

Using Google Jamboard in teacher training and student learning contexts

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Abstract

Keeping social constructivist learning experiences alive in the online classroom is important for our students' positive learning outcomes. Supporting pedagogies such as collaboration, discovery learning, and the principles of Universal Design for Learning can be facilitated by EdTech tools. One such tool is Google Jamboard, a cloud-based virtual whiteboard. This review of Jamboard focuses on how this simple platform can be used in two contexts: teacher-training sessions within a Scholarship of Teaching & Learning (SoTL) program and by educators in the classroom for student learning activities. The aim of this review is to show illustrative case study examples from around the world of Jamboard in practice, in order to inspire educators to try Jamboard in their own teaching and learning contexts.

Keywords: EdTech; Jamboard; online learning; social constructivism; SoTL.

Introduction

In March 2020, the global COVID-19 pandemic changed the way we teach (Butler-Henderson et al., 2021; Stafford, 2020). Cloud-based whiteboards, such as Google Jamboard (Jamboard) became one of the staple tools that educators across the globe utilised to facilitate online collaborative student learning experiences. Learning contexts ranged from language (Khoiriyah et al., 2022) and anatomy learning (Sweeney et al., 2021) to teacher training (Debelius & Mooney, 2020). This review of Jamboard will focus on two learning contexts in which Jamboard can be effectively used: as a teacher-training tool within a Scholarship of Teaching and Learning (SoTL) program and as a teaching tool with students in the classroom. The review will begin with a brief explanation of what Google Jamboard is, followed by illustrative case studies from around the world to inspire other educators to try Jamboard in their own teaching and learning contexts.

What is Jamboard?

Jamboard is a user-friendly platform for educators and their students to learn through. It is a digital whiteboard tool for synchronous and asynchronous collaborative learning experiences, accessed from either a dedicated Jamboard device, a PC, a laptop, or a mobile device via an app (Google, 2022). In its most basic form, participants collaborate via text, sticky note, image insert, or by drawing, on an online whiteboard that is accessible through a single link, for free. In this context, the host only needs to have a Google account to access this 'lite' version of Jamboard and anyone with security access to Google products can participate as an anonymous user. Alternatively, it can be purchased as a physical electronic whiteboard or app, incorporating more features, such as the integration of Google's suite of products such as Docs, Sheets, and Slides for a complete immersive collaborative product solution (Gavin, 2019; Google, 2022). Google Workspace's (formally G-Suite) collection of products was launched in 2006 with Jamboard being incorporated into it in 2016 (Weir, 2020).

The dashboard is a simple page with your saved 'recent Jams' on display and a circle icon with a '+' sign in the bottom right corner with which to create a new board – or 'Jam'. These Jams can remain a white page or a colour or inserted image can be used as wallpaper. You can download your Jams as a Pdf and control the sharing link access for viewing or editing. In this case, it is similar to Google Padlet, but Jamboard has less features for when a simple solution is required for your learning purpose or your students' technology skill levels are low.

The benefits of SoTL programs using Jamboard in teacher-training contexts

Collaboration

Jamboard is a great tool to achieve participant collaboration. This is an important feature of online learning as it allows social constructivism to thrive (Harasim, 2018). Both Harasim's (2018) Collaborativism and Salmon's (2022) 5-Stage Model for Online Learning models were designed to facilitate

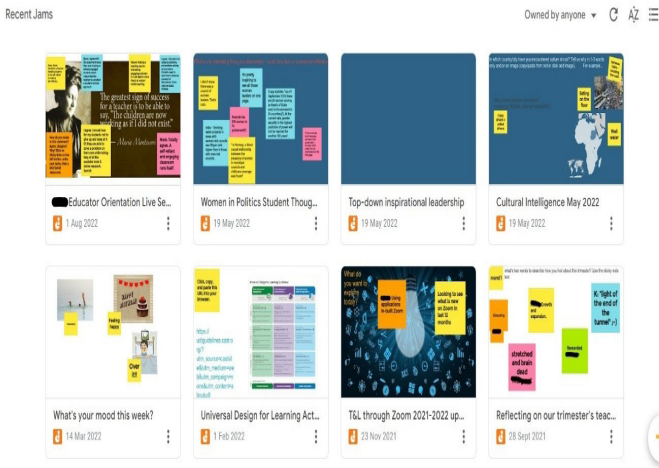


Figure 1: Google Jamboard homepage showing existing 'Jams' and a 'create new' button.

collaboration in asynchronous, forum-based learning contexts in order to ensure social constructivism could still thrive through a text-based communication channel. Jamboard's value-add is that it can promote collaboration via text, not only in both synchronous and asynchronous learning settings, but in a more visually appealing design as compared to an online forum. Harasim and Salmon would surely welcome such a step up to the asynchronous forum experience. However, a review of the recent literature around the use of Jamboard shows that most SoTL programs use Jamboard in a synchronous manner, most likely as a direct result of the pandemic pivoting on-campus classes to online versions.

In a research article presented in Portugal, Bakala et al., (2022) describe using Jamboard to gather the collective thoughts of kindergarten teachers, after an experiment on using programmable robots to teach young children computational thinking skills. In the U.S, Georgetown University's Debelius and Mooney (2020, p. 47) decided Jamboard's facilitation of collaborative, peer-peer learning experiences would complement their "relationships-based cohort model" SoTL program. This program aims to shift educators' perceptions of viewing EdTech not just as a saviour in a time of crisis but as an ongoing staple of learning tools (Debelius & Mooney, 2020). In South Africa, Ndwambi et al., (2022) used Jamboard as a collaborative quiz answer space, testing tutors' answers to a quiz on Ubuntu principles taught within a SoTL program session. I have used Jamboard in a collaborative SoTL experience – the induction of new educators to an Australian higher education business college. In this context, Jamboard was used to replace a more one-directional, host-to-participant PowerPoint slide presentation of pre-prepared content. Instead, Jamboard was used to facilitate a sense of community by allowing multiple authors to post questions and answers in an equally shared online space. These four cases show that Jamboard can bring online participants of SoTL programs together to a collaborative online space, regardless of global location, content, or educational institution type.

Reflection

Jamboard is useful in reflective online sessions. Both Bakala et al., (2022) and Ndwambi et al., (2022) used Jamboard for participants to reflect on past learning experiences, including that of the place for technology within the classroom. In this sense, they were not only using Jamboard to learn through reflection, but they were also reflecting on their students' ability to learn through technology. Should the reader be interested in replicating this, the TPACK (Technological, Pedagogical, and Content Knowledge) model is a helpful starting point. It was designed for such a reflective task within a SoTL program by guiding the educator to critically think of their competence levels regarding the intertwined components of technological skills, teaching skills, and subject knowledge (Koehler & Punya, 2009; Glowatz & O'Brien, 2018). All educators who choose to use EdTech products such as Jamboard, should reflect on their competence and confidence in incorporating these tools and engage in training programs that teach them how to do so effectively.

Brookfield asserts that all educators must be critically reflective, in order to (amongst other reasons), "unearth assumptions of power" (2017, p. 36). I did just that in the SoTL program's new education induction Zoom session. The first page of a four-page Jamboard was a reflective activity that showed a quote that touches on student-centredness and active learning in teaching practice. As a college that prides itself on practicing student-centred, workshop-style learning experiences that give voice to all participants, it is important to reveal the teaching mindsets of its new recruits early on. The participants were asked to reflect on their attitudes to the quote and insert a personal belief statement onto the quote page by using the sticky note tool. This statement could either agree or disagree with the quote. Within ten minutes, I knew the teaching and learning philosophies of my new educators, enabling note-taking on who may need further professional development to facilitate learning in the college's preferred manner.

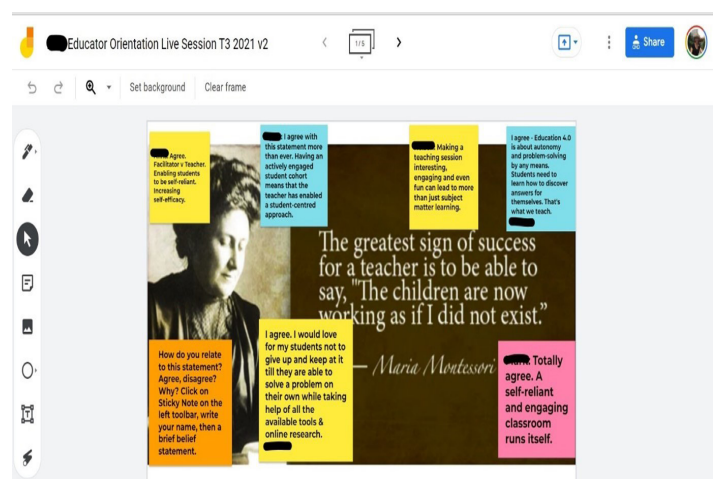


Figure 2: Jamboard page used for reflecting one's teaching philosophy in the author's educator induction session.

Modelling

Modelling is a key aspect of Albert Bandura's Social Learning Theory, which includes the notion that people learn behaviour through observing others and then imitating it themselves (McLeod, 2016). The use of modelling in SoTL programs allows a teacher-trainer to teach educators a new pedagogical device, such as an EdTech tool like Jamboard, whilst simultaneously structuring the session in a way that demonstrates how the educators can use it in their own classrooms. For example, I carefully plan my live pedagogy workshops to ensure that I am demonstrating an EdTech tool in at least three different ways – from basic to more advanced – so that each participant feels confident to attempt at least one method in their next class.

I used modelling in my educator induction session by using Jamboard three ways – teaching the participants what the tool can do, whilst teaching the content related to their induction. For example, the participants shared their reflective belief statements via a sticky note, something they could do with their students at the start of trimester as a litmus test for student motivation. They entered text in response to a quiz question, replicating a content-knowledge-check exit activity at the conclusion of a lesson. They also inserted images or GIFs to share how they were feeling about the new trimester, which can be used with students as a mental health check-in activity to do before assessment due dates. Debelius and Mooney (2020) used modelling in a targeted approach to combat the negative effects of isolation during the first months of pandemic-enforced online learning. Using Jamboard as one component of their holistic SoTL program, they demonstrated what inclusive, online, tech-enhanced learning experiences could be to achieve learning flexibility and community building. Similarly, Ndwambi et al., (2022) wanted to model to educators the Ubuntu principles of respect, sharing, fellowship, and human dignity, using Jamboard to facilitate such collaborative learning experiences. In these two examples, and mine above, modelling the use of Jamboard within SoTL programs is a way to strengthen the learning process of educators in order for them to replicate these learning experiences in their classrooms.

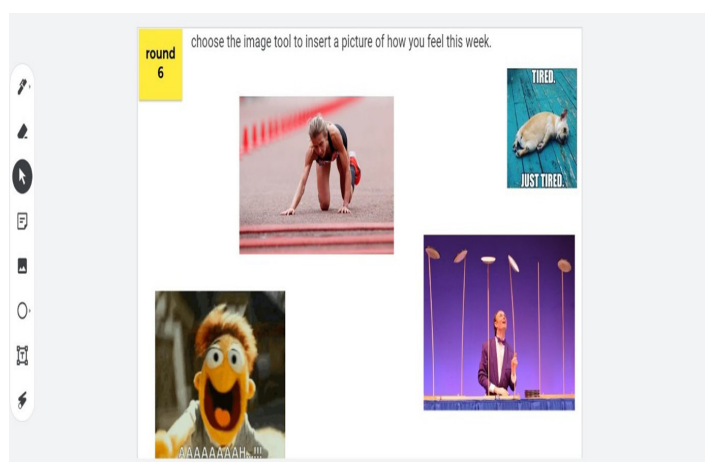


Figure 3: Mood Check-In Jamboard page with inserted images used in the author's educator induction session.

The benefits of using Jamboard in the classroom with your students

Universal Design for Learning

Finally, after the teacher-training has been completed and your educators know how and why to use Jamboard in their classrooms, they can give it a try. Khatri (2021) used Jamboard to facilitate Universal Design for Learning (UDL) principles in a Canadian English for Academic Purposes classroom context. Firstly, they drew on UDL's 'multiple ways of expression', using Jamboard to replace breakout group, peer-peer learning experiences to ensure the lessons weren't solely small-group discourse-based. Secondly, they addressed 'multiple means of engagement' to facilitate student-centred, inclusive learning practices, using Jamboard to promote slower and more thought-out answers that remove the fear of using voice only to contribute to the lesson.

Concept maps

One of UDL's suggested tools for 'multiple ways of expression' is to use a concept map, which is what Pothier (2021) used in the shift from on-campus to online learning, replacing butcher's paper with Jamboard. Pothier's decision to use Jamboard in a UK university library setting was based upon its familiarity to students as a Google product, declaring "I barely needed to explain the steps before each student claimed a board and began working" (2021, p. 2). Interestingly, a Spanish study by Recuero Virto and Blasco López (2020) notes that despite their hypothesis, 'ease of use' may not be a precursor for students' willingness to use EdTech tools such as Jamboard again, rather 'playfulness' was the motivating factor for re-engagement. This is echoed by Sweeney et al.'s (2021) reflection of a virtual anatomy class in Belfast, whose students overwhelmingly reported that their Jamboard practical lessons were the most enjoyable of the module.

Discovery learning

One final reason to use Jamboard is to utilise Discovery Learning. Bruner's Discovery Learning model is a constructivist approach that synthesises the learner's own existing knowledge with that of their new, independently discovered information, which leads to deeper learning through the personal nature of the learning path (Learning Theories in Plain English, 2017). In Australia, I used this model to collate a collection of case studies from a class of post-graduate international students on their most inspirational female leaders. The design of the subject was to add discovery learning to the weekly content so as to bring international case studies into the syllabus. Not only did they learn from their peers, but students learned how to research information on the internet, summarise it, and succinctly write a statement on a Jamboard page. The students filled multiple pages of a Jamboard with their contributions, which led to an empowering whole-group discussion. Not inconsequentially, the relaxed look and feel of Jamboard adds an element of fun that other online tools,

such as a Zoom whiteboard, can't deliver, creating a certain positive vibe to the activity.

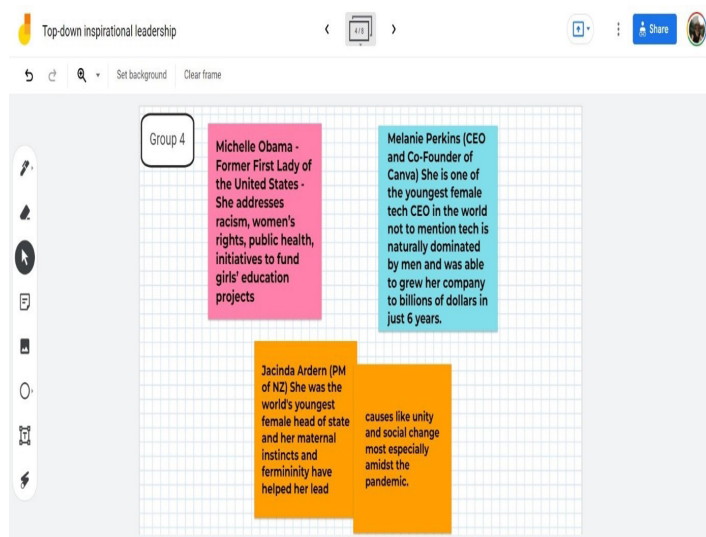


Figure 4: Australian postgraduate students' contribution to a discovery learning activity.

The aim of this review is to inspire other educators to incorporate Google Jamboard into their suite of teaching pedagogies. This will ensure online social constructivism remains a key feature of the online classroom in a post-pandemic world. There are pitfalls to using Jamboard, such as my experience of having Chinese students in offshore learning circumstances not having access to Google products. Also, as with any pedagogical tool, students can get tired of using the one product too often. This is why ensuring that you have a suite of EdTech tools to choose from each teaching period is crucial (see e.g. Stafford, 2021; Yeo, 2019; Yong & Rudolph, 2022). The benefit of Jamboard as one of these options is that it really is simple to use. The lack of features is its asset. When you want to focus on achieving the pedagogies that underpin the case study activities I've discussed, you don't want the complication of technology to hinder your success – Jamboard will certainly reduce your students' cognitive load. So, ensure your SoTL program incorporates the teaching of Jamboard to your educators as a first step towards an EdTech-enriched classroom learning experience. Jamboard will create enjoyment, collaborative learning experiences and diversity in learning expression for both educators and students.

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