Collaborative Video Case Studies and Online Instruments for Self-Reflection in Global Teacher Education

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Global challenges require international collaboration in order to solve, as Covid 19 exemplifies. In order to oppose xenophobia and promote global solidarity as the world fights this pandemic, teachers need professional development on global learning. Analysis of data collected during an online course that integrated global learning and a variety of online pedagogies, led to two assertions. First, case studies provided a way for teachers to envision new global teaching practices, and video enhanced that possibility. Second, online self-reflection instruments, the Teaching for Global Readiness Scale (Kerkhoff, 2017) and Global Competence Subscale (Morais & Ogden, 2011), provided opportunities for teachers to analyze and reflect on their practices related to global learning.

The global pandemic Covid-19 has highlighted the multitude of ways the world is interconnected socially and politically. Local-level responses alone are not enough to mitigate the virus. The World Health Organization (2020) and United Nations (2020) are calling for global coordination, information sharing, and most importantly, global solidarity to solve the crisis. As such, Covid-19 also illustrates the importance of global learning to build global solidarity, combat xenophobia, understand global systems, cut through misinformation, learn from other countries, and respond with empathy. Tichnor-Wagner and Manise (2019) define global learning as “the act of developing global competence through intentional educational activities” (pg. 2). Global learning prepares students to communicate and collaborate across borders in an effort to solve global challenges (Kerkhoff, 2018).
When the researcher surveyed the online teacher education master’s level class at the beginning of the semester using a knowledge inventory, 84 percent did not know or were unsure of what global learning was, 11 percent of teachers knew what it was but were not applying the knowledge in their practice, and only one participant knew what it was and was already applying global learning in their teaching. The purpose of this study was to see if integrating global learning in this course would impact teachers’ global competence, knowledge of global learning, and global teaching practices. Further, if there was a positive impact, which methods participants reported finding beneficial.

**Theory/Literature Review**

This study is grounded in two distinct Community of Inquiry theories: online learning (Garrison, Anderson, & Archer, 2000) and teacher education (Butler & Schnellert, 2012; Cochran-Smith & Lytle, 2009). In studies of online learning, Community of Inquiry has three dimensions of presence to facilitate learning: teaching, social, and cognitive. Research has shown that effective teaching presence refers to the instructor’s design and directed facilitation; social presence refers to purposeful collaboration on cognitive tasks; and cognitive presence refers to exploring and solving problems of practice (Garrison, 2007). In teacher education, research has shown that communities of inquiry—where knowledge is constructed through ongoing collaboration, dialogue, and reflection—is an effective form of teacher professional learning (Butler et al., 2015; Hughes, 2005; Skerrett et al., 2018; Spires et al., 2018).

**Process**

The study was concurrent nested mixed methods (Creswell & Plano Clark, 2003) with 28 teachers in a masters level online education course, with years of experience ranging from one to 20 and grade levels 1-12 of diverse subjects. Quantitative data included the Teaching for Global Readiness Scale (TGRS; Kerkhoff, 2017; χ² (143) 246.909, χ² to df = 1.73, CFI = 0.960, TLI = 0.953, SRMR = 0.061, RMSEA = 0.051, α = 0.88) and Global Competence subscale (GCS; Morais & Ogden, 2011; χ² = 465.64, χ² to df = 1.18, CFI = 0.98, NNFI = 0.98, RMSEA = 0.03, SRMR = 0.07) both validated and reliable instruments administered at the beginning and the end of the semester (see Appendix A). The researcher conducted qualita-
tive content analysis (Schreier, 2012) on two data types: (a) course artifacts, specifically reading of Mansilla (2016) with discussion board post using a global thinking routine described in the article, case study using global teaching examples from Wowlit.org and PBI-Global.com, lesson plan design, reflection comparing changes in pre and post test, and course evaluations at the end of the semester and (b) follow-up interviews with volunteer participants. See Figure 1 for the course module with more information on course artifacts. The module is available in Canvas Commons (lor.instructure.com/resources/56fe3bd440af425187963e793027284c?shared).

Learning Objectives
The learning objectives for this module were adapted from the Global-Ready Teacher Competency Indicators (P21 and VIF International, 2014).

- **Pedagogy** - The teacher demonstrates and models expertise in inquiry- and design-based learning theories and practices that build learners’ knowledge, creativity, innovation, critical thinking, perspective-taking and problem-solving skills through consistent implementation of global projects.

- **Content** - The teacher demonstrates knowledge of global content, curriculum and instructional practices that cultivate new knowledge through ongoing interdisciplinary global investigations.

- **Technology** - The teacher is confident in experimenting with and consistently integrating next-generation technology throughout teaching and learning processes that build learners’ global content knowledge, communication and media literacy skills.

Agenda
- Watch my introductory videos on What Does it Mean to be Global? and All the Different Global Education Terms (teaching).
- Watch the Asia Society video Global Competence.
- Read Veronica Boix Mansilla’s article Global Thinking.
- Post to discussion board using the Global Thinking 3Ys Routine (social & cognitive).
- View my minilecture video on Global Teaching (teaching).
- Read the article on Teaching for Global Readiness.
- Complete a Collaborative Case Study on global teaching (social & cognitive).
- Watch my Voicethread on Global Learning Myths and add comments (teaching & social).
- View my video on Resources for Intercultural Collaboration (teaching).
- Design a Going Global lesson plan integrating digital and global learning (cognitive).
- Take the Teaching for Global Readiness self-reflection instrument again. Compare to your answers at the beginning of the semester. Reflect on how you grew. Set goals on what you would like to continue to work on (cognitive).

Figure 1. Module agenda and hyperlinks to materials.
Results

Findings suggest that integrating global learning in the teacher education online course did impact teacher practice. Primarily, the percentage of teachers who never integrated global learning with the standards for their grade/content went from 43% to 14%. And the percent of teachers who never used texts written by authors from diverse countries went down to 0%. The three items displayed in Figures 2-4 were significantly different on the post from the pretest. In addition, participants demonstrated significant difference on the global competence item about expressing views related to a global problem, see Figure 5.

Figure 2. Pre and Post Scores on Teaching for Global Readiness Scale item.
Figure 3. Pre and Post Scores on Teaching for Global Readiness Scale item.

Figure 4. Pre and Post Scores on Teaching for Global Readiness Scale item.
Analysis of qualitative data revealed that of the four opportunities to interact cognitively with the content (i.e., discussion board, collaborative case study, lesson plan generation, and reflection using online tool), participants found the collaborative case studies and the reflection on their changes in TGRS and GCS to have been particularly useful to their learning. Through the case study exercise, teachers were able to recognize global teaching as multidimensional and what practices could apply to their own classroom context. Teachers especially found the challenge to critique instruction that attempted global learning both enjoyable and meaningful. A high school English teacher at an urban public school stated in the interview:

I never had an institutionalized or systematic way to teach global learning and that [module] was really useful… I liked the case study. It’s always fun to critique people and stealing ideas a little bit and thinking about how you would tweak it for your own class. That [case study] gave me a new perspective on my lesson plans for the future. Asking for the lesson plans, discussion posts and readings, which is an online master’s course expectation in general, but I felt like it was the case study work that like I actually got to learn from.
In the last sentence, the participant contrasts her positive perception of the case study assignment with her perception of designing lesson plans and completing discussion posts on readings. Another teacher also stated in her interview that the case study was the most beneficial for her: “The case study made me realize that it’s possible to do it in my classroom.” And, a first grade teacher stated a similar response as she questioned what global learning would look like in an early childhood context.

The first grade teacher also stated that she appreciated being able to take a pretest and posttest and compare the results to reflect on her learning: “I do consider myself to be a pretty reflective teacher, but having an actually piece I filled out two separate times was interesting.” A different teacher stated, “I know I need to reflect on what I did” but said that she does not usually find time to engage in reflective practice and goal-setting. And, finally, related to the self-reflection online instrument, a math teacher stated: “After retaking the survey, I feel as though my knowledge of and interest in global competence has heightened. I have also developed a desire to incorporate it in my curriculum where before it wasn’t much of a thought.”

In their reflections, many participants noted specific items from the instruments that they wanted to incorporate in their curriculum moving forward.

**Implications**

Analysis of both quantitative and qualitative data led to two implications for in-service online teacher education. First, case studies provided a way to envision theory to practice and video enhanced that possibility (Masats, & Dooly, 2011; Özkan, 2002; Perry & Talley, 2001). Also, to support collaboration during the case studies, the researcher provided each group a Google Doc with editing capabilities enabled, space for delegating roles, and a table for collaborative note-taking. This step eliminated frustration reported during a collaborative project in a previous module. The collaborative case studies provided social and cognitive presence as participants grappled with the content of the case and discussed with their partners aspects that could be adopted/adapted in their own classrooms (Garrison, 2007) and space for ongoing dialogue and collaboration as opposed to a one-off (Butler & Schnellert, 2012).

Second, the online self-reflection instruments provided opportunities for teachers to analyze and reflect on their practices related to global learning. Reflective practice has long been lauded as essential in teacher education (e.g., Loughran, 2002; Mumford & Dikilitis, 2020). Participants per-
ceived that using the TGRS and GCS as instruments for self-reflection enhanced possibilities for reflective practice by providing examples of practices that they could adopt, corroborating previous research (Kerkhoff, 2017) and providing an entry point for goal-setting through the ability to analyze change over time. Reflection and goal-setting are important components of teacher inquiry (Butler & Schnellert, 2012). The pre and post was conducted using Qualtrics because participants could download a PDF of their responses, making comparisons over time easier. In all, the collaborative case study and pre/post test with reflection methods of teacher education were enhanced by the affordances of multimodal and digital tools. In addition, they provided cognitive presence as participants interacted with the content as opposed to passive acquisition of knowledge (Garrison et al., 2000).

**Future Research**

Future research could examine teaching for global readiness in the content areas of math and music, as teachers in these two areas experienced difficulty translating the materials into actionable strategies for their classrooms. Enhancing teachers’ and students’ global competence requires a comprehensive approach across content areas and grade levels (Kerkhoff, et al., 2019). Global learning is essential, now more than ever, to combat misinformation and xenophobia, and to promote global collaboration and solidarity during this unprecedented time.

**References**


### APPENDIX A

#### Teaching for Global Readiness Scale

<table>
<thead>
<tr>
<th>In the last two weeks, how often have you:</th>
<th>Never</th>
<th>Once in 2 weeks</th>
<th>Once a week</th>
<th>2-3 times a week</th>
<th>Daily</th>
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<tbody>
<tr>
<td>Reflected on your own assumptions and biases?</td>
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<td>Used texts written by authors from diverse countries?</td>
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<td>Guided students to examine their cultural identity?</td>
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<td>Integrated global learning with the existing curriculum?</td>
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<td>Assessed students’ global learning?</td>
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<td>Provided a space that allows learners to take risks?</td>
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<td>Provided a space that allows students a voice?</td>
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<td>Attempted to break down students’ stereotypes?</td>
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<th>In the last two weeks, how often have you asked students to:</th>
<th>Never</th>
<th>Once in 2 weeks</th>
<th>Once a week</th>
<th>2-3 times a week</th>
<th>Daily</th>
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<tr>
<td>Engage in discussions about international current events?</td>
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<td>Analyze the reliability of a source?</td>
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<td>Analyze the agenda behind media messages?</td>
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<td>Construct claims based on primary sources?</td>
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<td>Use inquiry-based lessons about the world (e.g., research projects, exploratory learning, discovery learning)?</td>
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<td>Utilize technology (e.g., Skype, email) for virtual interviews (with experts, community members, etc.)?</td>
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<td>Utilize asynchronous technology (e.g., email, blogs) for international collaboration?</td>
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<td>Utilize synchronous technology (e.g., Skype, Google Hangout, FaceTime) for international collaboration?</td>
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<th>During a typical semester,</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tr>
<td>I build a repertoire of resources related to global education.</td>
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<td>I take inventory of the cultures (languages, countries, etc.) represented by my students.</td>
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<td>I cultivate a classroom environment that values diversity.</td>
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<td>I cultivate a classroom environment that promotes equality.</td>
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<td>I bring in speakers from different backgrounds so that students can listen to different perspectives.</td>
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