soon outnumber students on campuses" (Rollins, 2014), and in the late 1930s, radio was sometimes thought of as a 'Master Teacher' (Cook, 1938; Tyson, 1936). There has been a long series of fallacies when it comes to viewing technology as a panacea and it is the editors' view that both technological determinism and Luddism should be avoided, with there not being any Magister ex machina miracle.

Student response systems have been around for decades. This inaugural tech review is about such a student response system (SRS), namely Mentimeter. Why should you be interested in Mentimeter? It is freemium (i.e. free and premium versions are available); no extra hardware (apart from the standard laptop, projector and students' own digital devices are needed); it is easy to use and it may make your lectures more interactive and interesting.

Postsecondary students tend to spend an enormous amount of time on their smartphones, and there are numerous cases of social media addiction.

Illustration 1: Cell phone pun

Image source: Cell phone pun (n.d.).

Personally, I do not find it appropriate to tell adults (usually working professionals) to put their smartphones away (or to turn them off) in my classes – as they are not children. This is not to deny that studies show that continuous mobile phone use in class that is off-task has a negative impact on students' retention and performance (Brenner, 2015). As Illustration 2 shows, there are obviously different approaches.

Illustration 2: No cell phones sign

Image source: No cell phone sign (n.d.).

Over the years, I have observed that some students follow my slides on their smart devices or use them for translating concepts into their respective mother tongues. Thus, I am attracted to techniques that transform the problem (of unrelated smartphone use and distraction) into an opportunity by making productive and related use of the ubiquitous devices. By using their smartphones, students can brainstorm (thus creating a Wordle diagram live and then these brainstormed concepts can be discussed further) or answer multiple choice questions (MCQs) to just mention two of the more popular usages.

Illustration 3: Mentimeter word cloud (as used in a Knowledge Management class conducted by the author) on 2 March, 2017
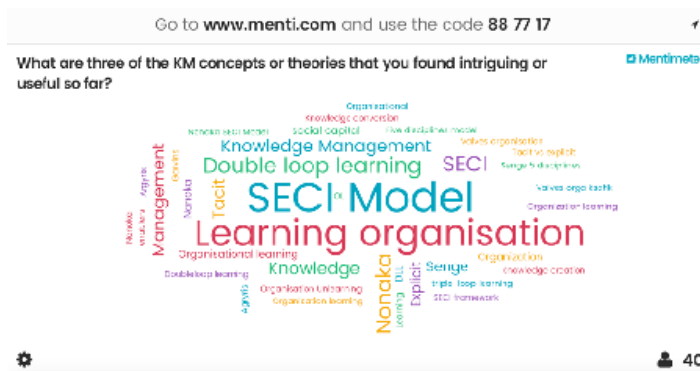
Source: self-developed.

It is meaningful to further explore the literature on such software and here are some more theoretical and generic practical considerations. Mentimeter is a commercial audience response system (ARS) that employs a freemium approach and combines wireless hardware with presentation software. In an educational context, these systems go by a variety of additional terms, amongst others, 'student response systems'. Such systems have been around for more than two decades, for instance, an early educational use has been documented at Rice University (Lane & Atlas, 1996). Whereas in the past, specialised hardware like 'clickers' for every participant was required, tools such as Mentimeter are cloud-based and open-source, and students can bring their own devices (BYOD)

and thus use their smartphones, tablets or laptops for class participation via ARS.

An audience response system allows large groups of people to vote on a topic, or answer a question. Each device communicates with the question via Internet. At the discretion of the facilitator, the system ends the polling for that particular question and tabulates the results. Typically, the results are instantly displayed on the projector. At present, ARS can be a pure software product, with the hardware being brought by the users (Devaney, 2011) – thus reducing the cost for an institution dramatically, and if a free version is used, to zero. Importantly, a software product such as Mentimeter is device agnostic, i.e. no hardware, app or installation is required (Imperial College, n.d.). It can be used for live audience feedback, mood measurement or live polling.

During preparation for a session, the lecturer has created questions that can be open-ended (often resulting in word clouds – see Illustration 3 above) or true / false or multiple-choice questions. Mentimeter offers six different types of questions: multiple-choice, scales (for instance, questions offering choices from a Likert scale from 0 to 5), open-ended (with a maximum of 140 characters per answer), 100-points (participants can distribute 100 points to alternative responses), dual-axis (participants rate items in two dimensions) and who-will-win (Peeters, n.d.).

The data can be collected anonymously and they can also be saved for analysis, comparative purposes and educational research (results can be exported, for instance, into Excel format). Various additional benefits of audience response systems (ARS) have been reported and discussed in academic studies. Amongst other advantages vis-à-vis traditional teaching and learning approaches, an improved attentiveness of students and increased knowledge retention could be shown (Kaleta & Joosten, 2007; Crouch & Mazur, 2001; Kay & LeSage, 2009).

Further, the anonymity (unlike a show of hands, for instance) could be advantageous to test the understanding of students in a more independent way. In addition, the anonymity of the tool may increase engagement, as participants who are normally reluctant to participate may also share their views and answers. For instance, when I previously used MCQs in the classroom, better or more active students would normally respond – but with ARS software such as Mentimeter, there is a much higher chance for (almost) everybody participating (Graham, Tripp, Seawricht & Joeckel, 2007; Stowell & Nelson, 2007; Peeters, n.d.). This may be of particular importance in Asian collectivist cultures where a study by Cheng (1999) found that it is the cultural preference of Asian students to withhold their analysis of subject matter rather than exchanging views.

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