Authentic Learning in the Social Studies Classroom: Connecting Globally

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Abstract

Students in a global classroom engage in learning that is participatory, collaborative and connected. By designing and facilitating authentic social studies learning for such environments, students are able to develop a greater understanding of who they are as global citizens. In this article, authentic learning, contemporary learning, and affordances and selection of technology are examined. Two examples of projects provide insight into the depth of learning, the integration of technology and how the role of the educator changes when using a global classroom approach. Five guidelines are presented to support designing and facilitating learning in a global classroom.

Introduction

The Internet is giving students and educators access to a new learning landscape that goes beyond the physical space of an educational institution. In this new landscape, students are able to engage in authentic learning opportunities in social studies classrooms where they can inquire and engage in conversations and collaborations with experts and other liked-minded individuals. They are not bound by time and/or geographic location. Rather, through the affordances of digital technologies, students and educators are able to work in a global classroom defined and shaped by their

interactions and collaborations. Designing and facilitating authentic learning in social studies through a global classroom approach enables students to develop a greater understanding of who they are as global citizens. Further, they will also develop an appreciation for the participatory nature of learning within technology-enabled learning environments.

This article examines authentic learning within a contemporary educational context. The review of the literature examines authentic learning, contemporary learning, and affordances and selection of technology with regard to designing and facilitating learning for the global classroom. Two examples provide insight into the depth of learning, integration of technology to support learning and how the role of the educator changes when working in a global classroom. In conclusion, the article presents five guidelines for designing and facilitating robust authentic learning in social studies classes using a global classroom approach.

Authentic Learning

Authentic learning is often referred to as students engaging in a real-world application. According to Newmann and Wehlege (1993), when learning is authentic the achievement "is significant and meaningful," in contrast to something that is "trivial and useless" (p 8). They created the following three

criteria to identify authentic instruction: "(1) students construct meaning and produce knowledge, (2) students use disciplined inquiry to construct meaning, and (3) students aim their work toward production of discourse, products, and performances that have value or meaning beyond success in school" (p 8). These three principles become a framework to guide how social studies teachers can create such learning experiences for students.

Within an authentic learning context, the emphasis is on knowledge creation. The intentionality of authentic learning "brings into play multiple disciplines, multiple perspectives, ways of working, habits of mind, and community" (Lombardi 2007, 3). Working with real-world problems is complex and messy. Authentic learning experiences provide opportunities for collaboration and reflection, and should be integrated across disciplines (Herrington, Oliver and Reeves 2003). "Students must be challenged with authentic tasks that drive the need to use, transform, apply, and reinterpret that information" (Woo et al 2007, 38). This type of learning has value for the individual student, as well as for the members of the community of learners.

Newmann and Wehlege (1993) developed five standards to assess the authentic instruction:

- Higher-order thinking "requires students to manipulate information and ideas in ways that transform their meaning and implications, such as when students combine facts and ideas in order to synthesize, generalize, explain, hypothesize, or arrive at some conclusion or interpretation" (Newmann and Wehlege 1993, 9).
- Depth of knowledge occurs when students "make clear distinctions, develop arguments, solve problems, construct explanations, and otherwise work with relatively complex understandings" (Newmann and Wehlege 1993, 9).
- Connectedness to the world beyond the classroom has students involved in learning in a greater social context. The connectedness involves students addressing real-world public problems/issues or making direct links to their personal experiences (Newmann and Wehlege 1993).
- Substantive conversation includes extensive interaction that engages higher-order thinking skills, development of ideas that involves unscripted exchanges, and fostering of shared understandings through dialogue (Newmann and Wehlege 1993).

• Social support for student achievement occurs when expectations are established for students that include the need to "take risks and try hard to master challenging academic work, that all members of the class can learn important knowledge and skills, and that a climate of mutual respect among all members of the class contributes to achievement by all" (Newmann and Wehlege 1993, 11).

Newmann and Wehlege's five standards provide a framework to guide the design of learning tasks in which students are intellectually engaged in inquiry that requires examination of multiple perspectives and thinking critically in their assessment of information. Further, they are intentionally engaging with others through purposeful and sustained discourse as part of constructing meaning or finding possible solutions to the problem.

Contemporary Learning in Social Studies Classrooms

Technology plays a critical role in support of contemporary learning. Friesen (2009a) argued that 21st-century learning "is better conceived of as ensuring students have the competencies required to fully participate in and make meaningful contributions locally, provincially, nationally, and/or globally, not for someday in the future, but now" (p 7). Further, according to Darling-Hammond (2008), effective "[e] ducation must help students learn how to learn in powerful ways, so that they can manage the demands of changing information, technologies, jobs and social conditions" (p 2). As students in social studies classrooms develop 21st-century skills or competencies to live well in today's technologically fast-paced society, they need opportunities to see themselves and their learning in a larger authentic context.

When students in social studies are engaged in authentic learning that uses a global classroom approach, it influences how they see themselves as global citizens. According to Lee et al (2013), students can develop character and values by exploring issues that connect to their everyday lives through global citizenship. They found that it is important to "encourage students to participate in real life community issues with their peers and teachers as collective members of the community thereby deriving a shared satisfaction from the experience of their actions" (p 2107). Through their actions, they are making a difference and contributing to knowledge creation. This, in turn, affects who they are as global citizens.

By designing learning that engages students in real-world problems within the social studies context, they develop the needed knowledge and skills for today's complex society. As recommended by Woo et al (2007), "[s]tudents must be challenged with authentic tasks that drive the need to use, transform, apply, and reinterpret that information" (p 38).

By confronting students with uncertainty, ambiguity, and conflicting perspectives, educators can help them mature their thinking and make them able to use problem-solving approaches effectively ... To be competitive in the global job market, students must become comfortable with the complexities of real-world problems. (Saxena 2013)

Thomas and Brown (2011) asked the question "What happens to learning when we move from the stable infrastructure of the twentieth century to the fluid infrastructure of the twenty-first century, where technology is constantly creating and responding to change?" (p 17). They argued that in today's world, "[n]ew media forms are making *peer-to-peer* learning easier and more natural" and "[p]eer-to-peer learning is amplified by emerging technologies that shape the *collective* nature of participation with those new media" (p 50). Therefore, social studies educators need to carefully consider how they can design authentic learning tasks for students in which they are working in peer-to-peer technology-enabled learning environments that are not bounded by physical geography or time.

Affordances of Technology

Students are more likely to become better-engaged and motivated learners when they are provided with opportunities to "critically examine local and global issues and act upon them" (Lim 2008, 1089). With the use of technology as a tool or means to construct their own understandings, students are able to form conclusions based on their own findings and experiences. Through meaningful dialogue in social studies classrooms, educators are able to facilitate the creative thinking process by supporting and empowering students to make their own discoveries. "In the process, they learn to use technology as a tool for data collection, manipulation, and communication rather than as a passive device for direct instruction" (Lucey and Grant 2010, 128). Technology plays a critical role in helping students not only to gather information but also to collaborate, communicate, present and represent their ideas as part of knowledge creation.

Students and educators in today's social studies classrooms have access to an array of asynchronous (eg, discussion forums, blogs, wikis) and synchronous (eg, video conferencing, virtual meeting forums, instant messaging) communication technologies, including a variety of social media applications (eg, Twitter, YouTube). "Using collaborative technology to extend the physical borders of the classroom can be of significant value. However, it does not guarantee that the students will either learn or 'collaborate'" (Larusson and Alterman 2009). The challenge is how educators design the experience so that students are using the technology in meaningful ways in their engagement in learning.

From the literature, there are various studies that highlight how technology can be integrated to support rich student learning experiences. For example, Lord and Lomicka (2014) used Twitter to engage students in authentic and appropriately designed learning tasks. In their work, students shared resources and developed a sense of camaraderie. They collegially developed ideas, asked questions, shared ideas and problem-solved using Twitter. In another study, Otrel-Cass, Khoo and Cowie (2012) found that capturing live moments on video provided opportunities to discuss, reflect and observe actions so that multiple solutions to problems could be identified. When learners reflected on the most relevant ideas noticed in a video, it provided opportunities for others to voice opinions and arrived at the best solution. A third example was in Edwards's (2014) study, which also found that the implementation of social media contributed to knowledge building. This study made evident that students could understand perspectives of others and collaborate on ideas by using the most appropriate technology for the task. By engaging in autonomous learning activities, students were able to demonstrate evidence of learning through a wide range of performance data using technology. These three examples demonstrate how such technology can extend and enhance the student learning experience.

Purposeful Selection of Technology

The use of technology to support authentic learning is not a matter of using what is convenient or what is most comfortable to use by the educator or the students. Rather, it requires intentional selection that best supports the robustness of the learning. "When we take the stewardship of the intellect seriously as an educational charge, students are given the opportunity

to think differently each time they use digital technologies" (Friesen 2009a, 8). As such, the design of the learning task requires "appropriate and pervasive use of educational technology" (Jacobsen, Lock and Friesen 2013, 18).

The following three studies illuminate the need to carefully think about not only the technology selection but also the influence of multimodality on the learning experience. First, in a study in which Facebook was used, O'Bannon, Britt and Beard (2014) reported that the use of Facebook provided no benefits to student achievement. Students perceived that Facebook was not suitable for educational purposes, but rather for interacting on a social level. Using what is socially popular may not be what is required to support the inquiry or what is required for learning. Second, Shanahan (2012) contended that audio is an important mode of communication with the use of digital software. Instead of using sound as an add-on or an embellishment when communicating in a digital context, students were encouraged to use sound to affect the meaning of a multimodal presentation. For example, using the sound of an avalanche to accompany the video of an avalanche has more impact than each on its own because of the connection to the affective domain. Shanahan found that communicating with sound in a meaningful way has a powerful impact on making relevant connections in learning. This example begins to denote the influence of multimodality (eg, audio and visual) on student learning. Third, Madden, Jones and Blanchard (2013) suggested that photo narratives assisted students in relating their own experiences to the content that was being learned. They found that growth in learning and a community of sharing was promoted when students shared the perspectives of others and self-reflected through photo narratives. Purposeful selection of appropriate technology allows for greater enhancement of student ideas and connects them to real-world learning experiences.

Learning Social Studies Through a Global Classroom Approach

When learners actively engage in relevant inquirybased learning relating to the world, it is important to make the necessary global connections to help foster the construction of knowledge (Joyce, Calhoun and Hopkins 2002). The global classroom provides an opportunity for students to engage in learning that is participatory, collaborative and connected. With recent advances in technology, classrooms are becoming a part of an emerging world of global learners, where students cocreate knowledge (Lock, 2015). For example, we have the ability to be in the moment, learning through such actions as watching world events unfold, singing with a Canadian astronaut who was living in the International Space Station or exchanging ideas as part of collaborating on a project with others from across hemispheres. Digital technologies afford students the opportunity to connect and interact in various ways. Having access to the technology is only part of the equation. The thoughtful design of the learning, the careful scaffolding and facilitation, and the purposeful use of the technology are what is needed for learning to be effective when using a global classroom approach.

The element of participatory learning is taken up when student actions can contribute to building a community of values and practices worldwide. Cooperation between the countries can help students cocreate knowledge (Lock 2015) to solve ecological problems and discuss issues such as preservation of animals, population growth and natural disasters. Students can also analyze the underlying decisions about international cooperation and collaboration. For example, trade agreements and the exporting and importing of goods can also be discussed between the groups of students in various locations around the world. Such learning provides students with opportunities to engage in the global community and to develop a greater understanding of global issues. Further, it also helps them to develop an appreciation of who they are as global citizens.

When students are connected digitally, they can work collaboratively to create ideas that are expected to be published in online spaces (Jacobsen, Lock and Friesen 2013). While students are working with experts in the field and building this knowledge, learning is taken beyond the classroom walls. Jacobsen, Lock and Friesen (2013) pointed out that it is central for learners to know that their contributions are important and that they matter. They also found that students improve when they receive comments and feedback from others, which generally results in a product that is of publishable quality. Lock (2015) suggested that it is important for the work to be authentic, collaborative and interactive to achieve the learning of curricular outcomes. Further, an important part of the process is the self-reflection that relates to the real-world cultural experience of cocreating knowledge. All of these components can lead to changes in a community when students become engaged citizens and present their ideas to others.

The 2014 NMC Horizon Report: 2014 K-12 Edition reported two key trends with the adoption of educational technology in school: "rethinking the roles of teachers" (Johnson et al 2014, 6) and the "shift to deeper learning approaches" (p 8). Johnson et al also noted that one of the serious challenges that affect the adoption of technology is "creating authentic learning opportunities" (Johnson et al 2014, 20). These three factors guided the discussion of the following two examples in which we, as educators and authors of this paper, designed authentic learning opportunities in which students were engaged in learning using a global classroom approach and developed a greater sense of global citizenship: (1) a cultural learning experience between two elementary classrooms and (2) a cross-institutional inquiry-based learning project using a four-stage process in which preservice teachers had the "lived experience of being online learners and online collaborators" (Lock and Redmond 2011, 25).

Learning of Our Cultures

Students from two elementary schools located in different communities were engaged in a cultural learning experience in which they communicated with each other using Google Docs and e-mail. These students participated in cultural activities relating to the social studies and science learning goals. Through hands-on activities, students learned about an Indigenous culture, Ukrainian Easter egg decorating, weaving, and culinary experiences from Peru, India, Tunisia and Ukraine. With the use of social media and other technologies, students from the two schools shared their thinking about issues in their own communities as well as global issues.

Technology played a key role not only in communication but also for knowledge building. For example, in science, students engaged in thoughtful conversations through e-mail regarding the life cycle of the butterfly. The students compared and contrasted their data on their butterfly's growth from an egg to the release into the wild. Through their online discussions, data collection and viewing of time-lapse photography, students came to the conclusion that a warmer classroom sped up the process of the eggs developing into larvae, then forming the chrysalis and finally emerging as butterflies. Through the use of time-lapse photography, students were able to share and discuss the life

cycles of their butterflies with each other. The hands-on experience of these students along with sustained conversation led to deeper learning. This knowledge building and cocreation of knowledge occurred through thoughtful discussion in e-mails and Google Docs.

The final project was a documentary of the year's learning through the creation of an iMovie. Photos, videos, music and dialogue of events throughout the year depicted student learning through the cultural events in the program. This included learning about a particular Indigenous culture through the eyes of an elder. The final project video demonstrated the learning that had occurred throughout the cultural learning experience. When students reflected on the most interesting aspects of their collaborative journey, they shared these insights through e-mail with their peers in the other school.

In this cultural learning experience, it was imperative for teachers to communicate effectively using the digital technology. It was also important for teachers to engineer effective tasks and provide feedback so that the students could own their learning and share instructional resources with one another (Wiliam 2007). In the planning stages, the teachers designed appropriate tasks that were meaningful and significant to both groups of students. These well-thought-out lessons were purposefully created for knowledge building with the use of digital technology. Through well-planned lessons, the students became engaged in their own learning and the teachers became facilitators of this learning.

The project required teachers to help students to develop technological skills so they could be successful working with their peers at a distance. For example, all students needed to be taught the skills of using e-mail for communication. Students were then assigned a "buddy" from the other classroom and each learned appropriate e-mail etiquette before they e-mailed one another. The next step was to ensure that all students learned the skill of sharing knowledge through the use of Google Docs. This meant teaching each student the steps in creating and sharing a document and then allowing others to edit and comment on the work. Once the students learned these skills, they were able to communicate effectively with their buddies in the other school. This rich interaction between students using technology in the cultural learning experience empowered them to build knowledge together. As a result, they developed an appreciation for the differences in various cultures.

Exploring Diversity and Inclusivity

A cross-institutional inquiry-based project occurred over six weeks that involved preservice teachers engaged in online discussions with peers, inservice teachers and teacher educators from Canada and Australia. The project was designed using the following four stages, in which preservice teachers shared experiences, observations and resources as they investigated the topics of diversity and inclusivity within a global classroom environment (Lock and Redmond 2011; Redmond and Lock 2009).

- Stage One—Community Building. Preservice teachers developed their online presence through meeting peers from both countries. As they introduced themselves, they were also developing confidence in using the learning management system (Lock and Redmond 2011; Redmond and Lock 2009).
- Stage Two—Learning from a Shared Experience. Each preservice teacher read one of four stimulus novels related to the themes of diversity and inclusivity. Within novel-based teams, the preservice teachers wrote a review of the novel and identified links with regard to pedagogical implications and curriculum. Further, they developed inquiry questions designed to initiate discussions about the novel and the project themes. This information was posted in the online environment. The novels created the foundation for a shared experience, which acted as a catalyst to launch the online discussion. A selection of inquiry questions were used in a series of discussion forums. The two teacher educators facilitated a structured initial discussion among the preservice teachers (Lock and Redmond 2011; Redmond and Lock 2009). The asynchronous communication technology accommodated the time difference when working with people in two different hemispheres.
- Stage Three—Learning from Teachers as Experts. Invited inservice teachers joined the discussion forum in the learning management system. These teachers had expertise in such areas as cultural diversity, second language learners and teaching in an inclusive classroom. Discussion forums were created for each of the areas of expertise. Within each forum, teacher experts from both Canada and Australia engaged in discussion with preservice teachers.

From the information provided by experts, the preservice teachers were willing to share their experiences in depth, and continued to question to gain deeper knowledge of the key concepts and issues. Interestingly, the preservice teachers also kept linking the discussion with the concepts from the stimulus books. (Redmond and Lock 2009, 270)

Further, synchronous opportunities were provided in which for an hour one teacher expert, the teacher educators and all preservice teachers who wanted to attend could engage in conversation. An activity used in the synchronous session was a discussion of a real-world scenario related to one of the themes from each novel. This scenario activity required participants to discuss the teaching and learning issues and implications and to provide strategies for how they would address such a situation in their teaching practice. From this experience, preservice teachers identified areas or topics for further learning as part of their professional growth plans (Lock and Redmond 2011; Redmond and Lock 2009). The synchronous discussion forums augmented the asynchronous, providing a space in the learning where interested individuals could meet to explore a topic and allowing spontaneous interaction.

• Stage Four—Critical Reflection. Preservice teachers posted their reflections in the online environment. They reflected on their personal experience as online collaborators and inquirers into issues and practices that affect teaching and learning. Their reflections were focused both on process and content. By posting their reflections, they shared with their peers both what they had learned from the experience and next steps in their learning (Lock and Redmond 2011; Redmond and Lock 2009).

With this example of working in the global classroom, the teacher educators were the codesigners and cofacilitators of the learning experience. The design of this project required that they open up the learning landscape by inviting other educators, with particular expertise, to join the learning experience. This models how the online environment can be used to create a space where individuals can be invited into the learning. It illustrates teachers being open to bringing in the necessary expertise to support student learning and that, in this type of environment, the educator needs to be able to work as a facilitator of learning.

Guidelines for Designing and Facilitating Learning in the Global Classroom

From the review of the literature and from the authors' reflection on our personal experiences, we have developed five guidelines to support the design and facilitation of learning using the global classroom approach.

- First, there needs to be an intentional design in planning the social studies inquiry that supports robust authentic learning. Newmann and Wehlege's (1993) five standards to assess the authentic instruction provide a helpful framework to guide the design process.
- Second, given the nature of the learning, students and educators need to purposefully select technology that best supports the specific goals of learning. This may initially require working outside a person's technological comfort zone. To learn what works best for each situation may involve asking colleagues what they have used, talking with students to gain their input, consulting with the technology lead teacher or expert and/or taking risks by experimenting with new technology. Using the most appropriate technology will enhance and enrich the nature of the learning experience.
- Third, there is a need to have responsive facilitation of the learning that nurtures the inquiry through new and emerging questions. These questions need to be taken up in a way that advances the depth and breadth of the learning yet bounds the experience so that the focus of the learning is not lost.
- Fourth, educators need to have the skills necessary to be able to provide supports and scaffolding to help learners collaboratively engage in knowledge creation within technology-enabled learning environments.
- Fifth, assessment is a "seamless part of the learning process" (Friesen 2009b, 5). Assessment practices, according to Friesen (2009b) need to be "clearly focused on improving student learning and guiding teaching" (p. 4). Assessment is an integral part of the design of the authentic learning experience. Students need to be aware of the assessment criteria so they can be used to inform and guide their work. Ongoing feedback to the students also helps the educator be responsive to the learning by providing the necessary scaffolds in support of knowledge building in social studies.

Conclusion

We are not bound by bricks and mortar within contemporary social studies classrooms. Rather, the affordance of digital technology opens a new learning landscape that offers new possibilities for how we engage students in authentic learning experiences. Designing and facilitating authentic learning for the global classroom is complex. It requires a degree of risk taking in opening up teaching practice to such ideas as learning through real-world problems or providing students with the opportunity to cocreate knowledge by working with other peers and experts, who may be located in various geographic locations. It requires careful deliberation by educators and students in terms of selecting appropriate technology to support the various elements of learning. With careful planning and facilitation in terms of the learning task and assessment, along with the purposeful selection of technology, there is a wealth of opportunity for what can be learned in social studies using a global classroom approach.

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