The Power of Conceptual Teaching in the Everyday History Classroom

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Abstract

This paper discusses practical approaches that enable students to appreciate how individual historical events connect to form meaningful patterns and relationships. Through lesson examples [i] and samples of student responses, this paper foregrounds the benefits of teaching for conceptual understanding and how it deepens historical understanding. While recognising challenges in adopting such pedagogy, the authors highlight the value of teaching conceptually as part of a four-year process and how it can be enacted through intentional lesson design to aid student understanding and cultivate a culture of inquiry in the everyday History classroom.

Introduction

Students engage well with historical narratives but sometimes find it challenging to identify connections across different time periods and events. Understanding history allows students to flexibly deploy knowledge and contextualise information when interacting with various sources such as accounts (Smets, 2024). Teaching for conceptual understanding involves guiding students through a thinking process which helps them organise historical knowledge into meaningful categories and provide opportunities for transference to a different context, which contributes to historical understanding and deeper learning.

Since 2013, the history curriculum in Singapore has foregrounded inquiry-based learning (IBL) as the key pedagogy in humanities education, while highlighting other teaching strategies [ii] such as teaching for conceptual understanding and discussion-based pedagogy. The revised 2023 Upper Secondary History (USH) syllabus reiterated the importance of IBL for humanities education, while teaching for conceptual understanding was also included as a pedagogical approach (MOE CPDD, 2023). It was featured alongside blended learning and the use of e-Pedagogy and differentiating instruction for diverse learners. The COVID-19 pandemic accelerated the need to adopt blended learning approaches and ways to leverage technology to enhance student learning. As a result, practitioners might have been torn between competing contexts and pedagogies, which resulted in challenges in actualising the curriculum. Thus, teaching for conceptual understanding may not have been featured as extensively in history classrooms as the curriculum envisioned. This is a missed opportunity as framing

learning through concepts provides students with scaffolds to make sense of a myriad of historical facts.

Concepts are mental models that are timeless, universal and abstract, with their examples sharing common attributes; concepts also provide the basis for the development of generalisations that are transferable from one context to another (Erickson, 2008, 2017). According to Erickson, traditional learning typically focuses on equipping students to acquire new knowledge and providing opportunities to demonstrate skills learnt - it assumes that if students demonstrate that they possess knowledge and skills, students have developed conceptual understanding. To bridge the gap, Erickson advocates for a three-dimensional model of learning (Refer to Figure 1) where clear learning targets also include developing conceptual knowledge (Erickson, 2014). Since IBL has been the key pedagogy for history education in Singapore for at least the past ten years and teachers are generally familiar and confident with this approach, it is timely to explore lesson designs which intentionally integrates the teaching of concepts that are explicitly positioned within the history curriculum for both Lower Secondary History (LSH) and USH with pedagogies that support IBL. Teaching for conceptual understanding guides students to use facts and skills as tools to uncover patterns and connections which lead to deeper understanding. Adopting a conceptual approach thus entails guiding students to progress from merely acquiring factual knowledge to demonstrating understanding through transferring conceptual knowledge to new situations (Stern et al., 2017). Furthermore, teaching conceptually supports the development of 21st century competencies (21CC) as students critically analyse different historical accounts and demonstrate adaptive thinking when they transfer their understanding to another situation or case study.

Figure 1. Erickson's suggestion of 3-dimensional curriculum versus a traditional 2-dimensional curriculum (Erickson, 2017, p. 8)
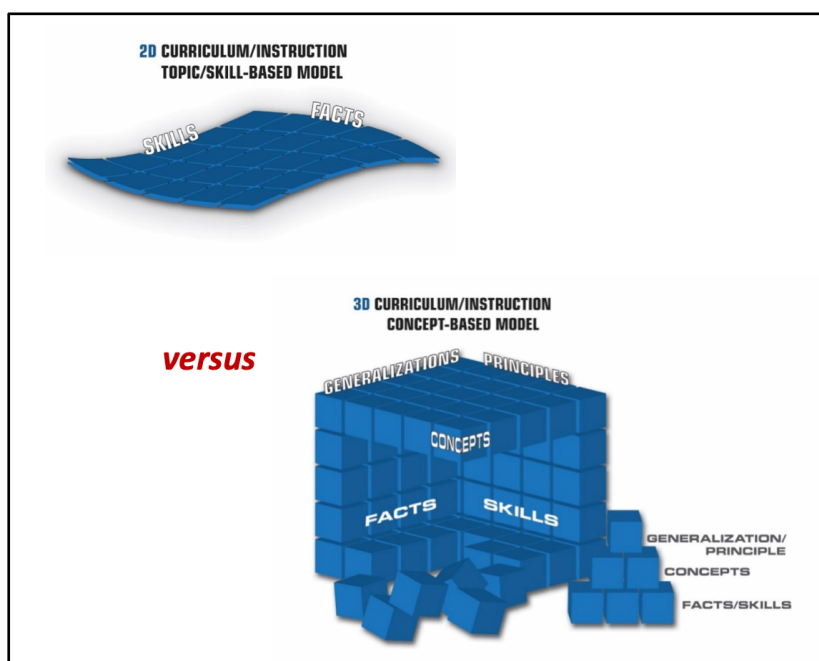
In Singapore, there are various opportunities in the history classroom to guide students' learning through the teaching of concepts. [iii] Exploring substantive concepts contributes to deeper understanding of historical concepts and teachers can layer substantive concepts with historical concepts to support IBL (Seet et al, 2022). For example, the following inquiry question "How did the actions of Superpowers escalate Cold War tensions?" consists of the historical concept of causation and substantive concepts of security and the Cold War. Through the use of guideposts (Seixas and Morton, 2013) to uncover historical concepts as well as concept definition and concept formation activities, students can be guided to make sense of concepts. The following sections will outline some of the considerations behind designing lessons for conceptual understanding and provide examples of some strategies that can be implemented in the classroom, such as the use of concept definition and concept mapping to surface critical attributes, examples and non-examples of a concept.

Considerations when Teaching for Conceptual Understanding

When developing conceptual understanding, an important consideration would be exploration of historical concepts in tandem with substantive concepts. [iv] Kitson and Husband acknowledge the importance of historical concepts in providing lenses through which the past can be viewed and recommend making it explicit in history teaching to enable students to better understand and in turn construct historical knowledge (Kitson & Husband, 2011). They also advocate that historical concepts "must continue to sit side by side with the content knowledge of history in all history curricula" so that history remains a dynamic and engaging subject (Kitson & Husband, 2011, p. 88).

Therefore, this requires conceptual lessons to be intentionally designed with clear learning targets that integrate knowledge, understandings, and skills. [v]

It is also important to promote a positive learning environment where students feel comfortable sharing their perspectives and co-creating knowledge with their peers. What would conceptual teaching look like in a history classroom? How would teachers assess whether students have developed a deep understanding of historical issues? One way to teach for conceptual understanding would be through an inductive approach, allowing students to organise historical facts and make connections through classification to "uncover" facts, and then provide opportunities for students to demonstrate conceptual understanding and "transfer" what they have learnt to new situations (Stern et al., 2017). Scaffolding is also necessary to guide students through the thinking process. One way to ensure effective student learning in a conceptual classroom is by promoting metacognition and providing more "think time" in class for students to make sense of their learning and to reflect on the learning process.

Learning can also be made more meaningful for students through the progressive development of conceptual understanding. This allows students to deepen their learning by transferring their understanding to different case studies. While there might be concerns among teachers that teaching for conceptual understanding is a time-consuming process, when students have gained conceptual understanding, they can transfer what they have learnt to a new context, which reinforces their understanding of the concept. LSH is an important starting point in the learning of history and adopting a conceptual approach which layers substantive concepts and historical

concepts helps students to organise historical knowledge and develop historical understanding. With a good foundation in conceptual understanding, students will be more confident to transfer their learning to different situations. This will be especially useful as students explore various case studies in USH. For example, the historical concept of causation and the substantive concepts of war and power are enduring and applicable across the four-year history curriculum. [vi] Given that power is about exerting control over another and it can be exemplified through political influence, military power and media control, this concept can be useful in understanding how the British and Japanese exerted control over the locals in the case study of Singapore in LSH. Similarly, the concept is also meaningful in helping students understand authoritarian regimes such as Nazi Germany and in the case study of militarist Japan where leaders had strong political influence over the people. Another example would be the substantive concept of war which is seen in LSH when students learn about the Battle of Singapore and the Japanese Occupation; and in USH when students learn about the Outbreak of The Second World War, The Cold War and its various case studies involving conflict such as The Korean War and The Vietnam War.

Teachers might also face challenges in making the shift towards teaching conceptually and convincing colleagues to explore innovative teaching approaches instead of tried-and-tested methods since there is no real impetus to deviate from existing practices that have proven successful for student learning. Open classroom is a good platform to allow colleagues to observe what conceptual teaching looks like. When our colleagues observed that students were engaged and able to articulate their understanding of historical knowledge, they were keen to experiment with teaching conceptually.

Teaching for conceptual understanding requires intentionality in lesson planning and consistent opportunities to be involved in concept definition, concept formation and transferring their conceptual understanding to another case study. One way to start would be through the use of strategies that are easy to enact, for example the use of word splash and concept mapping. Furthermore, Fisher, Frey, and Hattie's (2016) meta-analysis of the impact of various instructional approaches provide insights on factors that have a greater impact on student learning. For instance, concept mapping has an effect size [vii] of 0.60, while organising conceptual knowledge and transforming conceptual knowledge both have effect sizes of 0.85, which support the efficacy of teaching for conceptual understanding (Fisher, Frey & Hattie, 2016, pp. 80, 115, 122).

Another consideration when teaching conceptually is to address student perception of effective ways to learn. Some students perceive that knowledge from the teacher is superior and prefer direct instruction, as compared to collaborative learning or inquiry-based approaches (Kozanitis & Lucian, 2022). To circumvent the issue, we made conscious efforts to share the benefits of peer learning with students. [viii] Aside from actively involving students in the learning process, one essential consideration is explaining to students how developing conceptual understanding contributes to deeper learning, helps them appreciate what they are learning, and how it can be applied in class and beyond. Teaching for conceptual understanding promotes student agency in learning with greater opportunities for students to develop critical thinking skills. Lessons that are underpinned by conceptual teaching have shown to engage students meaningfully in the classroom by promoting higher order thinking skills and increased engagement together with student

ownership of learning (Romey, 2021). When students are consistently exposed to learning experiences that provide them with opportunities for cognitive engagement, they are more likely to develop confidence in sharing their perspectives and challenge themselves to think more critically about issues. Another key feature of conceptual teaching is providing students with opportunities to transfer their understanding to another context and the ability to understand different perspectives and transfer what they have learnt to another case study or scenario is a positive outcome of conceptual teaching.

Through lesson examples which the team conceptualised, this paper will show how different groups of learners [ix] across different history classrooms in Singapore experienced conceptual teaching. The following section will exemplify three approaches to teach for conceptual understanding: concept definition, concept formation and providing opportunities for transfer. Furthermore, this paper will use authentic student artefacts to exemplify how conceptual teaching enables students to deepen historical understanding.

Approaches to Teaching for Conceptual Understanding

1. *Concept Definition*

One way to teach conceptually is to guide students in the identification and definition of a concept that is relevant to the syllabus. An effective strategy for concept definition is a word splash, where students identify traits and characteristics of the concept and highlight the timeless and universal characteristics of a given concept across contexts. It can also involve the use of analogies and examples to illustrate the concept.

When facilitating a conceptual lesson

for LSH[x], a team of teachers from the LSH NLC decided to focus on the historical concept of causation, as they noted that the concept would provide students with the opportunity to transfer their learning to other topics they may encounter in the history curriculum. Activating prior knowledge helped students to connect new knowledge with existing knowledge to aid understanding. To introduce the historical concept of causation, students were asked the following questions in order to determine their current level of understanding about causation. Thereafter, teachers refined this understanding and introduced the idea of trigger, contributory and underlying causes.

● What do you understand about causes?

● How can the concept of causation help us better understand history?[xi]

A real-world example was then utilised to help students understand the historical concept of causation using a familiar setting. Through the example of a fictitious classmate Peter who was unwell, students discussed different reasons that led to his condition (Refer to Annex A).

Students were then introduced to the story "What Caused the Death of Alphonse the Camel?" (Chapman, 2003) and explored three types of causes behind his death - trigger factors, underlying factors, and contributory factors. To check for student understanding of the concept of causation, students completed formative assessment tasks[xii] hosted on the Singapore Student Learning Space (SLS). [xiii] Thereafter, students provided explanations for the different causes of the Anti-National Service riots and their responses demonstrated conceptual understanding of causation (Refer to Table 2). Historical facts remain an important part of the

narrative[xiv] and it is essential that students have a good grasp of historical facts. To ensure that each lesson helps students to build conceptual understanding, frequent checks for understanding are also necessary to ensure students have the opportunity to refine their understanding before transferring knowledge to another situation.

Table 2. Student responses grouped according to three types of reasons for the Anti National Service Riots

Type of Causes	Causes	This caused the Anti-National Service Riots because…
Underlying	● Unhappiness with the British ● Anti-colonial feelings	It bred doubts towards the British as people no longer believed that the British were the rightful and only possible ruler of Singapore. Consequently, the people no longer had reverence for the British. This resulted in the people questioning the decisions of the British as they were more willing to make their demands and feelings heard.
Contributory	● Felt that the British discriminated against Chinese education while favouring English-medium schools ● Education already disrupted by the Japanese Occupation	It aggravated the unhappiness people had towards the British as it further confirmed their belief that the British only cared for themselves and not for the people in Singapore.
Trigger	National Service Ordinance was passed in 1953	It triggered feelings of dissatisfaction with the British and motivated them to riot against the British to fight for their rights.

Concept definition can also be used for substantive concepts. Choosing concepts that are applicable across various case studies and topics can provide opportunities for students to identify and appreciate connections instead of viewing historical events in isolation, as we shall see in the following example that explored reasons that contributed to the end of the Cold War. [xv] The choice of two historical concepts, causation and chronology were consciously layered with the substantive concepts of tensions and rivalry, and provided useful conceptual lenses to understand the later years of the Cold War. The lesson was designed to allow students to first explore the rivalry between the United States of America (USA) and the Soviet Union through four tension points - seen as points of tension that had a significant impact on the USA-USSR rivalry - between the 1960s and the

1980s.[xvi] Through a group activity, students focused on the following Cold War developments and their influence on tensions between the USA and USSR - the Brezhnev Doctrine, the Soviet invasion of Afghanistan, the Strategic Defense Initiative, and Gorbachev's reforms. As students required factual knowledge of specific historical circumstances to effectively contextualise tensions and rivalry, the support of concrete details and examples helped students to grasp these concepts (Smets, 2024). Historical facts were presented in either video form or short articles (Refer to Figure 3) through the use of Padlet, with guiding questions to scaffold the thinking process (Refer to Figure 4).[xvii]

To further scaffold their thinking, students were provided with a timeline of events related to the Cold War that took place between the 1960s to 1991. Next, causation was introduced as a historical concept that would be repeated as these tension points acted as multiple causes that resulted in various consequences on the Soviet Union's strength, which ultimately led to the end of the Cold War (Seixas and Morton, 2013). Students were also guided to appreciate the sequence of events that led to the development of these tension points between 1968 and 1991, which formed the connection between historical patterns and developments.

Figure 3. Use of Padlet for students to learn about key events linked to the dissolution of the Soviet Union
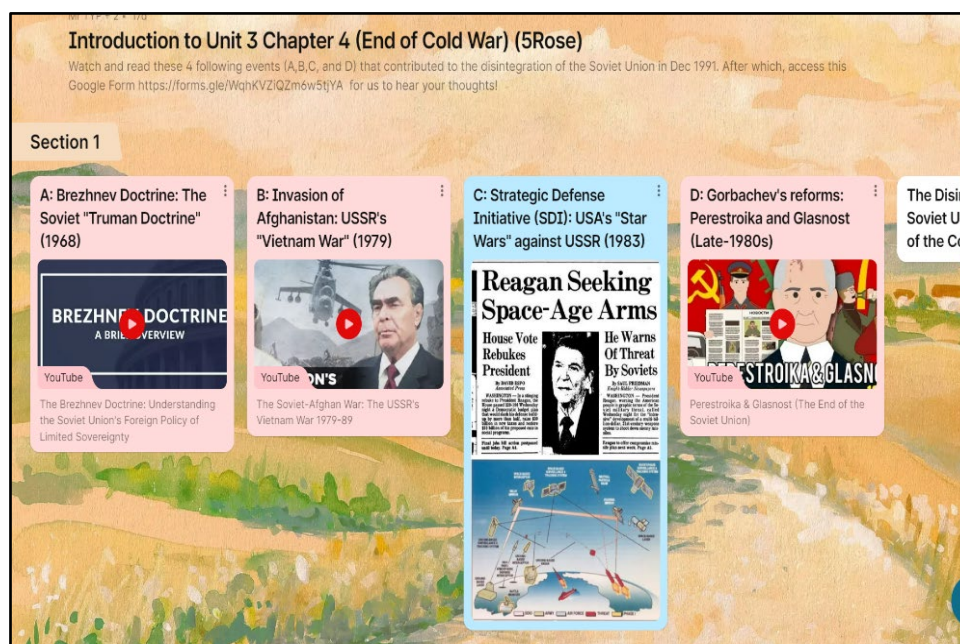
Figure 4. Use of Padlet to provide students with guiding questions to uncover the concept of "tension points"
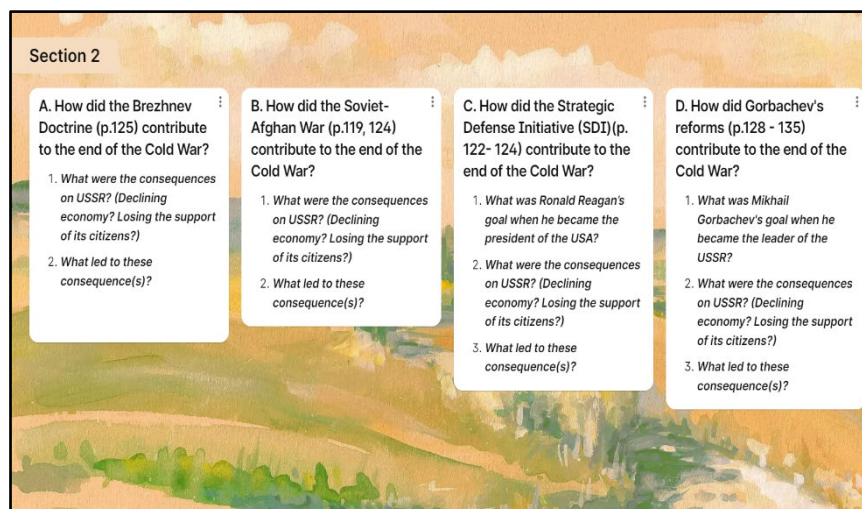
Through the group responses, it was evident that students attempted to conclude how each of these individual tension points had an impact on the Soviet Union, such as a detrimental economic impact or a loss of public support. Furthermore, some responses showed that students were able to identify the connections between the different tension points rather than seeing them as isolated events (Refer to Figure 5). Teaching conceptually thus helped students to appreciate how the series of events collectively contributed to the dissolution of the Soviet Union. Overall, this lesson activity was effective for students to identify patterns across different historical events and enhance their historical understanding.[xviii]

Figure 5. Group responses from students that demonstrated their understanding of the substantive concepts of tension and rivalry, and the historical concept of causation

2. *Concept Formation*

Another approach to conceptual teaching is concept formation. Concept formation is an initial stage in conceptual thinking, consisting of differentiating, categorising, and labelling examples and non-examples to develop an understanding of a concept (Gagne, 1965; Taba, 1965, as cited in Marshall & French, 2018). After students have defined and identified the traits of a concept, big ideas that capture the essence of the topic can be introduced as organising frames to guide student understanding across different case studies.[xix] Grant and VanSledright (2006, as cited in Grant & Gradwell, 2010, p. 3) defined a big idea as a question or generalisation that helps teachers focus on what to teach and ways to organise it into "meaty, complex issues that are open to multiple perspectives and interpretations". The following lesson idea will demonstrate how common traits and examples can be derived from substantive and historical concepts either through a word splash activity or the use of case studies that reveal features of the concept.

Conceptual teaching requires intentionality and activities can be seen as building blocks for students to progressively gain historical knowledge and conceptual understanding. For example, as part of the topic of decolonisation in Southeast Asia after The Second World War, a key consideration in lesson design was to explicitly layer the substantive concept of decolonisation with the historical concept of change and continuity to help students view decolonisation as a process with varying stages of development in different parts of the world.[xx]

While concept formation can be achieved through either the deductive or inductive approach, [xxi] the example cited will focus on the inductive approach. An inductive approach was selected for this phase of the lesson because the concept of decolonisation was seen to be complex and thus the intention was for students to be active participants of learning and collectively co-construct knowledge. Over a series of six lessons, students activated their prior knowledge for both substantive and historical concepts, which allowed them to identify connections across topics and contexts and deepen historical understanding.

One strategy that was used to facilitate the process of concept formation was concept mapping and effective questioning.[xxii] For example, the concept formation process started with a word splash activity to identify and classify traits of the substantive concepts of decolonisation, anti-colonialism and nationalism, and explain how the concepts

are interlinked. Some examples of effective guiding questions that students were posed during the class activity are as follows: "What does it look like?", "What does a 'nation' even mean? What do people in a nation have in common?", "Is it possible to be anti-colonial without being nationalistic?". This was a useful activity for students to activate prior knowledge and make connections between topics. [xxiii] Thereafter, students had a choice of responding to either "What would allow colonial rule to persist?" or "What would allow colonial rule to end?". Their responses collectively indicate

understanding of the necessary conditions for decolonisation, such as nationalism and political consciousness, local grievances, loss of credibility of colonial masters, and viable local leadership (Refer to Figure 6). Using these student responses (Refer to Figure 7), the teacher facilitated a class discussion and co-constructed the first big idea for the topic:

● Big Idea One: Decolonisation tends to occur with the rise of nationalist sentiments and when colonial master lose interest in their colonies

Figure 6. Samples of student responses during the process of co-constructing Big Idea One

Figure 7. Samples of student responses during the process of co-constructing Big Idea One

To facilitate concept formation of the historical concept of change and continuity, students engaged in a class discussion on examples they previously encountered, such as the bombing of Pearl Harbor and the Tet Offensive. These examples provided the historical context for students to explore the concept of turning points, which is defined as "moments when the process of change shifts in direction or pace" (Seixas and Morton, 2013) and this was used to guide the second big idea for the topic:

● Big Idea Two: Change and continuity can exist together; "turning points are moments where the process of change shifts in direction or pace" (Seixas and Morton, 2013).

An important consideration in concept formation is to ensure that students have a clear understanding of the concepts before providing opportunities for transfer to another context. For the lesson example shown above, students were asked to consider whether different events that took place in Malaya before World War II could be viewed as turning points and the following inquiry question was introduced

to guide the class discussion: "Which was a bigger turning point for Malayan independence: World War Two or the Malayan Union proposal?". To focus students on the historical concept of change and continuity, and to aid them in drawing comparisons, students worked in groups to explore whether the two historical events helped and/ or hindered independence. When discussing the idea of turning points, students evaluated the degree of change by adding qualifiers of their own, such as "temporarily hindered", "helped a lot/ a little", "helped in the long run", which proved their growing understanding of change as a process (Refer to Figure 8). In subsequent lessons, the same conceptual lens was used when teaching about post-1948 developments such as the Malayan Emergency and the formation of the Alliance Party. To check for understanding, students applied their learning by completing an essay on decolonisation in Malaya at the end of the unit. Many responses demonstrated a strong conceptual understanding, as evidenced by the use of language such as "root cause" and "catalyst," which signified their interaction and engagement with historical concepts (Refer to Annex B).

Figure 8. Sample of student responses which demonstrated their ability to see change as a process and co-existing with continuity, and thus the challenge of identifying turning points

Overarching Inquiry: Which was a bigger turning point in Malaya's road to independence: WW2 or the Malayan Union proposal?	
Role of WW2 - did it help or hinder independence? Why so?	**Role of Malayan Union proposal - did it help or hinder independence? Why so?**
World War 2 <mark>helped</mark> independence <mark>a lot</mark> in terms of fostering greater anti-colonial sentiments. • Damage to British prestige (swift surrender the Japanese) and hence dispelled ideas of White Man superiority • Japanese propaganda was anti-Western, making Asians in Malaya more critical to colonial rulers • Economic hardships of the Japanese Occupation also fostered resentment again the British for failing to protect Malaya WW2 <mark>temporarily hindered</mark> independence as it led to the British wanting to hang on to the profitable colonies like Malaya • WW2 bankrupted Britain. Britain thus needed resources of Malaya to aid its own recovery • Led British to create the Malayan Union to bring Malaya under a central government and direct rule (i.e. British were kept in power and colonial rule resumed with no timeline set for independence)	The MU proposal <mark>helped significantly in trigger</mark> nationalist movement throughout Malaya, <mark>but i still largely divided along ethnic lines.</mark> It height political activity amongst ALL communities in to fight for/against the Malayan Union propos However, the MU proposal deepened inter-ethnic tensions, thus posing an <mark>obstacle</mark> to Malayan unity and hence independence • Non-Malays supported MU while Malays objected to MU • The British's counter-proposal of the Federation of Malaya was to appease the Malays, yet it had the opposite effect of undermining the interests of other groups MU proposal <mark>helped</mark> independence <mark>significantly</mark> in terms of creating more political parties that could speak up for the people and vie for power (i.e. mor options for the British to transfer power to)

3. *Providing Opportunities for Transfer*

An essential feature of conceptual teaching is the opportunity for transference to another context. Teaching for conceptual understanding can be summarised in two processes: "uncover" and "transfer" (Stern et al., 2017). After students have uncovered the meaning of the concepts, an important way to know if they have acquired conceptual understanding is based on their ability to transfer what they have learnt about the concept, to another context.

One way to ensure meaningful transfer starts with thoughtful selection of concepts that are pervasive across the syllabus. For example, during the design phase of the lesson idea which focused on examples from the USH syllabus, a key objective of the lesson was identified: at the end of the lesson, students should understand the forces that led to decolonisation in Southeast Asia after World War II. Cognisant that students perceived the unit to be challenging due to the multitude of actors, policies and events, while recognising the opportunities for transference of concepts as students needed to grapple with at least two case studies,[xxiv] this unit was identified as a meaningful case study to be taught conceptually with the potential for organising frames to scaffold

student learning.

Students were given various opportunities to transfer their learning to another situation. For example, with reference to the historical concept of change and continuity and the two big ideas for the substantive concept of decolonisation; there were opportunities to transfer their understanding of the big idea to another case study within the unit. At the end of the series of six lessons, students proved adept at grasping Big Idea One. For example, students postulated that decolonisation would occur due to factors such as the rise of communism, western education, and the weakening of Britain due to The Second World War. They also noted that anti-colonial sentiments would more likely emerge from grievances or unmet needs, or due to dwindling benefits of colonial rule. Collectively, they constructed an understanding of why decolonisation occurred. Their responses showed that they had made connections to what they learnt about British rule in Secondary Three, such as the inherently exploitative nature of colonialism and its impact on local sentiments. With this conceptual understanding of the topic, students were able to transfer what they learnt from the case study of Malaya to the case study of Indonesia. For example, the ideas that students gleaned about the concept of decolonisation from the case study of Malaya, in particular the big ideas and traits of the concept, were applicable in the case study of Indonesia. Students were able to draw connections across the case studies and it helped them to concretise and reinforce their learning.

Transfer can take place within a unit across lessons, or it can also take place within a lesson. For example, in the LSH example mentioned earlier, students had various opportunities to transfer their understanding of the historical concept of causation. Having defined the concept through the story of Alphonse the Camel, students proceeded to apply their understanding of the three types of causes - trigger, contributory and underlying - to the case study of the Anti- National Service Riots of 1954. Students were provided with a variety of sources such as political cartoons, written accounts and archival photos related to the event, and the group activity involved identifying and classifying reasons for the riots. Finally, students were tasked to decide which was the most important reason that contributed to the Anti-National Service Riots in 1954 and to provide an explanation that was supported with historical facts to justify their thinking. Student responses showed they understood the concept of causation and they were able to apply it to a historical event (Refer to Annex C). In addition, conceptual understanding gleaned from the historical concept of causation could also be transferred to another case study present in LSH, specifically the inquiry focus on reasons for the introduction of National Service.[xxv] More opportunities for transfer of learning facilitates deeper learning and increases historical understanding.

Conclusion

This paper explored three approaches for conceptual teaching with strategies that are easy to implement, promote student agency and develop critical and adaptive thinking. Teaching for conceptual understanding enables students to appreciate connections across what they are learning and contributes to deeper historical understanding. Intentional identification of historical concepts and substantive concepts support student understanding across a four-year curriculum, enabling students to see continuity in learning and develop progressive understanding of concepts.

Our students' ability to transfer their understanding of concepts demonstrated the effectiveness of teaching for conceptual understanding. The development in their thinking process was particularly evident when they were taught using a conceptual approach from Secondary One to Secondary Four. While students were initially guided through the process of concept mapping and concept formation, they later gained confidence and the ability to independently organise their thinking and classify information into meaningful groups, and they were also able to derive big ideas of topics and apply their understanding to different case studies.

In an increasingly complex world, students will be overly exposed to information from multiple perspectives. They will need to navigate the Artificial Intelligence landscapes that are capable of generating content within a very short period of time or unverified information based on populist views on the internet. Teaching for conceptual understanding helps promote higher-order thinking skills when students have to analyse, synthesise and generalise information, rather than recall facts. Through this practice of analysing, synthesising and generalising, students will be more ready for the future when they have the skills to critically examine global issues.

Through the lesson ideas shared in this paper, it is clear that the cognitive engagement of students is present with increased student agency in the learning process. This builds confidence in students which are important in the increasingly complex, social media influenced world, where populist views dominate social media. Providing opportunities for students to exercise their voice in the classroom and deliberate about their opinions about various topics. Such opportunities will enable students to understand perspectives from others and for them to see if their personal opinions can stand up to scrutiny. To quote Sam Wineburg, "teaching students to separate fact from fiction by reading textbook narratives purged of ambiguity is akin to preparing a swimmer who's never ventured outside a wading pool to navigate the torrents of a raging sea" (Wineburg, 2018, p. 6). Students must be given the opportunity to counter the complexity of the outside world with scaffolds, so that they are ready for it. Conceptual teaching can be the scaffolds that students need to navigate these complexities.

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[i] The lesson ideas featured in this article were shared at the 2024 CPDD History Symposium and 2025 AST Teacher-Led Workshop: A Snapshot into the Everyday History Classroom - Developing Learning through Conceptual Lenses, as part of the collaboration between the Concept-Based Learning Network Learning Community and Lower Secondary History (LSH) Network Learning Community (NLC).

[ii] In addition, the 2013 Upper Secondary History (USH) Teaching and Learning Guide (TLG) also featured the following strategies to develop historical understanding: using sources and role play, cooperative learning, structured academic controversy (SAC), Socratic Seminar and historical inquiry field trips.

[iii] Within the LSH curriculum, Historical Investigation (HI) provides students with the opportunity to draw connections between substantive and historical concepts through engaging in research, inquiring into historical narratives and demonstrating conceptual understanding through interaction with sources and accounts.

[iv] Substantive concepts refer to knowledge relevant to the subject matter, for example conflict and rivalry; while historical concepts refer to how historical knowledge is constructed, such as causation and significance.

[v] Learning targets should include outcomes related to both substantive and historical concepts, and student's understanding and ability to apply their learning of knowledge and skills gained through the lessons. For example, the learning targets for the LSH lesson example featured are as follows: students will be able to explain the causes of the Anti-National Service Riots; and categorise different reasons for the riots into underlying, trigger and contributory causes.

[vi] A useful starting point would be to take reference to concepts listed in the MOE syllabus document. For example, "war" is listed as a key concept on page 21 of the LSH Teaching and Learning Syllabus (TLS). Although it is not listed in the USH TLG, the concept of "war" is a useful conceptual lens in the study of USH, especially for topics such as the Outbreak of War in Europe and the Asia Pacific, and The Cold War. Similarly, our team felt that the traits of power were applicable across the LSH and USH syllabus and chose to anchor conceptual understanding on the concept of power. For teachers who are well-versed with teaching for conceptual understanding, and clear with the syllabus outcomes, our team feels that there is some leeway to introduce substantive concepts that are enduring and aid students' understanding across different case studies.

[vii] An effect size between 0.4 to 1.2 on the barometer of influence is considered high in the zone of desired effects.

[viii] First, we were intentional in clarifying misconceptions within smaller groups; and second, we also reiterated key ideas shared by students. These efforts reassured students that historical knowledge and ideas shared by their peers had been curated and were equal if not better than direct instruction.

[ix] The lesson ideas featured in this paper were enacted in the G2 and G3 history classroom for Lower Secondary and Upper Secondary Humanities (History); and in the G3 History classroom.

[x] A 3-step process was used to deliver the lesson. First, the teacher related the concept of

causation to the real-world context; second, the teacher used formative assessment strategies to check for students' understanding of the concept; and third, students were asked to apply their understanding of the concept to a historical event.

xi Some student responses include "the reason why something is happening" and "something that triggers another effect or chain that will eventually lead to something".

xii One affordance of technology is the provision of almost immediate feedback to clarify misconceptions. Technology can also be leveraged to support differentiated instruction - in the LSH lesson example, students were directed to tasks of varying difficulty based on their scores from the assessment task.

xiii Learning resources were hosted in the Singapore Student Learning Space (SLS) and the SLS Lesson Package was used as an in-class teaching resource.

xiv Students were given time in class to read through the case studies of riots in Chapter 7 "How Did the People in Singapore Respond to British Rule After World War II?". The teacher then summarised key ideas before proceeding with the lesson that focused on Alphonse the Camel.

xv The learning targets for the lesson example are as follows: students will be able to explain the role of historical actors (e.g. USA, USSR) in contributing to the end of the Cold War; and explain how different factors led to the end of the Cold War.

xvi The lesson package was carried out over two lessons to allow students time to make sense of what they had learnt and to prevent cognitive overload. During the first lesson, students were introduced to the above-mentioned substantive concepts and historical concepts. The second lesson involved students working in groups and collaboratively contributing perspectives about how the tension points contributed to the end of the Cold War. To consolidate learning, the teacher facilitated a class discussion, using students' responses to co-create conclusions.

xvii Teaching for conceptual understanding also supports blended learning which was consciously incorporated in the lesson package. For instance, students were tasked to analyse media resources as part of asynchronous learning before the synchronous class discussion.

xviii This lesson activity helped students conceptualise the dissolution of the Soviet Union as a sequential flow of escalating tensions between the USA and Soviet Union, while recognising other reasons that shaped the trajectory of the Soviet Union's collapse, such as the weaknesses of the Soviet economy and the impact of Gorbachev's reforms.

xix A big idea is a statement that generally consists of two or more concepts.

xx The learning targets for the lesson example are as follows: students will be able to evaluate the role of different factors in contributing to the end of colonial rule in Malaya; and appreciate decolonisation as a complex process where change and continuity can coexist.

xxi Deciding between adopting a deductive or inductive approach depends on students' level of readiness and the complexity of the concept. Rachel French listed deductive and inductive approaches as concept formation strategies and suggested that a deductive approach might be more time efficient for concepts with clear definitions and a range of examples and non-examples (Marschall & French, 2018, p. 109). The 2013 USH TLG (MOE 2013, pp. 119-121) also featured the use of deductive and inductive approaches when teaching for conceptual understanding.

xxii Concept mapping is a useful strategy to elicit student responses and it can be paired with open-ended questions that promote thinking and encourage students to make connections to prior knowledge. Some useful thinking routines can be found on Harvard's Project Zero website https://pz.harvard.edu/thinking-routines

[xxiii] Students used their prior knowledge of Singapore's independence and colonial rule in Malaya from their study of history in Secondary two and Secondary three respectively, to postulate conditions that would allow colonial rule to come to an end or to be sustained.

[xxiv] Students have a choice of focusing on the case studies of Malaya and Indonesia or Vietnam.

[xxv] Chapter 9 "How Did Singapore Safeguard Its Independence after 1965?"