

Decolonising learning

Changing perspectives and opening up opportunities

Potential impact: Medium
Timescale: Medium

When thinking about colonialism, it's useful to start by thinking about some of the things that can happen when one group of people tells another group what to do. Imagine a situation in which people from a different neighbourhood came to your house and told you how to live your life. They might not think about, or know about, the issues faced by people in your area. Their instructions on how to live might be counterproductive when addressing those issues. Settler colonialism is a large-scale version of this situation. It's the process of ruling people within the borders of their land.

“ tools for colonised peoples to shape their future ”

Opposing settler colonialism by decolonisation is an unsettling activity because decolonisation is a process, not a metaphor. If people come to your neighbourhood to tell you what to do, one solution is to stop them exerting control over you, claiming the power to make your own decisions. This is unsettling because so many aspects of the situation change for everyone involved. The same applies at a larger scale. Decolonisation requires systematic unsettling change. This may include measures such as dismantling colonial structures while empowering indigenous cultures with nation-building activities. Part of this process involves acknowledging the ways in which digital presence can contribute to colonisation.

Digital colonialism

Imagine a situation in which people from a different neighbourhood make a website to provide your community with a place to communicate with local politicians about current issues.

Their neighbourhood is interested in building a new school.

As the authors of the website, they add a poll asking which part of their neighbourhood would be the best location for the new school.

If they don't include an option to say you want the school built in your neighbourhood, your choices are limited by their priorities.

By participating in the poll, you help to direct resources to their community.

There is more than one way in which one group of people can exert influence on another group. Digital colonialism occurs when indigenous populations use resources developed by the colonial population. This can happen with online learning, and is a danger when millions of learners from countries around the world join massive open online courses (MOOCs) run on platforms developed in just a small number of countries.

In contrast, digital decolonisation considers how to support colonised people with technology in order to:

- connect them with a shared history,
- support a critical perspective on their present,
- provide tools for them to shape their futures.

To enable the use of this critical perspective and these tools, it's important that digital decolonisation transfers decisions about how to use technology to the people.

If the power to make decisions isn't transferred, colonialism can continue, no matter how well intentioned the decision makers might be. The website creators from a different neighbourhood (see box) might try to gain your support for a new school by considering your views and developing proposals that take your community's educational values into account. However, if they don't understand that you'd prefer to have the new school in your neighbourhood, their work will remain focused on a new resource that benefits them. The ability of one group to understand and anticipate the needs of the other group relates to what some refer to as critical pedagogies.

Critical pedagogies provide frameworks for the academic success of indigenous students. For example, culturally relevant pedagogy seeks to provide a way for students to maintain their cultural integrity (their needs) while succeeding academically (educational needs). Similarly, culturally sustaining pedagogies seek to support students in sustaining the cultural competence of their communities (their needs) while also offering access to the colonial cultural competence (educational needs).

To understand the distinction between using critical pedagogies with mainstream materials as compared with building educational material from the starting point of indigenous cultures, the next section compares different approaches to game-based learning as well as a flexible online course.

Examples of digital de/colonisation

The commercial video game *Civilization* can be used in educational contexts to normalise or to challenge colonialism. The game's theme is colonialism – it encourages players to 'expand your empire across the map, advance your culture'. Players engage in settler colonialism as they conquer and rule neighbouring civilisations. If the game is presented as a representation of history, it normalises colonial behaviour in America, because Native American cultures appear homogenous and their rich diversity is obscured. On the other

hand, the game also provides opportunities for critical pedagogy that encourages students to critique colonisation and how Native Americans are represented.

Critical pedagogy can be used to reframe games. One way of doing this is to begin with the perspective of indigenous people rather than the colonisers' perspective. Elizabeth Lapensée earned a doctorate and went on to build capacity within indigenous communities to author games and comics that represent their cultural heritage. This resulted in the creation of a variety of games, including *Thunderbird Strike*. In *Thunderbird Strike*, a bird from indigenous cultures fights oil pipelines. The game is an example of digital decolonisation that connects the cultural heritage of indigenous people with important current issues relating to the oil industry ignoring their land rights. The game encourages players to oppose the oil industry. If people make that move, from game play to political action, the game will become an example of digital decolonisation transitioning into settler decolonisation.

A different approach is to adopt a pedagogy that can support a variety of approaches to digital decolonisation. In higher education in the US and the UK, the course *Digital Storytelling* helps students use authoring tools to tell digital stories. The course is led by students. They can take a narrative such as settler colonialism and tell that story through a critical lens, they can tell the story of indigenous people taking action on current issues, or they can explore critiques of colonial nations.

Conclusions

Colonisation is not a metaphor but a process that shapes reality for generations. Digital colonisation is an aspect of this, and digital decolonisation can be used within education to support settler decolonisation. These processes take place at all levels of education.

Higher education helps students to prepare for jobs, as well as offering its own career ladder. Recruiting diverse students and providing them with equal access to jobs is, at best, a partial solution and may perpetuate



Image from the game *Thunderbird Strike*

colonisation. What is needed is to give equal access to success, bearing in mind that success for a student may be at odds with success within colonial society. Success for indigenous students will be associated with work on cultural preservation, revitalisation, and nation building. Higher education has the opportunity to align content and help build local communities. This is work that requires support for change both within universities and within the wider communities they support.

Historically, schools have played an active role in colonisation. As a result, they frequently fall short of serving the educational needs of indigenous populations. We are in a period of transition away from the use of schools to suppress indigenous culture and towards approaches to education that can serve the

needs of all students. As education tackles global issues and engages people worldwide with new initiatives such as MOOCs, the ideas of open learning provide sparks of opportunity for new approaches that serve the needs of local communities.

The transition of education from local to global can and should change the nature of learning. Rather than using educational technology to amplify oppressive efforts, it can act as a catalyst that precipitates a change in the aims of education. By reimagining education as an activity that serves the needs of local communities, including indigenous populations, the impact of learning can be expanded, making it more inclusive and more valuable to us all.

Resources

Digital Storytelling:

<http://ds106.us/about/>

Elizabeth LaPensée:

<http://www.elizabethlapensee.com/>

Sen David Osmek: MN taxpayers should not be funding Angry Birds for eco-terrorists. (2017).

<http://bit.ly/2retD4O>

Barlow, A. (2014). Another colonialist tool? In S. D. Krause & C. Lowe (Eds.), *Invasion of the MOOCs: The Promise and Perils of Massive Open Online Courses* (pp. 73-85). Anderson, South Carolina: Parlor Press.

http://www.parlorpress.com/pdf/invasion_of_the_moocs.pdf

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<http://bit.ly/2Rz9t0Z>

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491.

<http://bit.ly/2RBpNyl>

Levine, A. (2013). ds106: Not a course, not like any MOOC. *Educause Review*, (January), 54-55.

<http://www.educause.edu/ero/article/ds106-not-course-not-any-mooc>

Loban, R. (2016). Indigenous Depictions in Strategy Games: An Argument for Flavour.

<http://bit.ly/2EaSDIN>

Paris, D. (2012). Culturally sustaining pedagogy: a needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93-97.

<http://bit.ly/2DVJAEB>

Squire, K. (2008). Video game-based learning: an emerging paradigm for instruction, *Performance Improvement Quarterly*, 21(2), 7-36.

<http://bit.ly/2Q9KjJn>

Tuck, E., and Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education, and Society*, 1(1), 1-40.

<http://bit.ly/2PIlh3W>

Wolfe, P. (2006). Settler colonialism and the elimination of the native. *Journal of Genocide Research*, 8(4), 387-409.

<http://bit.ly/2EbXyTt>

Making thinking visible

Opening windows into student learning

Potential impact: Medium

Timescale: Ongoing

Making student thinking visible can support a student's learning process by making studying more effective and teaching more targeted. Activities that raise student and teacher awareness of the learning intentions of a course, the student's subject understanding, and how to improve are all important. The core of such activities is making student assumptions and ideas visible for both teachers and students. This information can be used by teachers to adapt their teaching and provide feedback, and by students to make more informed decisions about their study.

Digital tools offer a wide range of opportunities for students to construct and express their understanding, alone or in collaboration with others. The ways in which digital tools can be used to support the process of making student thinking visible depends on several factors. These include: what the tools can do, how they are understood and used, and how activities align with the learning intentions of the course as a whole. Digital tools offer more opportunities than a traditional classroom when it comes to storing and processing information, creating spaces for communication and cooperation, enabling students to construct and express ideas in new ways, and providing opportunities for fast feedback.

Visualising student thinking

Both subject-specific and non-subject-specific tools can be used to make student thinking visible. Various tools allow students, together or alone, to demonstrate their understanding of phenomena and ideas by visualising them in

different ways. For instance, software enables students to create models, videos, or texts that bring together audio, images, and video. Augmented reality can be used to create virtual objects as holograms, or artefacts can be created in virtual reality. The use of a variety of media can open new windows into student thinking.

To gain insights into students' learning processes and create purposeful feedback, it's important that digital activities provide rich information that can be considered and discussed. Students can be offered opportunities to express their understanding at different points and evaluate each other's work. Diversity in student responses can be achieved by giving them open tasks, allowing them to choose their own tools and ways of presenting their ideas.

Open tasks require the use of authentic questions in teaching. These will have a wider variety of acceptable answers than is the case with most test questions. Teachers therefore need to be open to unexpected responses. Letting students choose how to express themselves can provide different perspectives on a topic. This enables them to develop their understanding by presenting and evaluating different types of work.

Co-creation of ideas and communication

Digital tools offer new opportunities regarding collaboration and communication, when it comes to creating tasks and giving feedback. Many teachers have found that written feedback doesn't necessarily lead to students doing better. Many students express dissatisfaction with the feedback they receive. One problem with written feedback is that it's often a one-way communication in which teachers use language that isn't available to students. Digital tools can be used to create more dialogue, both inside and outside the classroom.

Digital media such as Twitter, YouTube, Facebook, blogs, wikis, Google Docs, Etherpad, and Padlet invite interaction and collaboration in ways that weren't possible in

the past. These media can be used to support collaboration when creating and sharing digital products. They also offer a way of providing feedback during the process of creation, which makes it easier for students to ask follow-up questions. They may also discuss, or even challenge, the teacher's feedback along the way. Some social media make it possible to receive feedback from a larger audience, with varied expertise, outside the teaching environment.

Some tools can be used to make student thinking visible during lectures. Response systems can be used to collect student answers or to enable students to ask questions. Teachers can follow up on the student responses at the time, contrasting and discussing the content of the lecture with the ideas of the students. This makes it possible for teachers to adapt their teaching to the learning needs of students. It also helps students to relate their assumptions to the ways in which ideas are discussed within a discipline.

Just-in-time teaching

Digital tools can be used to make student thinking visible before classes take place, so that the learning activities can be adapted to meet their learning needs. Just-in-time teaching gives students questions or assignments before a class for them to solve and discuss using digital tools. Teachers then use student answers when preparing the class. This approach has five phases.

1. Making students understand the purpose of the approach.
2. Creating purposeful questions or tasks.
3. Setting a deadline for responses.
4. Analysing responses.
5. Presenting responses to the students and adapting learning activities to take these responses into account.

It's vital that students understand the purpose of the approach so that they know what's required of them and how their contributions can shape the teaching they receive. This can lead to students feeling greater ownership

of issues that are discussed and worked on in class.

Different tasks invoke different responses and require different ways of visualising student thinking. The questions posed can be multiple-choice, short-text response or tasks that allow the students to express themselves using illustrations, images, sound, or video. The tasks don't need to be restricted to questions that the students need to answer. Students can be asked to pose their own questions to the teacher and each other in a shared online room.. This means that students are less restricted by their teacher's questions and perspectives, and can voice the questions with which they're struggling. It can also be useful for students to become aware of the questions and ideas of their peers.

After the deadline, teachers can use digital tools to collect student answers. These responses can be used to plan lessons. They can also be presented to the students and used as an integrated part of the learning activities.

The assignments and the way in which they're used is not only about making student thinking visible for the teacher. This approach makes students more aware of their own thinking and prompts them to reflect on their learning process. They have opportunities to shed light on their misunderstandings. Students become aware of what they can do and what they understand, and can identify topics that are important to work on further.

“Students become aware of what they can do and what they understand”

Why make student thinking visible?

Different devices and media support different ways of creating and expressing ideas. Digital tools create new spaces for communication and enable ideas to be expressed in a variety of ways. This can lead to improvements in teaching and studying. It also connects study with instruction so that what happens in a class can support student learning activities outside the classroom, and vice versa. Different experiences with creating and expressing ideas, assessing their own work and the work of peers, and discussing the subject matter can help students monitor and regulate their learning processes more purposefully. If teachers use student thinking to design their lessons, it's more likely that the content of a class will answer student questions and extend their understanding. Instead of basing study and instruction on assumptions about student understanding, digital tools can be used to provide teachers and students with a more accurate picture of the students' learning needs.

Although technology changes the possibilities for making student thinking visible, the pedagogical principles don't change. It's essential to align the use of digital tools with the intentions and activities of a course as a



Online tools extend the possibilities for sorting, grouping and preserving the thinking of different participants

whole. Learning to write an essay and learning to build a car engine, for example, are likely to require different tools and methods for making thinking visible. If used purposefully, however, digital tools can help make both instruction and studying more flexible, integrated, and responsive to students' learning needs.

Resources

Academic Writing Analytics (AWA) from the UTS Connected Intelligence Centre:
<https://utscic.edu.au/tools/awa/>

Cmap – concept-mapping tool:
<https://cmap.ihmc.us/>

Etherpad: online tool that supports collaborative editing:
<http://etherpad.org/>

Flinga – collaborative platform with integrated pedagogical activities:
<https://flinga.fi/>

Goformative – assessing student understanding:
<https://goformative.com/>

Padlet – collaborative boards for sharing resources online:
<https://padlet.com/>

Prism – tool for collaborative interpretation of texts:
<http://prism.scholarslab.org/>

Verso – tool to promote collaboration, critical thinking, feedback, and metacognition:
<https://versolearning.com/how-it-works/>

17 Formative Digital Assessment Tools To Help You Know Your Students. Blog post by Lee Watanabe-Crockett, 7 September 2018
<https://globaldigitalcitizen.org/17-formative-digital-assessment-tools>

Five EdTech Tools To Make Thinking Visible. Blog post by Dennis Pierce, 12 August 2016
<http://bit.ly/2FWtE7D>