

A Canva(s) of Possibilities: Leveraging Educational Technologies to Develop Historical Understanding

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Abstract

The rise of educational technologies creates many opportunities for history teachers to deepen their students' understanding of historical concepts. This article highlights a case study of how history teachers can use Canva, an online interactive platform, to conduct a lesson on the historical concept of causation. This article is not prescriptive—the onus should always be on the history teacher to decide whether the use of educational technologies is conducive to their own teaching environments. Nevertheless, the authors argue that there is a plethora of possibilities in educational technologies, which history educators can harness to facilitate an enhanced conceptual learning experience for their students.

Introduction

History teachers are engaged in a perennial struggle — how to make the study of the past engaging to students living in the present but also ensure that the students accurately understand important historical concepts at the same time. The answer often lies in taking advantage of the opportunities that modern educational technologies have to offer — innovating the way we teach a subject that we are so passionate about. While some history teachers are

understandably concerned about the effects of the increased use of education technology in the classroom, the winds of change — at least in the Singaporean education system — are firmly blowing in one direction. In 2020, the Singapore government announced its intention to provide all secondary school students with their own Personal Learning Devices (PLDs), such as iPads and Chromebooks, by the end of 2028. The Ministry of Education (MOE) also provided financial subsidies to help students purchase their PLDs (Ang, 2020). The National Institute of Education (NIE), where most of Singapore's public school teachers are trained, includes a course on educational technology in its teaching diplomas. Teachers are graded for their incorporation of educational technology into their lessons during their observations. It is clear that in the context of Singapore's education system, educational technology is here to stay. Therefore, while history teachers are right to be wary of the dangers of educational technology, we must also harness the opportunities that educational technology provides.

It is in this light that we detail our proposals, in this article, regarding the use of Canva in the history classroom to teach an activity centred around the historical concept of causation. This activity was part

of a lesson plan — while it was not implemented in a classroom, the necessary materials were drawn up by us and reviewed by fellow student teachers. The activity introduces Secondary 4 (16-year-old) students to the causes of the Korean War, with the inquiry question “Who caused the Korean War?” Apart from learning that the Korean War was multi-causal in nature, students will also arrive at the enduring understanding that different explanations of what caused an event can be valid, depending on the criteria applied. Through the lesson activity, we argue that incorporating education technology tools into the teaching of history in the classroom can be intellectually and conceptually effective. The case use of Canva for this article serves as merely one of the many possibilities that educational technology has to offer history educators. That being said, we believe that at the time of writing, Canva is a tool uniquely positioned to offer teachers versatility and flexibility in tailoring digital lessons to their pedagogical and curricular requirements. This article will be broken down into three main segments. First, a literature review highlighting previous examples of how history teachers have incorporated educational technology into their lessons. These previous iterations of technology have sought to solve common problems that history teachers face in teaching the subject, such as student engagement. Second, an introduction to the Canva platform and its capabilities, using the aforementioned case study. Third, an evaluation of the Canva platform’s opportunities and challenges, along with possible measures to mitigate these challenges in the classroom. The hope is to showcase just one of the many innovative possibilities that Canva can facilitate, with the hope that history teachers reading this embrace Canva and use it in their own ways to enhance the teaching of history.

Literature Review

In this section, the literature review will explore, first, the use of educational technology at a macro level in teaching. The review will then explore how history educators have attempted to incorporate digital technology into the teaching of historical concepts. The review will then demonstrate how recent studies on Canva’s utility in the history classroom tend to focus on its facilitation of creativity and engagement, while overlooking its ability to cultivate conceptual learning.

The use of educational technology in the classroom has long intrigued educators and academics alike. Between 2014 and 2023, the number of publications focusing on educational technology increased year-on-year by 21.5% (Alam et al., 2025). These publications show the generalised benefits of educational technology — “increased accessibility, better engagement, personalised learning, and flexible learning environments” (Alam et al., 2025). At the same time, educators have shown their wariness of the rise of educational technology. These concerns include teachers being unwilling to incorporate educational technology into their own lessons, a lack of assistance from educational institutions in training their teachers to be technologically savvy, and concerns surrounding the safety of educational technology to students. Our stance is that we firmly believe that educational technology has much potential in the history classroom, but that its implementation should be at the teacher's sole discretion with consideration for the classroom context, with the primary purpose of improving a student's grasp of historical concepts. Lee (2023) argues that digital-based tools facilitate the implementation of inquiry-based learning. Digital tools can enable students to more easily access historical sources through

online portals, while also creating avenues for students to work collaboratively with their peers on research projects. Lee (2023, p. 78) goes as far as to argue that digital tools have the potential to “revolutionise history education.” It is clear that digital tools are becoming increasingly pivotal in the history teacher’s arsenal to address two key problems that have emerged in teaching history — a lack of engagement and a struggle to effectively communicate historical concepts. Digital tools help history teachers bring the subject to life — examples include access to primary source archives, and the opportunity to incorporate multimedia use, showing interviews with historical figures.

While Seixas and Morton (2013) cover many key historical thinking concepts, including significance, for the context of this article’s case study, the literature review will focus on causation. Scholars of history education, such as Shemilt (1983), have identified that students tend to struggle with understanding causation beyond a superficial level. Shemilt proposed a four-stage progression model to illustrate students’ increasing understanding of the historical concept of causation. In Shemilt’s study, a plurality of interviewed students attained a Stage 2 understanding of causation, where “historical narrative is seen to obey a simple and iron necessity.” (Shemilt, 1983, p.14). This is in contrast to Shemilt’s Stages 3 and 4, where a student can understand the complexities and multifaceted nature of causation, eventually developing a cognisance of historiography. It is clear that the goal of a history teacher is not to get all students to Stage 4, but an understanding that history is not as binary as it appears in Stage 2 is conceptually important. Nonetheless, teachers such as Woodcock (2005) have attempted to implement new frameworks, such as providing students with an expanded vocabulary, in order to facilitate students’

understanding of causation building on Shemilt’s model. Chapman (2003) goes further by demonstrating the possibility of using educational technology to teach conceptual frameworks such as the diamond nine. Chapman’s work is particularly relevant to this article’s application of Canva in a causation activity, where we adapt, modify, and extend his use of the diamond nine framework. Canva does not replace Woodcock’s and Chapman’s conceptual tools but rather evolves them — making the most of the advances that digital technology has to offer. Digital technologies like Canva can offer real-time collaboration, the integration of media such as primary sources, and allow teachers to track their students’ work at a glance — elevating traditional teaching strategies.

Several history educators have documented the use of Canva in history education. These studies have shown that not only does Canva increase student engagement with history lessons, but it also facilitates more creativity in students’ thinking and expression. Virgawati, Sinaga, and Istiawati (2024) argued that compared to a control class without the use of Canva, a class that used Canva demonstrated a greater interest in learning history through project-based learning. Similarly, Susilo, Wiyanarti, Mulyana, and Darmawan (2025, p.358) demonstrated that the use of Canva in lessons “can enhance students’ fluency, flexibility, originality, and elaboration in creative thinking.” The numerous studies on Canva’s use in history classrooms confirms its potential as a valuable teaching tool. However, there is a risk that educational technology provides engagement and flexibility at the cost of actual conceptual development and understanding. The existing research primarily focuses on Canva’s aesthetics and ability to foster deeper engagement. While Canva’s use in education in itself is not

groundbreaking, in this article we will demonstrate that Canva can be further harnessed in the teaching of historical concepts, using causation as an example. While engagement and creativity are admirable qualities, ultimately, Canva can help our students to achieve a deeper understanding of historical concepts.

Canva Whiteboard

Many teachers and students in Singapore are familiar with Canva as a design tool used for creating slides, infographics, and posters. Beyond these functions, Canva also offers a digital collaborative workspace known as Whiteboard, which provides an open and flexible canvas for users to work together in real-time. Launched in August 2022 and available for all users, Whiteboard remains an underutilised educational tool. However, we argue that it holds significant potential for supporting History educators in the classroom. This section of the article explores how Canva whiteboard can support inquiry-based learning and promote historical understanding, using a single,

double-period lesson on the causes of the Korean War as a case study.

Our case study explores the origins of the Korean War, by examining the inquiry question “Who caused the Korean War?”. This lesson is designed to serve as the students’ initial introduction to the Korean War and is structured as a historical inquiry. In the gathering-evidence stage of the inquiry, students are provided with five sources, each exploring how North Korea, the USA, the USSR or South Korea may have contributed to the outbreak of the conflict. Using the sources provided, the key objective of the lesson is for students to explain the motivation behind the key actors involved and assess their relative responsibility for the conflict. Finally, students will deepen their conceptual understanding of causation by reflecting on its interpretive nature, as different explanations can be equally valid depending on the criteria used to assess them. The lesson also serves to reiterate other aspects of causation, such as multiple causes and intercausal relationships that students have previously encountered in earlier units.

Figure 1. Outline of the IBL

Step	Description
Step One	Students examine sources and explore the actions of various historical actors.
Step Two	Students answer guiding questions to gather evidence to respond to the inquiry question “Who caused the Korean War?”
Step Three	Students make a judgment on who was most and least responsible by ranking the actors along a 'Zone of Relevance.'
Step Four	Students reflect on the process and consider the reasons behind differing interpretations of who caused the conflict.

1. *Affordances of Whiteboard*

So far, the lesson follows the structure of a typical IBL lesson. What makes this lesson novel, however, is that it is conducted entirely on the Canva Whiteboard. Students examine curated sources, respond to guiding questions, and construct their arguments within a single, navigable workspace (Figure 2). We will begin by outlining how Whiteboard makes inquiry-based learning and collaboration more feasible in the classroom compared to traditional pen-and-paper methods, before exploring how this ICT approach can foster deeper intellectual engagement with disciplinary concepts. As this section demonstrates, our application of the Whiteboard can be adapted and modified to support a wide range of lessons focused on either deepening historical understanding, or inquiry-based learning.

efficiently and independently. Without strong instructional scaffolding, students often struggle to locate or refer to the appropriate materials, particularly when multiple sources, platforms, and pages are involved. Teacher modelling can also become unnecessarily burdensome and time-consuming, as frequent pauses are needed to ensure students are on the right page both literally and figuratively. These realities disrupt the flow of the inquiry cycle, fragmenting the teaching and learning experience. To address these issues, the whiteboard has been designed to be an all-encompassing experience. Students can view instructions, sources, and work on their responses all within a single scrollable canvas (Figure 2). Each stage of the inquiry is labelled with instructions to guide students through the tasks. This design helps reduce students' cognitive load by removing the need to switch between worksheets, tabs, or

Figure 2. Visual Overview of the Inquiry Activity

A persistent challenge confronting teachers during IBL is ensuring that their students can follow the various stages both

different platforms to access materials to complete each stage of the inquiry. More importantly, students can focus on the

interpretative and analytical tasks at hand. Once the inquiry is completed, the Whiteboard can be exported and printed for students' reference.

Another key benefit is the way it facilitates students' collaboration in ways that traditional pen-and-paper methods cannot. With Canva Whiteboard, students can co-


prepare targeted prompts to address misconceptions or prompt deeper analysis. Beyond IBL, these collaborative features make Canva Whiteboard a suitable ICT platform for lessons aimed at developing students' analytical skills and answering techniques. Below is a screenshot of a lesson conducted to introduce students to the concept of reliability (Figure 3).

Figure 3. Screenshot of Student Work: Analysing Source Reliability

Reliability based on Contextual Knowledge

Study Source C. How reliable is Source C as evidence about the economic situation in Germany in the early 1920s?

Source C: A photograph showing dollar bills being swept on the streets in Germany in the early 1920s



Paragraph One Reliability Based on Message
Answer the Guiding Questions below

Source 1 (Kaylin, Meghan, Leah and Gemma)	Source 2 (Yetti, Birgit, Kyle)	Source 3 (Jaden, Vishal, Caden)
<p>Study Source C. How reliable is Source C as evidence about the economic situation in Germany in the early 1920s?</p> <hr/> <p>Point Answer the Question</p> <p>Source C is reliable (ATQ) as evidence that the economic situation in Germany in the early 1920s was <u>terrible</u>.</p> <hr/> <p>Evidence Describe the Source</p> <p>The source shows <u>money on the streets being swept away by a person who is holding onto the broom walking near a crowded streets that is filled with people...</u></p> <hr/> <p>Explanation Why is this important?</p> <p>This suggests <u>WRITE YOUR ANSWER</u> that money is not worth anything anymore as there is a lot of unused money, being thrown into the drains.</p>	<p>Study Source C. How reliable is Source C as evidence about the economic situation in Germany in the early 1920s?</p> <hr/> <p>Point Answer the Question</p> <p>Source C is reliable as evidence that the economic situation in Germany in the early 1920s was <u>devastating</u>.</p> <hr/> <p>Evidence Describe the Source</p> <p>The source shows <u>a person sweeping the money with broom as it has no worth.</u></p> <hr/> <p>Explanation Why is this important?</p> <p>This suggests <u>WRITE YOUR ANSWER</u> this suggests that the economy in Germany is bad as the Weimar Government had caused the hyperinflation in Germany after world war 1</p>	<p>Study Source C. How reliable is Source C as evidence about the economic situation in Germany in the early 1920s?</p> <hr/> <p>Point Answer the Question</p> <p>Source C is reliable (ATQ) as evidence that the economic situation in Germany in the early 1920s was <u>poor</u>.</p> <hr/> <p>Evidence Describe the Source</p> <p>The source shows <u>dollar bills being swept on the streets in Germany in the early 1920s</u></p> <hr/> <p>Explanation Why is this important?</p> <p>This suggests <u>that because of amount of money which was created, money's value became very little and also caused hyperinflation soon after.</u></p>

construct their responses in real time – drafting, editing, and organizing their work collectively, much like how they would in a shared Google Doc. This format promotes student participation, as all members are able to contribute and shape their group's final product. In contrast, platforms such as Padlet, Mentimeter, or ClassPoint allow only isolated inputs from individual members. This functionality also supports teacher facilitation and instruction. As students build their responses, the teacher can view their progress in real time, placing them in a better position to check for understanding and

Notably, one distinctive feature of Whiteboard is that it allows students to move, design and annotate elements within the workspace. This affords them greater agency and opportunities in how they would like to organise and present their ideas. We will return to these features later in our discussion on how Whiteboard can be used to support activities that deepen students' historical understanding.

Whiteboard as a Platform for Conceptual Teaching

Beyond its collaborative affordances, we argue that with thoughtful planning and design, Canva Whiteboard can be a useful ed-tech tool to promote disciplinary understanding and reflection. A central objective of IBL is to help students grasp the disciplinary nature of History, especially regarding how historical knowledge is constructed, adjudicated, and contested (Afandi & Baidon, 2015). This understanding emerges most effectively when students perform tasks that mirror the work of historians, such as analysing sources, constructing arguments, and debating interpretations. However, students often approach these steps in isolation, without understanding how they might fit into the bigger picture. This is unsurprising, as performing inquiry and constructing historical claims rarely comes intuitively to students. This issue is further compounded by assessment-driven expectations, which condition students to seek fixed answers rather than approach inquiry with an open mind to consider multiple perspectives (Afandi & Baidon, 2024, p.14). In this context, it becomes essential for teachers to develop students' metacognitive awareness, helping them understand how each task fits into the broader inquiry process. However, two key challenges confront teachers: First, supporting students in navigating the stages of the inquiry process with clarity and purpose, and second, encouraging them to engage meaningfully with the tasks rather than rely on model answers.

While teacher modelling and clear instructions help, some students will still lose sight of how their earlier steps should inform subsequent stages. A well-structured Canva Whiteboard can address this by making the entire process visible throughout the enquiry. For this lesson, the whole inquiry is mapped out from top to bottom, with instructions prompting students to scroll up to refer to

their earlier interpretations (Figure 2). When students adjust the zoom level, they gain a bird's-eye view of the entire interpretive process. Such actions allow students to recognise how each task contributes to the larger process of constructing a well-supported historical argument – an understanding often lost when students undertake an inquiry spread across multiple pages in a worksheet. For this reason, the tasks are also kept deliberately bite-sized so that students can better appreciate the process and progress to the next stage with only the required information.

Given the prevailing culture of exam pressures, students might be misled into crafting formulaic responses using examination answering techniques. The usage of smaller, focused questions counters this by encouraging students to concentrate on their own thinking and interpretation. For instance, students in Step 2 are only required to identify: (1) the country that produced the source, (2) who it blames for the outbreak of the Korean War, and (3) the reasons it gives for holding its enemies responsible (Figure 4).

This provides them with enough information to make reasoned judgements in Step 3.

In Step 3, or the “exercise reasoning” stage of the inquiry, we used the Zone of Relevance to get students to decide who was most responsible for causing the Korean War using the information they gathered in Step 2. This process required each group to deliberate amongst themselves to reach a coherent position. Students then justified their rankings by forming arguments about who they saw as most and least responsible by positioning the culpability of each historical actor along a continuum of responsibility (Figure 5). Typically, each group will produce its own justification that

Figure 4. Exercising Reasoning Task in Step Two

Group 3 Source Analysis (insert names)	
<p>Source A</p> <p>Who/which country wrote this source?</p> <p>Who is this country blaming for the outbreak of the Korean War?</p> <p>According to this country, why were their enemies responsible for starting the Korean War?</p>	<p>Source B</p> <p>Who/which country wrote this source?</p> <p>Who is this country blaming for the outbreak of the Korean War?</p> <p>According to this country, why were their enemies responsible for starting the Korean War?</p>
<p>Source C</p> <p>Who/which country wrote this source?</p> <p>Who is this country blaming for the outbreak of the Korean War?</p> <p>According to this country, why were their enemies responsible for starting the Korean War?</p>	<p>Source D</p> <p>Who/which country wrote this source?</p> <p>Who is this country blaming for the outbreak of the Korean War?</p> <p>According to this country, why were their enemies responsible for starting the Korean War?</p>
<p>Source E</p> <p>Who/which country wrote this source?</p> <p>Who is this country blaming for the outbreak of the Korean War?</p> <p>According to this country, why were their enemies responsible for starting the Korean War?</p>	<p>CONFIDENTIAL</p>

ranges from superpower empowerment to “layers of causation”. Importantly, conducting the activity on the Whiteboard allows the class to view and compare each group’s selection, making the range of interpretations formed from the same set of sources visible.

The inquiry concludes with a teacher-led reflection that prompts students to recognise how historians can construct different accounts even when working with the same sources. Using the Whiteboard as a reference, the teacher can affirm students' responses and pose reflective questions that draw upon their arguments to highlight the interpretive nature of the discipline. These questions include “Were each group given the same sources?”, “How does their ranking differ from yours?”, “What is the other group’s explanation for their ranking?” and “What does this tell you about the causes of the Korean War?”. Additionally, the teacher can directly engage with students’ ideas by annotating and highlighting their work in real time. In a

typical pen-and-paper IBL setting, this level of interaction would have been impossible or unnecessarily time-consuming. It would have required students to prepare separate presentations following the inquiry to share their findings and arguments. Even then, it makes it difficult for the teacher to connect the different presentations to illuminate the interpretive nature of historical knowledge. With Whiteboard, this process becomes more efficient and integrated within the inquiry, allowing the reflective process to occur without disrupting the flow of the lesson.

This activity draws upon the visual organisers and comparative tasks that have been previously proposed to develop students’ understanding of historical causation. Chapman (2003) argues that students often struggle with causal reasoning because they bring everyday ideas into the classroom that conflict with disciplinary ways of thinking, and they are rarely given structured opportunities to weigh, relate, and prioritise causes. To address this, he proposes lesson

Figure 5. Exercising Reasoning Step

Group 3 Ranking of Causes (insert names)

WHO CAUSED THE KOREAN WAR?

- Cards for all the actors involved have been provided for you below on the left.
- Drag each card and place it on the scale of 'most responsible' to 'least responsible'.
- Explain the reasoning behind your ranking in the box provided.

North Korea

South Korea

USA

China

Soviet Union

← Least responsible
Most responsible →

Explanation

In our opinion, (insert country) was most responsible for causing the Korean War because...

In our opinion, (insert country) was least responsible for causing the Korean War because...

In our opinion, (insert countries) were slightly responsible for causing the Korean War because

activities like the “Diamond Nine” framework and the “Zone of Relevance” to help students move beyond linear, monocausal explanations and instead engage in more analytical judgements about relative significance. With Whiteboard, these activities can be seamlessly integrated into the inquiry process, allowing students to engage with historical concepts in more interactive and collaborative ways. While the core nature of the activity remains unchanged, the Whiteboard enhances its pedagogical potential by allowing students to arrange, refine and annotate their selections collectively. Crucially, it allows students to categorise and label the causes using different colours or borders - an activity that promotes comparison, evaluation and structured reasoning. Students can use text

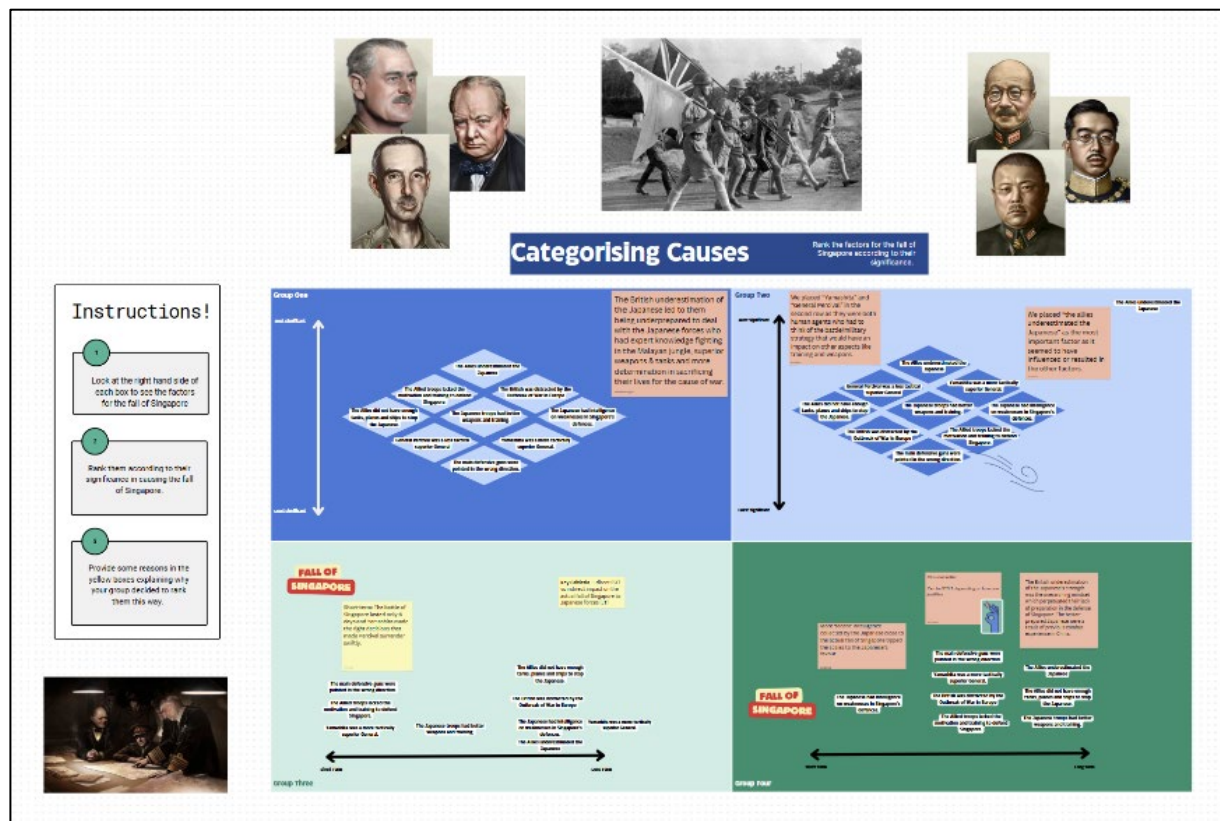
boxes to justify their selections and view their peers’ reasoning, allowing the teacher to draw upon their thoughts during the reflective stage.

As the whiteboard shares a familiar interface with other Canva tools, most students would have no problem navigating their way around the canvas. Likewise, preparing the lesson becomes less time-consuming, with the teacher simply required to create movable boxes representing various factors for students to manipulate. Importantly, such activities offer a useful and engaging way for students to consolidate their content knowledge and deepen their understanding of causation. For these reasons, digital visual organisers could be useful stand-alone activities that teachers could

incorporate in their practice outside of IBL. A sample Whiteboard activity asking students to rank the causes of the Fall of Singapore is shown in Figure 6.

This process of drawing attention to divergent responses can be applied to a wide range of other lessons covering different historical concepts. In a lesson on evidence,

Figure 6. A Sample Causation Activity for Causes of the Fall of Singapore



While evaluating factors is not formally assessed at this stage of the History curriculum, these activities serve as a valuable introduction to inter-causal reasoning for Secondary One students. To support this process, scaffolds such as sentence stems can be embedded within the Whiteboard to help students express and justify their claims. This is especially important given that many students lack the disciplinary vocabulary to explain causation clearly (Woodcock, 2005). More importantly, this activity allows the teacher to facilitate classroom discussions that build upon students ideas and interpretations, guiding them towards more complex and nuanced ways of thinking.

for instance, students can analyse sources that lend themselves to multiple interpretations, or write contrasting accounts based on different sets of sources provided to each group. Using Canva Whiteboard in this way can help reinforce the idea that History is an interpretive, argumentative discipline.

Acknowledging classroom realities — educational technologies do not make the History educator

We have thus far, in our capacity as history educators, made the case to fellow practitioners for the pedagogical benefits and opportunities that platforms like Canva hold for our classrooms. Equally, given this capacity, we would be remiss if we failed to

acknowledge the wariness educators have towards introducing such educational technologies into the history classroom. This section addresses three sites of concern which we believe contribute to this wariness — classroom management, the longevity of technology-mediated lessons and their learning with regards to assessment and the seeming tensions between such technologies and conventional pedagogies. While affirming these justified concerns, this section also offers what we hope are productive mitigating strategies and mindsets. That the winds of change are blowing firmly need not mean we get swept up by them. Our substance as history educators — our training, our knowledge, our love for the discipline, our raw instinct and discretion — still matters. We believe that this substance can, indeed, should ground us in our leveraging of educational technologies for the history classroom. With this in mind, the presence and use of educational technologies in the classroom, something we believe teachers should have autonomy over in any case, appears more feasible and, importantly, sustainable.

1. Classroom management

We acknowledge that the incorporation of educational technologies into our classrooms alters the delicate calculus of classroom management. This alteration, however, need not necessarily be viewed as threatening. If we accept that technology is a staple of the Singaporean education landscape, the question is not how to park it at the door in the interest of controlling our classrooms. Instead, we should be thinking about how best to incorporate, and indeed manage, the incorporation of these technologies without compromising our control, autonomy, and personal flair, which we educators come to and ground ourselves in through much trial and error.

While managing learners within the classroom environment constitutes our ‘bread and butter’, our experience and work as educators in establishing rules, routines, and accepted norms extend well beyond the confines of the classroom, be it in co-curricular activities, learning journeys, or our day-to-day interactions with students in the corridors. This perspective could prove productive in addressing the emergence of educational technologies. Such technologies should not be viewed as some amorphous mass that dictates our jobs. In other words, educational technologies are not an uncontrollable force that overshadows or compromises our authority as teachers. On the contrary, we educators should dictate its place in our classrooms, and our experience with managing learners across their manifold learning environments should give us confidence in doing so.

‘Teacher-talk’, establishing usage norms and guiding students through each aspect of the Canva whiteboard were ever-present considerations in our crafting of this particular technology-mediated activity. Such examples include the replication of Lesson Objectives and guiding questions to mirror and reinforce the teacher’s verbal instruction and provisioned time for the teacher to establish group norms for the activity (e.g. appropriateness of responses, no tampering with other groups’ work, accountability in providing responses). Granted, there are likely cases where such norms fail and disruptive or transgressive behaviours surface. In such instances, logical consequences would be imposed by the teacher, just as they would for any other lesson, whether technology-mediated or not.

We should also recognise the cumulative benefits of establishing such rules, norms, and routines. Just as most students become increasingly accustomed to routines of

punctuality, work submission, and behaviour, we believe it possible for students to become capable of adhering to classroom norms towards the use of educational technologies in the classroom. Establishing these norms and getting students acquainted with them holds a dual benefit. First, we expand students' understanding and familiarity with rules and routines by establishing them across varied domains. More importantly, doing so greatly increases the feasibility of, and the teacher's confidence in, utilising such technologies when the need arises. Taken together, educational technologies should be viewed as but another tool in our pedagogical repertoire, which we can and will manage, rather than something which subsumes and overshadows our autonomy.

2. Educational technologies as one mean to an end

The relative importance placed on formal summative assessments at the school or national levels is a deeply rooted reality of the Singaporean education culture and system. These assessments, in turn, are a salient and sobering factor for educators when choosing their pedagogy and pedagogical approaches. Given this landscape, the reservations educators hold towards substantially and regularly incorporating educational technologies into their teaching are understandable. So, what if we have 'cool' technology-mediated lessons? Are students actually learning? How can we be sure of that? How can we remain accountable to our stakeholders and provide evidence that we are doing our jobs? These questions are fair and justified. Having grappled with these questions ourselves, the authors believe that a technology-mediated lesson need not mean exclusive reliance on these technologies.

This technology-mediated activity incorporates several conventional

pedagogical features. Students' thinking is operationalised through the requirement of discussing and recording their group's responses in the spaces provided (Steps 2 and 3). Canva's interactive nature also allows teachers to monitor student responses in real-time and provide group-specific feedback while the activity is in progress. Additionally, it is feasible and desirable for the teacher to consolidate each activity segment before proceeding to the next, which allows misconceptions to be addressed promptly within the lesson. In this sense, time-tested pedagogical practices such as modelling, scaffolding, and checks for understanding continue to undergird the crafting and enactment of technology-mediated lessons.

Educational technologies are a platform for learning, but not the only platform — they cannot be. Instead, they should be viewed as but one means to an end, even if that end is formal summative assessment. For instance, it is certainly possible for this Canva activity to be accompanied by a hard copy handout for individual notetaking and consolidation. This ensures the longevity of this lesson's learning for the purposes of revision. Things like exit tickets remain important, where students might be directed to independently construct a paragraph in response to the lesson's inquiry question ("Who caused the Korean War"?). In the same vein, the enactment of such activities need not be mutually exclusive with frontal teaching. For instance, this Canva activity might be followed up by a consolidatory, primarily teacher-led lesson. To be clear, this is not to say that we would re-teach the chapter from scratch in subsequent lessons — this defeats the purpose of the activity and, more broadly, of incorporating educational technologies into the classroom. Rather, subsequent frontal teaching would ideally focus on consolidating learning and plugging gaps in understanding identified through this activity.

In fact, enacting such activities could help economise our teaching within already limited lesson time. For the unit on the Korean War, knowledge of key players and broad-brushed understandings of their motivations and roles in the conflict would have already been established through the Canva activity. In this way, the volume of direct content delivery can be streamlined, creating greater room for maneuver for teachers.

Such activities do not need to be enacted every lesson or every chapter. Given the varied content and concepts across the syllabus, it is unrealistic and perhaps even counterproductive to set a schedule for incorporating any type of educational technology into our schemes of work. We do, however, believe in the productively complementary role between educational technology and conventional pedagogies. In particular, we believe in the continued importance of the latter even in the realm of the former.

3. *Crafting technology-mediated activities for learners and learning*

We have explored the feasibility and benefits of enacting this Canva activity in the history classroom. This final segment looks at the constituent elements of the activity and the pedagogical considerations behind their crafting. In doing so, we hope to demonstrate how such activities, which utilise educational technologies, are not just about the ‘bells and whistles’. Beyond considerations of aesthetics and engagement, crafting student-centric and user-friendly interfaces support history learners and facilitates history teaching and learning.

The activity is scaffolded into step-by-step sections to manage the cognitive load on students. Step 1 invites students to read the

sources. Step 2 requires students to record information from the source. This rests mainly at the level of identifying and lifting material from the sources. In Step 3, students use their findings to rank various countries in order of increasing responsibility in causing the Korean War. Finally, Step 4 directs students to consider if and why their rankings differ from other groups. We see from here that Steps 1-4 were deliberately crafted and arranged in order of increasing complexity, beginning from source comprehension and working gradually towards reflective and historiographical thinking. The crafting of these gradated steps supports learners by creating cognitive momentum for them as they progress through the activity, which would likely translate into greater confidence and buy-in.

Within each step, guiding questions are explicit and straightforward. This helps keep students focused, thus mitigating potential distractions that may arise from the use of PLDs and online platforms. More importantly, these crafted questions aid in students’ source comprehension by prompting them to salient and relevant information in the source. Additionally, Step 3, which requires more complex thinking, has built-in question stems to jumpstart students’ thinking. In this way, the cognitive load of the lesson remains manageable for students. This opens space for students to be engaged in utilising this information to create their causation rankings, and in higher order thinking of why different groups might have different responses for Step 3.

More broadly, the sources chosen for this activity were deliberately similar to those which students might encounter in their source-based assessments. We also deliberately formatted the sources (text within a box with borders, source title, captions) in a similar fashion to what students

would eventually see on their question papers. These decisions were guided by the recognition that source comprehension and analysis is as much about form as it is about content. Exposing students to this format of source reading early creates familiarity and builds confidence. Thus, while this Canva activity works towards procedural understandings of causation, not explicitly tested in exams, there is room and opportunity to use such activities to expose students to components of formal summative assessment. From this, we hope to have shown that the teacher remains a crucial arbiter of the value educational technologies hold for our students. If crafted with students and their learning in mind, technology-mediated activities and lessons hold the potential to simultaneously engage students, cultivate confidence, introduce assessment components and open space for discussion and thinking of second-order historical concepts.

Conclusion

In this article, we have argued for the use of Canva in the history classroom. We first demonstrated that existing literature on education has shown the effectiveness of education technology in facilitating increased engagement in the classroom, while also enhancing the teaching of historical concepts. We then demonstrated an example of how a Canva activity might be carried out in the classroom. The activity was focused on the historical concept of causation, examining the causes of the Korean War. Through the use of Canva, students were able to peruse sources and construct their own interpretations of what caused the Korean War. We then acknowledged that the use of education technology in the classroom is not without its challenges. However, we also argued that these challenges could be mitigated through pedagogical approaches

that demonstrate the teacher's understanding of the learning gaps their students face. The flexibility of Canva is such that activities can be easily edited. For example, a teacher can adjust the level of scaffolding provided or change the modality of an exit activity designed to check for a student's understanding. The article has thus demonstrated the potential utility of Canva as an engaging yet effective tool for a history teacher to use when teaching historical concepts.

It must be noted that the recommendations in this article are not prescriptive in nature — every teacher, classroom, student, and curriculum is different — and that must also factor into a teacher's consideration when deciding how to plan their lessons. Education technology is not the only way for a history teacher to be pedagogically effective in fostering engagement or communicating historical concepts — but we believe that the addition of Canva to the history teacher's arsenal would pay dividends both for students and teachers alike. It is not enough for a teacher to simply use Canva — its use must be carefully considered and tailored to the relevant student profiles and their academic readiness. Canva is not the only answer — but we firmly believe that if implemented well, Canva can help to facilitate students' understandings of second-order historical concepts beyond a superficial level. We therefore encourage history teachers to at least consider using Canva in their lessons — a valuable addition to their teaching toolkit.

References

Afandi, S., & Baidon, M. (2015). Anxieties over Singapore students' conceptions about history and the past. *HSSE Online*, 4(2), 36–47.

Afandi, S., & Baidon, M. (2024). *Inquiry-based learning in Singapore: Challenges, constraints, and opportunities*. In *History education and historical inquiry* (pp. 1–19). Information Age Publishing.

Alam, T. M., Stoica, G. A., Sharma, K., & Özgöbek, Ö. (2025). Digital technologies in the classrooms in the last decade (2014–2023): A bibliometric analysis. *Frontiers in Education*, 10, Article 1533588. <https://doi.org/10.3389/educ.2025.1533588>

Ang, J. (2020, March 4). *Parliament: All secondary school students to have personal digital devices by 2028, \$200 Edusave top-up to support purchase*. The Straits Times. <https://www.straitstimes.com/politics/parliament-all-secondary-school-students-to-have-personal-digital-devices-by-2028-200>

Chapman, A. (2003). Camels, diamonds and counterfactuals: A model for teaching causal reasoning. *Teaching History*, (112), 46–53.

Lee, B. N. (2023). Digital tools & inquiry-based learning in history education. *Muallim Journal of Social Sciences and Humanities*, 7(4), 78–88.

Shemilt, D. (2009). The devil's locomotive. *The History Teacher*, 42(3), 289–304. <https://doi.org/10.2307/40543218>

Susilo, D. R., Wiyanarti, E., Mulyana, A., & Darmawan, W. (2025). Enhancing creative thinking in vocational high school students through digital history teaching media: The impact of Canva integration. *Al-Ishlah: Jurnal Pendidikan*, 17(1), 358–367. <https://doi.org/10.35445/alishlah.v17i1.6297>

Virgawati, D. S., Sinaga, R. M., & Istiawati, N. F. (2024). The effect of project-based learning by utilizing the Canva

application to increase the interest in learning history of class X students of Public Vocational High School 1 Seputih Agung. *International Journal of Education and Life Sciences (IJELS)*, 2(4), 249–258. <https://doi.org/10.59890/ijels.v2i4.1615>

Woodcock, J. (2005). Does the linguistic release the conceptual? Helping Year 10 to improve their causal reasoning. *Teaching History*, 119, 5–14