

Developing Conceptual Understanding in Social Studies Using Technology and Discussion

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Introduction

Social studies concepts are tools for understanding our experience, the past, and the social world. They are broad, organizing ideas that can be expressed in one or two words and they are defined by key characteristics or attributes. They help us think about groups of actions, people, phenomena, issues, or relationships in the social world and can be applied to make sense of new situations and information that we encounter in our experience. Concepts help us learn by organizing new information and experience into mental constructs or schema. In social studies, concepts like trade-offs, identity, integration, and interdependence serve these purposes.

Important concepts that structure Issue One in Singapore's new Social Studies syllabus include citizenship, trade-offs and governance. For example, to understand the concept of governance students are expected to understand the functions of governments, such as rule-making (i.e., laws) and the role of government in working for the good of society by maintaining order and ensuring justice (with each – the social good, order, and governance – also core social studies concepts necessary for students to understand). By understanding that governance consists of these common

attributes – rule making, maintaining order and ensuring justice – no matter which society or government they are examining, students will be better positioned to think about governance, how different governments function, and analyze the role of government in making laws, maintaining order, and ensuring justice. They will be better able to think about the role that government plays in their own experience, the laws that affect them as young people, and what various levels of government do to help provide order and fairness in their community and even at school.

In this article, we share the experience of one Secondary Social Studies teacher, Michelle, in having her students investigate the question of whether or not the Singapore government has done enough to ensure progress in Singapore. Although initially taught prior to the introduction of the new syllabus, we believe it serves as an example of a Social Studies lesson focused on conceptual understanding. To understand the concept of governance and the role of the government in society, she asked them to consider another core social studies concept – progress. The concept of progress is central to the discipline of sociology. It is essential for understanding contemporary society and in developmentally-minded Singapore, the

notion of progress is central to thinking about governance and the effects of government policy to support personal well-being, social improvement and economic growth. As the sociologist Robert Nisbet (1980) argued, “no single idea has been more important than...the idea of progress” (p. 4). The [Social Progress Index](#) provides several attributes that might help teachers and students consider different facets of social progress, such as well-being (e.g., healthcare, housing, social connection, etc.), whether or not basic human needs are met in society (e.g., clean air and water, safety and security, etc.), and opportunity (e.g., social mobility, inclusion, economic opportunity, etc.). In determining whether government policies had “done enough,” students might consider the extent to which they think policy adequately promoted these aspects of social progress.

We outline Michelle’s lesson in having students consider different attributes of progress by examining different perspectives through source work, class discussion, and the use of technology. After providing this short lesson vignette, we conclude by highlighting Michelle’s takeaways from the lesson and the shift in her thinking about teaching Social Studies.

The lesson

Michelle designed the lesson with a question that she thought would be provocative for students: “The Singapore government has done enough to ensure progress. How far do you agree?” The question would also enable students to consider a range of government policies, such as housing policy, population policy, and economic policy. She started by having her students work in groups to discuss the question. She had them analyze various components of the question by asking:

- What is progress?
- How do we measure “done enough”?
- What is the Singapore government?
- Why is this question important?

After the groups discussed these questions, Michelle then facilitated a whole class discussion to have students share their thinking and to identify some of the key ideas students had raised.

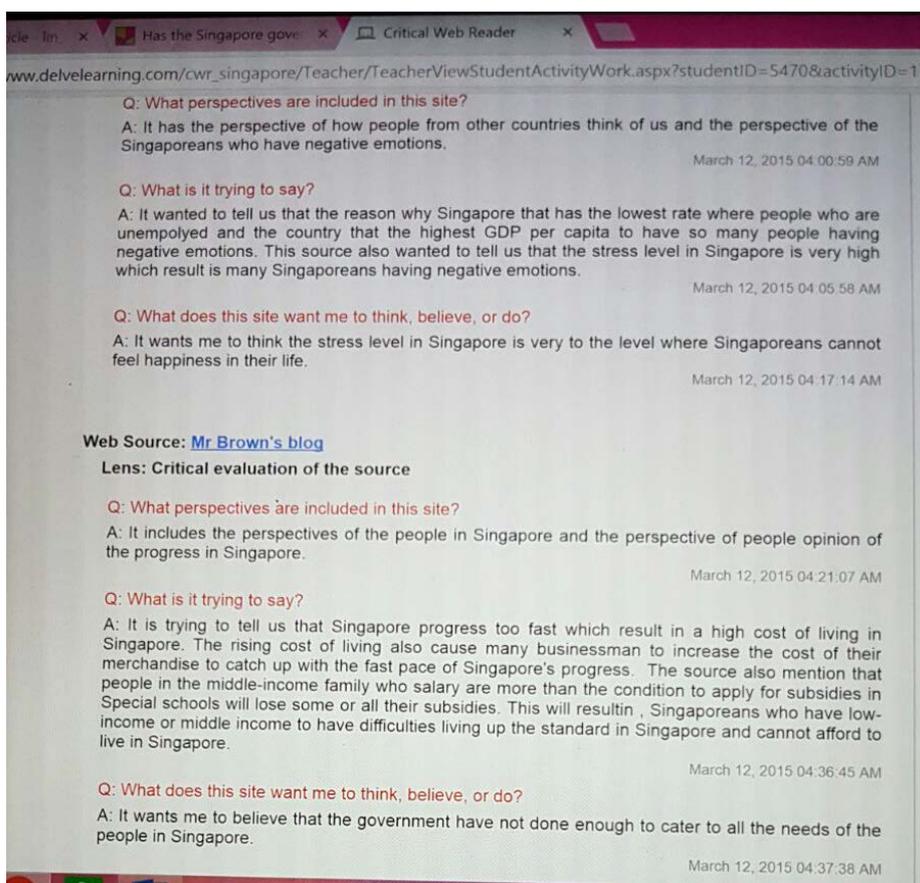
To guide students in doing this work, Michelle facilitated small group discussions and the large group discussion to ensure that a range of responses and viewpoints were shared. In considering the concept of progress, what constitutes the Singapore government and the idea of “good enough,” Michelle emphasized common attributes that students had identified for each of these key ideas. She also pointed out examples of what might constitute progress and specific actions or efforts by the government to bring about progress that the students shared during group discussions. This first stage of the lesson is crucial for concept development because it allowed students to share initial ideas about progress and what governments can do to bring about progress. Having students consider whether or not the government has “done enough” is also important because it required students to exercise their reasoning and make a judgment about government policies. Consolidating students’ ideas, as Michelle did in large group discussion, is also a critical aspect of the lesson so that students would begin with a set of common attributes for the concept of progress as well as an initial set of criteria to determine “done enough.”

Sources can also be utilized to help students identify critical attributes of concepts as well as provide varied examples that students can refer to in order

to develop their understanding. Michelle's class used an online tool, the [Critical Web Reader](#) (CWR), to expose students to a broader range of views about the Singapore government's policies (see Figure 1 photo of student work in the CWR). For example, to answer the question of whether the Singapore government has done enough to ensure progress in Singapore, the class read an [article](#) reporting that Singaporeans were the least likely worldwide to report feeling positive emotions, a [RazorTV YouTube video](#) where people shared different views on how livable Singapore is, and a [BBC](#)

[video](#) on Singapore's hidden poverty problem. The students were asked to carefully examine the sources and "infer the reaction/perception of the Singapore government presented" and the reasons for these reactions and perceptions. The purpose of the activity was two-fold: to develop students' source-based skills, such as the evaluation of source reliability, and to have students consider different perspectives related to the overarching question. Michelle made students' thinking visible by sharing students' responses in the CWR on the overhead projector (See Figure 1 below).

Figure 1. Student work in the *Critical Web Reader* shared on projector in class.



After Michelle's students had an opportunity to consider different perspectives, they were then asked to make their thinking visible to the whole class by using the online bulletin board [Padlet](#). *Padlet* allows teachers and students to share their thinking on a social wall, collaborate, share links or other resources, and reflect on their own and others' thinking. Students can respond to each other's ideas and the teacher can also give feedback on student thinking. Teachers can easily create a *Padlet* wall for students to post their ideas and respond to others' ideas that are posted. Students can also share other sources for their classmates to consider. Teachers are able to organize students' ideas by grouping similar ideas

together. Michelle utilized these several functions of *Padlet* to create a wall where her students could apply what they had learned thus far in the lesson to answer the overarching question about whether the government had done enough to ensure progress. To develop their ideas, students were directed to refer to class discussion and draw on evidence from the sources they read in the *Critical Web Reader*. She requested students to do further research on the issue, to share their response to the question with supporting evidence from online sources, and to share links to sources they thought especially supported their views. (See Figure 2 photos of *Padlet* wall below.)

Figure 2. Photos of students' work shared on the *Padlet* wall.

Student A

I think that the Singapore government has done enough to achieve progress in Singapore

evidences:

By 2030, about 19% of s'pore population will be above 65 years old.Challenge would be to ensure that these people remain contributing members of society.

S'pore gov has and is able to make decisions in anticipation of future challenges

As Singapore is facing an ageing population(like many other developed countries has faced),the government have to meet the challenges of an ageing population by

being able to manage s'pore resources to provide a **stable ans secure environment** for citizens so that its quality of life can improve .

implemented laws and introduced measures to protect the interest of senior citizens(gov support) as they could no longer work & had to depend on their family & savings.

Examples:

Public Housing Schemes

1)First time buyers of HDB flats can get a housing grant if they buy a flat in the area where their parents live.

CPF(CENTRAL PROVIDENT FUND)

Savings in special account are for retirement,emergency and investment purposes.Money from medisave can be used for medical expenses.

CPF members can withdraw savings at 55 years old but have to leave a minimum sum in their retirement account

above age of 62,CPF members receive a monthly sum from their Retirement account.

Ensuring senior citizens have enough money for old age.

Link:

Thus S'pore gov has done enough to ensure progress in s'pore anticipating change and stay relavant.

Student B

I think that the Singapore government has not done enough to ensure progress in Singapore

Evidences: High standard of living, Sandwich class

The sandwich class refers to the middle income family in Singapore. Due to the high living standard in Singapore, people in the sandwich class cannot afford some of the things in Singapore. However, their income are not low enough to apply for financial assistance.

Examples: This will lead to them not being able to buy a flat, or they will not be entitled to get any rebates, if they buy their flats from the resale market. Thus people in the sandwich class cannot afford to buy a flat. In addition, family that are in the sandwich class may not have enough money pay for their children education. Lastly, people in the sandwich class cannot afford to buy cars as the price for Certificate of Entitlement (COE) are too expensive for the sandwich class to afford. If one of the family member that was handicapped they will have difficulties taking public transport, but they have no choice as they do not have the money to buy a car. People will not be happy and Singapore will not progress.

Link: Hence, i think that the government has not done enough to ensure progress in Singapore.

Student C

I think the Singapore government has not done enough to achieve progress in Singapore.

EVIDENCE: Working poor in Singapore are not getting enough pay to make ends meet.

"Working poor" is defined as someone earning less than half of the average monthly income of a Singaporean, which now stands at S\$3,000. Associate Professor Hui Weng Tat of the Lee Kuan Yew School of Public Policy said: "We do have a problem, because we do have a large number of households who are earning income in the lower end, not having enough to cover their household expenditure, especially at the lower 20 per cent

EXAMPLE: It has been reported that there are more than 300,000 Singaporeans and Permanent Residents who earn less than S\$1,500 a month, excluding employer CPF contributions, despite working full-time.

LINK: Hence, I think that the government has not done enough to ensure progress in Singapore.

After students had a chance to share their views, Michelle used the *Padlet* wall to lead another discussion that required students to view and respond to selected student responses on the wall. She called on students to ask if they agreed or disagreed with selected responses. She asked them to give reasons for their views, required them to share their thinking with the class, and used probing questions that required students to explain their reasoning, clarify ideas, or give evidence in support of their ideas. For example, she asked questions such as, "What is Rebecca's post trying to say? Do you think the evidence she chose is suitable? Melvin doesn't agree with what Rebecca is saying. Does it mean her view is incorrect? When two people have different views, does it mean one of them is wrong?" Michelle emphasized peer critique as important to helping each

Student D

I think the Singapore government has done enough to achieve progress in Singapore.

Evidence: Recruitment of able administration, Elimination of corruption and Establishment of education.

Recruitment of able administration makes sure that we are in the hands of a trustworthy leader, someone who is not going to bring corruption to Singapore.

Someone who is forward-looking and plans for future challenges and ensure the smooth continued progress of the country. The leader who has control over the citizens' behavior through strict laws. He would also instill strong work ethic and provide business opportunities to people, ensuring Singapore to be a business-friendly culture which encourages foreign investments. He who establish English in education so that all students get to have a chance to learn the main language and help contribute to future plans when they grow up.



other further developing their thinking and understanding. She also encouraged her students' participation by modelling how constructive feedback can be given and supported by evidence. The students' discussion grew in depth as the lesson developed with Michelle providing a safe and scaffolded environment to ensure discussion supported student learning.

Michelle concluded the lesson by highlighting key takeaways from the lesson and by returning to the key ideas of progress and whether government has done enough to ensure Singapore's progress. She recorded key ideas on the whiteboard to share the range of views students had and to consolidate student learning. The assessment for the lesson was to have students write individual responses to the question to assess their

understandings and ability to consider different perspectives.

Discussion

Michelle's lesson is an example of a guided inductive approach to conceptual understanding. Students generated their initial ideas to the inquiry question and then Michelle guided both small group and large group discussions toward the identification of critical attributes or characteristics of the concept of progress. Beginning with students' ideas is an important first step in all forms of learning. It enabled Michelle to identify and provide support that students needed in understanding the question and the key concepts contained in the question. To build new knowledge, it is important for teachers to activate and engage students' prior ideas (Bransford, Brown, & Cocking, 1999). Leveraging existing knowledge is an essential first step toward developing more sophisticated conceptual understandings.

Source work can also be a significant aspect of developing conceptual understanding. Different kinds of sources can provide examples (as well as non-examples) of the concept for students to consider. Sources can also be utilized to provide different perspectives about the concept, reinforce critical concept attributes or introduce new attributes, and provide new examples or situations for students to apply their conceptual understanding (and "test" their understanding). Sources can help students to build perspective by providing multiple representations of the concept (Baidon & Damico, 2011). This requires teachers to be strategic about their selection of sources with the concept in mind. Michelle, for example, began with simple sources to provide basic information about concept attributes as well as different ways to think

about the concept. She then encouraged students to come up with their own examples using sources that they found related to the concept.

Technology was used in this lesson to expose students to a range of views, including alternative views (*CWR*), to make thinking visible (*Padlet*), and to promote active learning through discussion in the classroom. Michelle was also able to evaluate students' understandings by checking their responses on *Padlet*. She believed *Padlet* provided an opportunity for all students to participate in sharing their views, especially students who are normally more reserved in typical class discussions. She was able to address any misconceptions that she noticed in responses and used other responses to reinforce accurate understanding of the concept. By making student thinking public, students were able to consider the range of responses, and evaluate and use other responses to inform their own ideas. Michelle was also able to ask probing questions, extend student thinking by providing examples they hadn't considered, reinforce key understandings, and model critical reasoning about students' ideas for the class.

The discussions in Michelle's classroom supported her students in more collaborative and social ways of making meaning in several ways. First, it acknowledged that students already have ideas about the world and that these ideas can be leveraged to support deeper understanding. However, this requires the skillful facilitation of a teacher like Michelle who can help guide students toward consideration of key concept attributes, suggest examples or illustrations of the concept, and consolidate student learning by bringing forward key ideas and understandings that she wanted them to develop. Small group discussion enabled

students to raise their own initial ideas but then consider other students' ideas. The large group discussion enabled the consolidation of learning so that students would have key takeaways that would help them build knowledge. During the discussion of responses students posted on the class's *Padlet* wall, students were exposed to each other's more developed ideas (after reading different sources) and able to discuss different ideas. Again, discussion was key for developing thinking and understanding by reinforcing key attributes of concepts, considering different perspectives, and examining reasons and evidence students had provided. Through discussion, Michelle was able to model careful and critical reasoning and reinforce key learning points. She also used this approach to help students understand the concept of reliability, which is central to being able to perform the skill of evaluating the reliability of different sources.

Reflection

Michelle has taught Social Studies to Secondary 3 and 4 students for five years. During this period, she observed that her students struggled with understanding social studies concepts. She also felt that understanding core concepts would not necessarily help students achieve desired examination results. Like many Social Studies teachers in Singapore, she believed that drill and practice would help students achieve better grades. Although Michelle and her colleagues agreed that helping students develop deep understanding of society was a primary goal of education, there was a nagging concern that conceptual understanding didn't support assessment outcomes.

Fortunately, Michelle had a senior teacher at her school who served as a mentor for her. This teacher subscribed to

inquiry-based teaching and was a strong advocate of active student-centered learning. She demonstrated to her department how spending time to help students understand social studies concepts could improve academic achievement and the critical thinking skills of her students. Michelle was inspired by her mentor but found it difficult to change her own classroom practice. Apart from the fear of not being able to achieve department targets, she was doubtful of whether she had the ability to deliver key lesson objectives through a more inquiry-based approach. A lingering question was, "What am I going to do with students' contributions during inquiry-based and student-centered lessons? They contributed a lot in class during discussions and small group activities but I cannot use it to teach!"

In 2015, Michelle was tasked to head a cross-disciplinary project. The project required students to collect evidence through research, field trips and interviews. The students worked in groups to prepare for the presentation of findings. From her past experiences of implementing similar activities planned by her department, she observed that there were imbalanced views from the fieldwork alone. Students often didn't include different perspectives to the issue in their final presentations. She wanted to overcome this by introducing the use of the *Critical Web Reader (CWR)* prior to the fieldwork. Through the use of the *CWR* she sought to promote engagement and a more holistic and multi-perspectival investigation of issues. Apart from this, the online sources she selected for use in the *CWR* were aimed to help promote engagement and interest in learning Social Studies by having students engage with online information sources, such as YouTube videos, social media sites and websites.

She also observed from her past

experiences that the students' thinking processes and ideas during discussions were not documented. Consequently, the ideas generated through rich discussions were lost and not used to fully support student learning. She also wanted to enable students to have greater opportunities to share their ideas with both their teachers and peers. With these goals in mind, Michelle planned for the students to make their thinking visible to her and other students through the use of *Padlet*. She believed this would ensure that students could express their views and provide opportunities to collaborate and learn from one another.

Michelle found that her students were more engaged and self-directed when the learning was made relevant and more authentic through the investigation of issues using online sources in the *CWR*. Also, when students' thinking was made visible through the use of *Padlet*, it sparked discussions and the sharing of different perspectives on the issues. This required her to shift her role as a teacher to focus more on listening to students' ideas, facilitating classroom discussion through questioning, and being more responsive to class discussion in order to assure learning outcomes were met. She was motivated by the outcomes of these lessons to move away from a teacher-centered approach.

Subsequently, Michelle designed more lessons that allowed her to incorporate students' ideas into her lessons. She continued to see the benefits of making thinking visible not just to herself but for her students. This gave her confidence to focus on meaning making as a central feature of her lesson design and classroom instruction. Michelle noted that, "I have learnt to let go and my lessons are more fluid, natural and instinctive. This way, I realized that I can close the students' learning gap better." She acknowledged

that this focus on thinking takes time but believed it is necessary for deeper student engagement and learning. She explained that concept-based learning will help her students think more critically about what the concepts mean and how they can apply these concepts in different contexts.

Conclusion

Michelle commented that when her beliefs about student learning had changed, this in-turn changed her overall teaching practice. She views herself as having adopted a more holistic and student-centered approach to teaching and that this has led to more inquiry-based classroom practice. Even her teaching of source work has changed. She no longer uses templates that provide necessary steps or procedures for students to follow and specific words or phrases for answers. Instead, she requires students to focus more on explanation as they evaluate reliability, for example. She wants students to take more ownership for their thinking, to apply what they've learned in class, and to focus on the reasons and evidence they have learned to support their thinking. She believes that this shift in her teaching is now well-supported by the changes in the Social Studies assessment that requires students to give recommendations for the Structured Response Questions on the exams. She thinks this requires students to explore issues in more depth, to develop their own opinions and views, and for students to consider a range of perspectives on issues and what can be done to address them. It is well aligned with some of the changes she sees in her own teaching.

Change starts with a first step, and it doesn't have to be a big first step. For Michelle, this first step was focusing on her students' ideas and their engagement in lessons. This led her to move toward using

two technology tools that would engage students with issues through authentic online sources similar to those they engage with on a daily basis outside of school. She also wanted to give students greater voice in sharing their views and used one of the tools as an online platform that could facilitate this. She has also shifted toward more discussion in her classroom. All of these put together – greater focus on students’ ideas, an emphasis on student engagement by using online sources, and providing opportunities for students to share their thinking – build toward a more inquiry-oriented approach in her instruction. In many ways, involving students as more active learners has transformed Michelle’s beliefs and practices. It points to the way progress can be made in teaching and learning.

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