Global Thinking Routines to Develop Critical Global Perspectives in Teacher Education

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Abstract: The goal of critical global teaching is to prepare learners to live in, communicate with and advocate for an inclusive and just world. In this study, teacher-researchers explored how integrating global thinking routines (GTRs) affected an undergraduate education course focused on communication diversity. A qualitative case study design was used to analyze how this pedagogical tool afforded 29 teacher candidates the opportunity to develop critical global consciousness. Data from written reflections and focus groups revealed students' varied beliefs about those who communicated differently from themselves. Students explored topics of ableism and linguistic privilege in local and global contexts. Findings lead to practical implications for infusing global thinking routines into teacher education courses as a means to develop critical global consciousness of perspective taking, empathy and advocacy.

Keywords: global, teacher education, pedagogy, communication, diversity, disability, multilingualism.

> State Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice. (United Nations, Convention on the Rights of Persons with Disabilities, 2006, Article 21)

Communication is a human right. Internationally recognized since 1948, the United Nations (UN) declares that "everyone has the right to freedom of opinion and expression"

(McLeod 3). The UN later expanded this to recognize communication in one's native language, or mother tongue, and communication means and accessible formats of those with disabilities (e.g. augmentative and alternative communication devices, sign languages and Braille). The advocacy of communication rights by the UN highlights the importance of diverse means of communication for human flourishing (McLeod). It is essential that all individuals' voices and signs are recognized, included and valued to build relationships within and across global communities (Asia Society and OECD 14). Therefore, in our school communities we must disrupt ableism (Baglieri and Shapiro 276), linguistic prejudices and monolingual habitus (Piller 145) to combat systemic discrimination based on how individuals communicate. 'Ableism' refers to discrimination in favor of able-bodied people, 'linguistic prejudice' means bias based on the language/dialect of a speaker, and 'monolingual habitus' refers to an assumption that one language will be used as the norm for all.

In preparing 21st century teachers, we must assume classrooms full of diverse communicators who will be communicating with others from around the world. Practically, this means a classroom of students who identify as multilingual, autistic, African-American English speakers and/or deaf[1] are provided with an equitable education and are valued members of school communities (UN "Disability and Development Report"). The current study explores means to develop teacher candidates' global consciousness so that they value and affirm the communication of all students and prepare them to work with others locally and globally. According to Boix Mansilla and Gardner, global consciousness is "the capacity and disposition to understand and act upon issues of global significance. It is the ability and willingness to

[1] These imagined classrooms may include other identities in which communication is essential.

understand oneself and others within the broader matrix of our contemporary world" (58). Educating for global consciousness prepares learners to live in an inclusive and interconnected world through examination of the complexity of culture (Gaudelli 11). To advocate for inclusive education that recognizes the disabled (Alim et al. 4), global understanding and perspectives of persons with dis/abilities must be incorporated as a critical source of knowledge for examining equitable education practices (Johnson and McIntosh 80). As a reflection of our critical global education stance, we use the terminology of 'communication diversities' in this paper as a collective term to appreciate and celebrate the diverse means of communication used by individuals and communities, while at the same time acknowledging forces of privilege and marginalization that are present.

Communication Diversities and Global Education: A Critical Stance

In our teacher education work, we intentionally bring disability into the conversation of communication diversities and global education. This is not intended to create a dichotomy between linguistically and culturally responsive practices and special education or to equate language learners and those with disabilities, but instead to engage in discussions about complexity, intersectionality and "diverse diversities" (Dervin 3) in our classroom communities and the world (Artiles; Waitoller and King Thorius). We consider disability as a culture (Brown; Strauss), acknowledging the experiences of disability as a way of life, not just societal narratives of pity and inspiration (Baglieri and Shapiro 764). Thus, a critical stance in relation to global consciousness, or what we 'call critical global consciousness', considers the relationship of culture, language, and power within the broader context of a global world. For example, how do we value the assets of a new student from rural Guatemala in our U.S. classroom who identifies

as deaf and communicates using Lengua de Señas de Guatemala (Sign Language of Guatemala) and Quiché the language of his family?

Teachers need to know themselves, their students and their families to communicate with them in ways that build relationships, value their linguistic repertoires and not erase cultural complexities (García and Wei 60). Dervin writing about education for diversities says, "diversity in the plural indicates a move from a mere emphasis on people from the outside (migrants, "Others") to taking into account the diverse diversities from within, in other words anyone who is considered or who constructs themselves to be different" (3).

Without a critical frame, global education can reproduce hierarchies and hegemony found in the world (Hauerwas et.al., 2021). Critical global education, as defined by O'Connor and Zeichner, "seeks to educate students about the causes and consequences of global injustices and aims to support students to work in solidarity with the world's people towards transformative change" (523). To educate students about global injustice, teachers practice authentic and situated pedagogy. Through inquiry on real world issues, students examine their biases and connections to global injustice. By situating teaching to students' cultural identities and local contexts, teachers make global education culturally sustaining, or inclusive and nurturing of students' cultures (Alim et al. 5).

One way to empower students to act toward justice globally is for teachers to take a Freirian stance that knowledge and language are not politically neutral (Byker 266). In this scenario, teachers provide students with multiple perspectives, including international and historically marginalized voices. Teachers do not ask students to speak or solve problems *for* marginalized people, but to learn and work *with* diverse others in solidarity. Transformative

action is an important component of critical global teaching. As O'Connor and Zeichner explain, "heightening students' awareness of global problems without cultivating in them a sense of efficacy to take part in transformative action might in fact make students less likely to become active empathic citizens" (532).

Research on Global Pedagogies in Teacher Education

Existing research studies exemplify the importance of integrating global perspectives across teacher education courses (Byker 267). Ferguson-Patrick et al. identified infusing global perspectives within teacher education curricula to align with initiatives for transdisciplinary teaching and authentic pedagogy. In a case study of infusing global teacher education in Spain, Estellés and Romero (28) found that teacher educators perceived that developing teacher candidates' critical thinking, empathy and value of diversity were important parts of their courses designed to lead to global consciousness. Xin et al. (173) embedded global content themes into a course on Differentiated Instruction and found that integrating the content as it related to 21st century skills positively impacted teacher candidates' lesson planning and perspectives toward diversity and global challenges.

Global Thinking Routines in Teacher Education

In addition to curriculum for critical global education, educators have suggested structured discussions as an instructional pedagogy to scaffold global perspectives (Asia Society and OECD 6). A specific structured discussion to build critical consciousness is to offer teacher candidates the use of global thinking routines (GTRs). GTRs are carefully designed thinking structures or micro-teaching tools specifically geared to nurturing global dispositions, which

build upon the visible thinking routines from Harvard Project Zero (Boix Mansilla). The GTRs, originally developed as a PK-12 tool, are intended "to be used frequently, across content, and as an integral part of the learning environment" and to "help create a classroom culture of global competence over time" (Boix Mansilla 13). Provocations (e.g., artwork, news stories, international data) begin each GTR by sparking students' thinking around an issue of global significance. For example, in responding to the *Step In, Step Out, Step Back* prompts, students are asked to consider global issues from multiple perspectives (see fig. 1). Through integrating GTRs across curricula, learners can develop global consciousness via an inquiry stance, considering multiple perspectives, engaging in respectful dialog, and taking responsible action around global issues (Boix Mansilla and Garner; Boix Mansilla and Jackson).

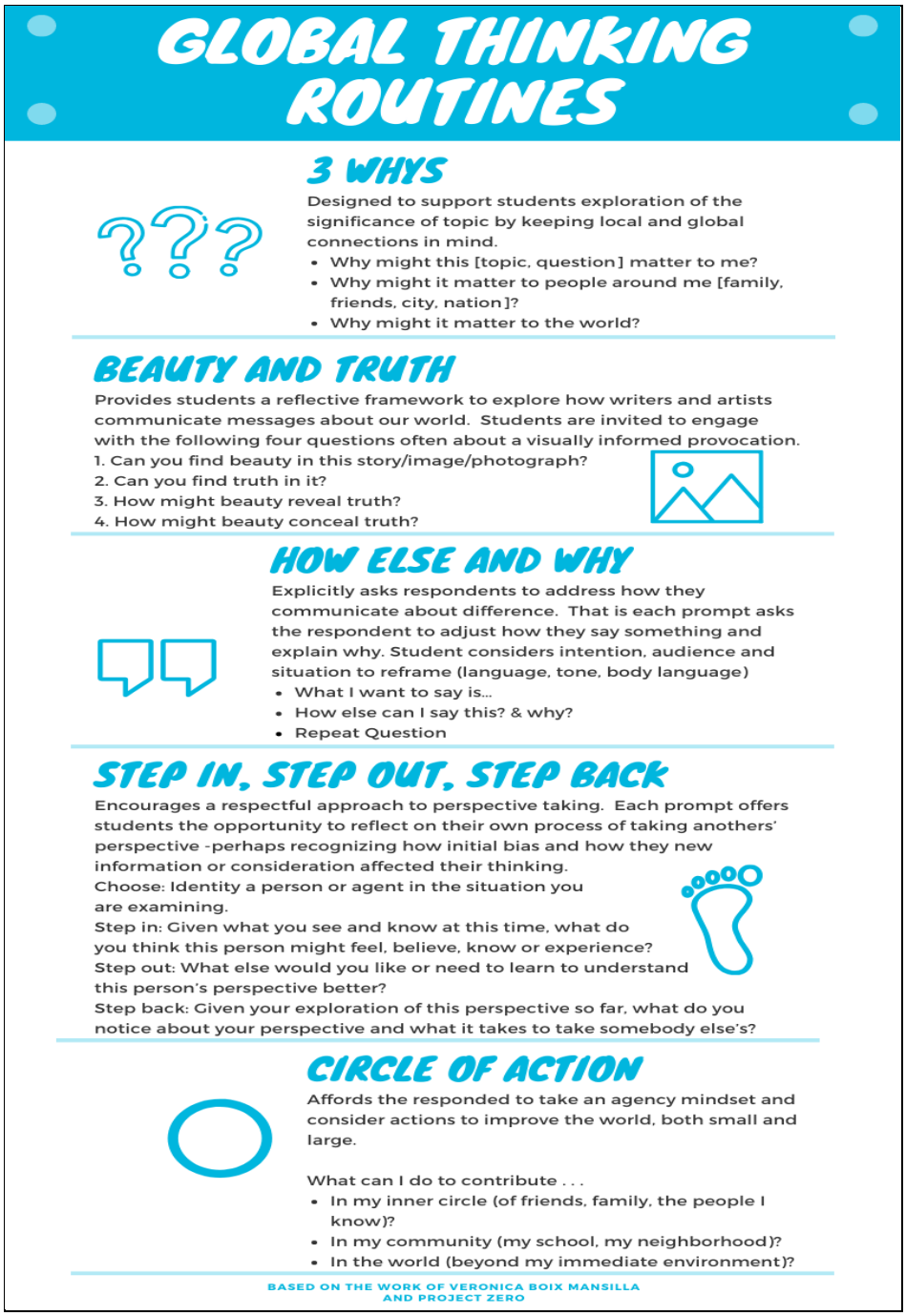

Fig. 1: Global Thinking Routines

Visible thinking routines broadly have been researched with positive results in developing teacher candidates' ability to go beyond surface level thinking and modeling a PK-12

pedagogical tool (Barahal 300; Gholam 74). Lowe et al. examined the routine *See, Think, Wonder* as a journal prompt for Australian teachers participating in an international exchange. Their participants utilized the routine in different ways and appreciated that the routine provided enough flexibility to do so. The researchers found the routine helpful for promoting critical reflection in an intercultural context. However, we found no research to date on GTRs in teacher education with the explicit purpose of promoting global consciousness from a critical stance. Because the GTRs are explicit and structured while remaining flexible in use, research can offer evidence to support use of the method for critical global education. Thus, our study offers teacher educators an exploration of the affordances of GTRs as a global micro-pedagogy to learn about communication diversities.

Methods

This case study took place at an urban liberal arts college in Northeastern U.S. We utilized the collective case study method to qualitatively analyze data across participants, looking for patterns as a whole (Stake 192). The data consisted of course artifacts and focus group transcripts from undergraduate students enrolled in two sections of the same education course where GTRs were implemented. Our research questions were: (1) What are the affordances of GTRs in a teacher education course? and (2) How did GTRs impact student outcomes related to global consciousness?

Context

The course *Communication Development and Disorders* was an undergraduate first year education course taken by declared elementary/special education majors, undeclared students

exploring the major, and students fulfilling the college's diversity requirement. The 29 traditional college-age participants included twenty-five women and four men. Two self-identified as students with disability, four students self-identified as multilingual and two self-identified as people of color. The course addressed the following topics from an asset-based stance: communication development, multilingualism, different modes to communicate (e.g. accents and dialects, augmentative and alternative communication, and sign language), disabilities that impact communication (e.g. autism, developmental language disorders, stuttering), and strategies to enhance communication in the classroom. Readings and media with a global frame of reference were intentionally added and GTRs were included to structure discussions and reading responses on critical issues of inclusivity and discrimination. The semester culminated in a final project that involved collaborating virtually with an international NGO that works with children with disabilities in rural communities in El Salvador.

GTRs were incorporated into class as a framework for analysis and reflection. Students were introduced to the routines through pedagogical practices modeled in class and reading Boix Mansilla's article "How to be a Global Thinker." Approximately once a week, class discussions were structured using GTRs (see fig. 1). Students were also required to complete five GTRs as formative reading response papers. Students were asked to anchor their routine with a quote selected from assigned reading/media[2]. The GTRs were intended to formatively assess students' understanding of readings, critical thinking, perspective taking and their connections to class topics[3]. Students were given the opportunity to choose which articles/media to analyze (both as an attempt to engage them in topics that sparked their interests and to give them flexibility in

[2] Course readings addressed are marked with an asterisk in the reference list.
[3] Global Thinking Routine response rubric is in Appendix.

scheduling). About a third of the students involved in the courses participated in a focus group three months after class to talk about their global learning experience and, in particular, the use of GTRs.

Researcher Positionality

As teacher educators, we are committed to infusing critical global perspectives with our preparation of teachers. The first author, the teacher and designer of the course, and the second author, a research colleague, collaborated after completion of the course to analyze the pedagogical practice of GTRs. Although both Longview Global Education fellows in 2018, our expertise is distinct; as such, we approach topics of identity, dis/ability, literacy, language, and privilege as scholars of special education and literacy, respectively. As first author transitioning to the role of researcher from teacher, I did so with critical reflexivity towards how I considered my positions; I identify as a researcher with those 'researched.' Because I was the participants' teacher, we took care to conduct the research ethically. We followed Institutional Review Board approved protocols, yet we acknowledge the data cannot be separated from a contextual power difference between the researcher/teacher and the participants/students.

Qualitative Analysis

Two primary sources of qualitative data were used. Specifically, the sources were five completed written routines submitted across the semester by each of the 29 students and a transcript from a student focus group about their global learning experience. The course syllabus and teaching materials also were referenced to provide detailed context.

Analysis of the written GTRs involved three rounds of coding. We first read through the data set and open coded sentences relevant to the research questions. Open coding provided the opportunity to negotiate our understanding of criticality from different perspectives (literacy/disability) as well as reduced data to key statements that addressed affordances and outcomes. First-round coding and the collaborative discussion helped us define two thematic codes: Critical Literacy and Global Perspective (see table 1). Critical Literacy addressed topics of disability, power and language, bias, and human rights. Passages coded as Global Perspective addressed topics of globalization and local-global connections, intercultural communication, multilingualism, and cultural diversity.

Table 1

Codebook for Data Analysis

	Operational definition	Example quotes
Critical literacy	● Dealing with power, privilege & politics ● Critique society and questions status quo, questioning normal ● Value equity and equality ● Critical analysis of text and reflection of self	I have also realized the stereotypes that are often placed on these people living in harsh circumstances in rural areas of countries such as El Salvador. Their lives are extraordinarily different from those lives of people living in the US, and through no fault of their own. These citizens are typically born into their situations, as are those living comfortably in the US. It is crucial to recognize these biases in order to gain a better perspective when reading Diego's story.
Global Perspective	● Dealing with nations and cultures ● Value international diversity, multiculturalism, and multilingualism	With our world becoming more interconnected, it is important that we can all understand one another and communicate with each other effectively. This starts with understanding where people are coming from.

	• Enacting intercultural communication • Awareness of global systems and local-global connections	

We completed second round coding of critical literacy and global perspective within each routine to identify particular affordances, if evident. Inter-rater reliability was then established in second round coding on a sample of twenty-five responses. The percentage of agreement was 86%; the two researchers then discussed differences. We recognized overlap and that critical literacy and global perspectives are theoretically related (Yoon). We saw examples of empathy, perspective taking, agency and valuing of diversity in these points of overlap. For example, we asked ourselves where in the data does personal reflection and empathy contribute to criticality? Thus, we went into the final round of analysis aware of these blurred lines. In the third round, we used thematic coding across routines to understand how, as a micro-pedagogy, routines afforded students opportunities to understand communication diversity and develop critical global consciousness. Counterexamples were also coded as such to increase the trustworthiness of the findings.

Results

We first present data about the use of routines in general, and then the present findings of our research question by themes. When given the choice of five GTRs to use as frameworks for their reading responses, students most frequently choose *3Whys* (53%) and *Step In, Step Out, Step Back* (30%). *Beauty and Truth* was chosen 9.4% of the time while *Circle of Action* (3.6%)

and *How Else and Why* (3%) were used infrequently. In the focus group, students talked about their choice of different routines and how different routines lead to different thinking. One student thought that the GTRs were helpful because "from each one you thought in a different perspective like me, my community and then like the world- but then if you switched step in, step out, step back- it was totally different."

Students' routine responses provided opportunities to demonstrate critical literacy and global perspectives, as more than half were coded as incorporating critical literacy and/or global perspectives (see table 2). Across all but one routine, the majority of responses addressed topics using a critical literacy stance. All of the routine types resulted in more than half of the responses incorporating global perspectives. An overlap existed between responses coded as critical literacy and global perspectives, recognizing that students' analyses of global topics incorporated a critical understanding. In the sections that follow, we offer specific examples of how the GTRs afforded the students opportunities around three themes: to explore their awareness and value of differences critically, to discuss the limits of perspective taking, and to reflexively advocate and act across multiple personal and global contexts.

Table 2

Percentage of Routines that Afforded Critical Literacy and Global Perspective

	3 Whys	*Step In, Step Out, Step Back*	*Beauty and Truth*	*Circle of Action*	*How Else and Why*
Critical Literacy	75%	73%	92%	0%	50%
Global Perspective	60%	58%	62%	80%	75%

Critical Literacy and Global Perspective	41%	35%	54%	0%	50%

Value of Differences

The routines offered students opportunities to explore the diversity of how people communicate. Students valued difference and frequently took a critical stance to counter negative stereotypes about individuals with communication disabilities or language learners. For example, in a *3 Whys* routine response to reading *Rules* (Lord), a children's novel about Catherine, her brother David (a child with autism), and Jason (a friend who communicates with an alternative communication device), a student said, "People see others as not normal...when it comes to disabilities and communication disorders because they are often seen as different before even interacting with them." This student begins by noticing that people judge others by comparisons to themselves. The student then names judgement of communication differences as a "large stigma" and calls for people to acknowledge and accept differences as positive.

Students also applied *3Whys* questions to classroom practices that value children's unique identities related to communication, as in the following example: "There is not one language or dialect or accent to become familiar with. There are many children in the school systems that need to feel accepted for who and what they are." The *3 Whys* routine structure provided space for the student to move beyond personal experience to consider why it is important for people around them to use their native language and how stereotypes about dialect or mode of communication can impact others' life experiences.

The *Beauty and Truth* routine provided the opportunity to ponder what was communicated through visual media about different cultures' communication. One student, in response to article and video (Beckman and Montagna) about the Salvadoran community who learned sign language to communicate with their neighbors who were deaf, explained she found beauty in "a community effort to include the disabled in their education and culture is a moving sentiment, as well as a large step forward in the direction of special education and an inclusive society." This student is seeing a whole community composed of people with different identities and recognizing the assets of a community that is different from her own. Another student wrote about *A Life Without Words*, a documentary about a family in the Global South with three adult children (Maria, Francisco, Jose) who are deaf: "I find it powerful that her not having a spoken or written language did not affect her and she still managed to communicate with people and get her point across." These two students used words that captured emotions—*powerful, moving sentiment*—and in a description by another student, the word *frustrated*: "Maria is frustrated at first learning basic words and not knowing what they mean." *Beauty and Truth* allowed students to express feelings about character portrayals, tapping into the affective dimension of learning. The use of affect and feelings is important because it relates to the critical stance which is built on a foundation of empathy for others.

Other prompts within the *Beauty and Truth* routine provoked students to attend critically to social context and describe ways to address stereotypes. In the following quote the student addresses geographical privilege when discussing *A Life Without Words*: "People like Maria deserve materials to help broaden their horizons to what their life could be like as a deaf person. It is not fair that they lack this because of where they are located in our world*."* And in

considering how truth might be concealed in the documentary *Through Deaf Eyes*, a student was mindful of stereotypes and their harmful impact when we don't view others for their full human potential.

> There are almost always truths/ideas that we do not know about as an audience. Regardless, it is crucial to continue to enhance our knowledge and eliminate any stereotypical ideas of the deaf community. . . As expressed through deaf eyes, humanity is a part of every person's nature, no matter if they can hear or not.

A student's comment in the post-course focus group confirmed how using the routines helped her learn to think differently: "Stepping back and saying, okay, I actually didn't know that much about this. And that's… really helpful to be able to learn how to think differently and switch gears like that in different situations, different routines." This student and others interspersed the language of the routines in explanations of how they developed their critical thinking and ability to make personal and global connections through their GTRs.

In contrast to the student above, maintaining stereotypes was also illuminated by all the routines. For example, another student attributed negative assumptions about Maria and her brothers: "These adolescents work in the field with their family and stay pretty close to home. In other words, they don't get out very often, but they also do not have a passion to leave or become educated." This student assumed personal deficits rather than recognize the truths of systemic poverty and disability in the rural Global South (Beckman and Montagna). Another student revealed a subtractive view of language learning in the *3 Whys* routine exploring the perspective of a multilingual parent who was part of the 5 Million English Language Learners [ELL] Voices project (Sanchez): "She now has two daughters and must speak more English to them than

Spanish because she knows it would be hard for them to learn English in school after learning Spanish." Others expressed deficit perspectives of disability; for example, when learning about speech and language disabilities (Rosenbaum and Simon), a student tried to take the perspective of a person with speech disorder and suggested "If a person is suffering from a speech disorder but not a language disorder, there could be some difficulties. I would think that a person must hate that they have that speech disorder." These biased responses demonstrate that the routines provide formative opportunities for the professor to challenge problematic thinking about people who are historically marginalized based on their identity, their language and how they communicate.

Limits of Perspective Taking

In many of the routines, students explored the perspectives of language learners, individuals with disabilities, teachers, and family members. To illustrate, in this *Beauty and Truth* response about a scene from the short film *The Silent Child*, the student explored differing perspectives about a young British girl who is deaf: "Joanne represents those in society who are educated on the topic and are aware of the potential that the deaf community has. The grandmother's sarcastic tone and clear doubt represents those who see deaf people just simply as deaf." In exploring this scene, the student was able to investigate multiple perspectives about deafness and express her own perspective about the competence of those who communicate differently when she goes on to say, "different does not mean incapable."

Using the *3 Whys* routine, students also extended their perspective-taking to consider the global context. The following quote shows how a student took an example from the novel *Rules* and expanded on an idea to think about intercultural communication:

> The communication methods of gestures and facial expression can help one express a thought to someone with a disability or language difference without needing to use words. Catherine also demonstrates that it is necessary to be creative, which on a global scale emphasizes the need for innovation to create new ways to communicate with those who are different from oneself.

Reflecting on their ability to fulfill the routines, one of the students recognized how difficult perspective taking is across differences: "It can take a lot to understand someone else's perspective, especially when they are from another country... As a result of this, I have learned the value that global education has." Similarly, another student stated:

> When thinking about the creation of a language, especially sign language due to the fact that I am mostly unfamiliar with it, I realized that there is a lot I do not understand... This uncertainty demonstrates the fact that not knowing a lot about someone else's experiences make it very challenging to take their perspective.

Both students recognized the importance of gaining more information and checking assumptions as part of the process of understanding perspectives.

Completing the routines after reading about communication diversities necessitated students to rely, not on assumptions but rather, to understand the perspectives of others. As this student explained when reflecting on Burleson's *Cultural Mindedness*, "Every single individual is different, and therefore, it is impossible to make assumptions." However, others approached differences in perspective by minimizing them and assumed that an individual with a disability wanted to be treated like a person without a disability. Specifically, in the reflection about *Rules*, another student relates the text to a class discussion about identity-first and person-first language:

“We consistently came back to the fact that it should be based upon whatever that person would like to be called. People with any kind of disability should be treated just like people without a disability.” This student recognized that it is important to find out from a person what they would like to be called, yet assumes a person would not want to be identified by their disability. This response indicates that the student may not appreciate the potential differences in perspectives as it relates identity, communication, and disability.

Step in, Step Out, Step Back is one GTR that explicitly encourages perspective taking. In the following *Step In, Step Back, Step Out* responses, we see how students describe their ability to take perspectives, but also acknowledge limits to taking another person's perspective. In taking the perspective of Jason, a character from *Rules*, this teacher candidate qualifies his ability to take that perspective by saying “I can only imagine” when describing the emotions Jason may feel when communicating with images on a communication board.

> When I "Step-In" and immerse myself to the best of my ability in Jason's life, I can only imagine the frustration he must feel when he cannot speak... Jason also has to deal with other people, their perceptions of him and how they may act towards him.

In this quote, the student addresses biases that some may hold about individuals who communicate with alternative devices.

Teacher candidates also stepped into the shoes of language learners. For example, in responding to the Sanchez report about language learners another student used an asset-based lens to describe potential feelings a language learner may have about the educational system. “They may feel ... upset or angry because they are being denied opportunities over their language. It must be hard to be smart but be viewed as otherwise simply because you speak a

different language." Note this student also uses the word 'may' to show that there are some limitations in the ability to truly understand someone else's perspective. In the following quote, another teacher-candidate student shares the difficulty she experiences taking the perspective of Catherine from *Rules*:

> Personally, I have relatives and friends with various disorders and disabilities, however, I have never experienced them every day. Having said that, it was incredibly difficult for me to put myself in Catherine's shoes. I would like to believe that I would have patience and be understanding, however, thinking about Catherine and the countless experiences she had that made her feel neglected and frustrated made me question my strength.

This student thoughtfully considers both Catherine's perspective and her own as individuals who have family members with disabilities but also offers some personal limits regarding her empathy for someone who is disabled.

In direct contrast to the above reflections where students explored limits in perspective taking, a few students explicitly conclude that they cannot take the perspective of others:

> After trying to put myself in Catherine's shoes, I still feel that I will never understand how Catherine's life is like. I personally have never had a lot of encounters with people with disorders and autism. It does not run in my family or occur in my life. Therefore, I think that makes it harder for me to understand her life.

This teacher candidate states she will never understand Catherine—for her, limits in perspective taking are barriers. *Beauty and Truth* also revealed that for some students taking the perspective of a person with a disability is difficult. In this quote, the teacher candidate is talking about Jason: "I obviously cannot relate to him in any way because I do not have the same experiences

as him." This difficulty with perspective taking is in contrast to students who were able to relate across differences but also understood the limitation of being able to truly understand another person's lived experience.

The discussion in the student focus group three month after the course ended confirmed that students' use of GTRs and perspective-taking developed across the semester:

> I think just naturally when you're writing and reflecting and analyzing you tend to stick towards what you understand, and that's it. So to put that global thinking routine… it's kinda like stepping outside your comfort zone... you probably wouldn't take on those different perspectives if you didn't have that structure to do it.

Routines pushed the student beyond the ways that they were used to responding to readings. Over time, this student realized that routines provided structure to examine different perspectives and construct new understanding.

Reflexivity Enabling Advocacy and Action

Students' reflexive process made visible not only their perspective taking but also how their understanding of others contributed to their advocacy and action. For example, they described what they learned from others' perspectives as they critically explored issues of power, bias and advocacy for marginalized voices. One student recognized how power impacts perspective-taking when reflecting on Park's article about Nicaraguan children who developed their own sign language; she pointedly expressed how those who had power—those who can hear—made ableist assumptions about language learning deciding to teach lip reading and American Sign Language. "This example of the deaf community pushing back in order to communicate in their most desirable way allows hearing people to step back and change their

perspective on how deaf people should be learning language." The routine provided space for the student to explore the idea of self-advocacy within the deaf community. It also shows how the student uses the language of the routine to real-life situations, calling for "hearing people to step back" and leave the decision-making to the people being affected.

In some responses, the students expressed how they would use the critical understanding they gained to act. For example, this student shares her experience with her younger cousin, now recognizing how she had adjusted her language: "My cousin was unable to produce and combine words into a sentence until she was around three. During this time of her life, I had to adjust the way I connected and communicated with her." Another student uses the *Step Out* prompt to call on all teachers to "fight the stereotype that language learning students come from the same backgrounds." She continues her response by advocating that teachers "learn as much about their students as possible" and understand them as individuals. This student points to the place of reflexivity in teaching, which involves breaking down stereotypes that one holds and building relationships with students in order to recognize each person's needs and preferences rather than relying on generalizations and assumptions.

Later in the semester, a few students choose to use the *Circle of Action* routine to reflect on their experience communicating virtually with Salvadorans and developing literacy materials for their community members with disabilities: "To truly serve someone you must take their own priorities and viewpoints into consideration. You must help them have the life that they want, which is not necessarily the life that you would want." This student demonstrated empathy for the Salvadorans as she considered her role in taking action within a relationship and understanding of others' priorities. Other students, however, described their work on the

Salvadoran project using us-versus-them language: “With my peers and those close to me, the best possible thing I could do is to educate them. Clearly, the El Salvador education system needs some work at some point.” This reflects a judgmental, privileged perspective that the United States is better; and not acting from a point of global consciousness, this last quote demonstrated that not all students’ actions reflected the critical global consciousness that was the objective.

While GTRs may not move all students to global consciousness over the course of the semester, they do inform teacher educators about students’ beliefs and developing consciousness. As such GTRs provide opportunities for educators to formatively assess students, offer feedback and extend critical dialogues about ableism, stereotypes and privilege as students learn to think about others’ perspectives and act. Focus group students recognized that the prompting and feedback they received on their routines “really challenged them not to put limits on the perspectives we take throughout the course;” and “just as a comment she would bounce ideas and say, well, you know, how would your opinion change if the situation looks this way.” Several students shared that they were applying what they learned in other classes “looking at things a bit more carefully, with a global lens” and “going beyond the surface and analyzing.” The routines were now learning tools that were a part of their journey to critical global consciousness.

Discussion

Our data show how implementing GTRs in teacher education classes fosters both global consciousness and critical global consciousness and supports equity in education, by inviting education students to engage thoughtfully around social issues of global significance. Reflection about communication differences provided a site of interconnection between global competency and critical literacy (Landorf et al. 63). Students discussed the value in diverse communication

methods and languages as well as the barriers to inclusion of diverse communication methods and languages in current global education systems. According to the data, students valued the multiplicity and complexity of language learning and the interconnection of language and systems of power, instead of describing language use as a discrete process separate from culture, social, and political environments (Grosjean 137). In the majority of responses, students reflected on course readings and media with a critical literacy lens exploring topics of stigma and bias, power and privilege, and identity as they described those who communicated differently from themselves.

By engaging in routines, students' differing beliefs about communication were made visible. In the focus group, students shared how the routines were different from other reading reflections. They recognized that utilizing the different routine structures led them to explore multiple perspectives about communication. In these structured explorations, many countered negative stereotypes about language learners and ableist beliefs about those who are autistic or deaf. Some acknowledged differences but responded by minimizing variances and focusing on similarities to the norm (Cushner et al. 136). A few maintained deficit perspectives and negative biases as they reflected on individuals who communicated differently than them. For the first author, having GTRs as part of her pedagogy provided not only a place for the students to reflect critically about communication diversities, but also enabled a space to offer formative feedback which challenged students' thinking as they made sense of multiple perspectives—an essential component of the on-going development of critical global consciousness. Building on previous research and adding this data, we put forward that critical global consciousness is a multidimensional construct including the awareness of how power systems work locally and

globally; a value of diversity, equity and inclusion on a global scale; and commitment to solidarity and empathy as stances for action with marginalized voices.

Relationship of Perspective-Taking and Empathy

Our data demonstrate that in addition to exploring social differences with criticality, the routines afforded students a space to consider the perspectives of others and empathize. A primary objective of infusing global content into education courses is to develop teacher candidates' ability to take multiple perspectives about issues locally and globally and to hold an empathetic disposition towards those who communicate differently. But perspective-taking and empathy are overlapping yet slightly different ideas (Walther et al. 127).

Perspective-taking is cognitive, requiring both critical and creative thinking. Critical thinking is necessary because perspective-taking requires one to be able to think from different angles and consider different viewpoints. Creative thinking is necessary because it also requires one to imagine and generate new ideas different from those one has directly experienced. As one focus group participant explained, "One practical reason creative thinking and perspective-taking are important for teachers is to communicate across differences by thinking about what would be helpful to the other person and for 'innovation' throughout the conversations."

For many students, perspective-taking led to empathy across differences, recognizing how additional knowledge about others contributed to greater understanding and compassion. This contrasts with a few students who expressed pity for the disabled or poor. Perspectives of sympathy didn't achieve our critical global education goal of including marginalized voices in our efforts to build inclusive societies.

Empathy requires both the cognitive and affective ability to feel with others (Mirra). Participants chose words such as 'appreciate' and 'moving' to describe affective dimensions of their learning experience while reflecting with GTRs—particularly in *Beauty and Truth*. Empathy connects caring (McAllister and Irvine 434) and compassion (Levenson and Ruef 244) to perspective-taking. In addition to the cognitive and emotional dimensions, empathy also adds responding directly and compassionately to someone else's experience. Further, empathy requires a response with attention to the receiver's desired response, what we call an empathetic action. The data provide evidence of empathy from cognitive and affective dimensions, but there were not enough *Circles of Action* routines to draw conclusions about the potential for prompting empathetic action, a construct that was reflected in only one participant's post when she said "to truly serve someone you must take their own priorities and viewpoints into consideration." Future research could examine whether the prompts support imagining action empathetically.

Prior research on teacher education from a critical lens advocates for empathy in teaching, especially across differences (e.g., Darling-Hammond and Bradford; Noddings and Shore). The GTRs provided students opportunities to reflect empathetic dispositions, while also providing space to examine the limits of perspective-taking. After describing an issue or scene from a particular perspective—frequently with detail and new understanding about someone different from themselves—some students would go on to state there would always be a limit to their perspective-taking. In their responses, we saw they recognized who they were as native English speakers, how they were the same and how they were different from those who use alternative communication or were learning English as another language; that there was perhaps a limit to seeing the world from another's point of view.

Students' articulations of limitations shed light on earlier researchers' critiques of advocating for empathy, namely for White teachers working with students of color and the abled speaking for the disabled (Linton 526). For instance, McAllister and Irvine warn against a "false sense of involvement" that can result from an emphasis on empathy without critical framing (434). A critical framing toward empathy goes beyond the superficial to a complex and multifaceted understanding and feeling with others.

Our findings suggest that perspective-taking and empathizing are not bivariate, that is "you do it or you don't;" rather, they are multidimensional and perhaps developmental. Further research can investigate whether these skills are developmental progressing along a continuum, and/or multidimensional, consisting of parts that can evolve in a variety of ways. Our findings also indicate that advocating for empathy in teaching does not exclusively involve perspective-taking and caring, but also a critical frame.

Advocating and Communicating across Differences

The GTRs provide one tool to understand students' thinking about how others may feel but may not be enough to realize empathy as a sense of social responsibility that undergirds advocacy (O'Connor and Zeichner 532). The data provide evidence of students thinking about new ways of communicating about and relating to others. Students' use of asset-based language and their critical awareness of bias and stereotypes suggests they recognized that their language was not politically neutral (Lucas and Villegas 56). Baglieri and Shapiro suggest that "awkwardness about talking about disability and fear of offending others by our talk is informed by cultural aversion to disability," and we need to abandon "stigma and move toward language practice that captures individual and collective disabled identities" (26). In other words, *not*

talking about disability or *not including* the disabled in that conversation perpetuates ableism and stigma. In talking about globally competent inclusion teachers, Landorf et al. take one step further stating the importance of redefining the 'other' not by the majority but accepting disabled peoples' definitions and names for themselves (42).

Students were able to reflect on experiences and imagine how they would advocate for difference inside their future classrooms. In particular, *3Whys* and *Circle of Action* required students to think beyond their first reaction and expand on how they could actualize their knowledge in local and global contexts. And some students used the final prompt in *Step Back* to share how they would advocate for language learners or individuals with disabilities. Later in the semester when students were completing projects for the community in El Salvador, some students expressed agency as teacher candidates who would advocate for quality education for individuals who communicate differently. However, they did not necessarily foster what Wahlström calls "transactions of perspectives" where students listen and respond to other people with reciprocity and equality such that they can learn *with* and work *with* others in solidarity. The actions they imagined reflected a "U.S. is best" perspective and lacked disruption of systemic inequities globally. While students demonstrated changing orientations about those that communicate differently than themselves, the use of GTRs alone fell short of providing the students authentic means for proposing critical social action which combats discrimination toward those who communicate differently.

Implications for Teaching

Our research demonstrates that GTRs originally developed for the PK-12 are effective for college educators to incorporate into their courses to support the global dispositions of

perspective-taking, empathy and advocacy. As a framework for reflective reading responses in a first-year education course about communication diversities and disabilities, the pedagogy enabled students to grapple critically with globally-infused content. As such, GTRs straddle previously described pedagogies for developing global perspectives: structured discussions and incorporation of global content (Asia Society and OECD 6).

Preparing to teach and advocate for quality inclusive education (Landorf et al.) requires teachers to participate in difficult discussions with a critical lens—discussions that challenge the familiar, amplify marginalized voices, include speakers of other languages, and necessitate empathy across differences. The GTRs provided structure to facilitate such discussions in students' written reflections. While not all of the quotes that students analyzed had a global focus, requiring them to make connections to course topics and/or their experiences provided the professor with valuable information regarding students' conceptualizations of communication and disability in local and global contexts.

In turn, that understanding was used to frame future class discussions by helping students refine concepts, accommodate conflicting viewpoints and adopt multifaceted explanations. Previous research on global teacher education highlights connecting global learning to the place, people, and time of instruction (Kerkhoff). GTRs were successful scaffolds for locally situating discussion of the global, a promising practice for developing global consciousness.

Essential to GTRs is content that provokes global thinking and reflection. Therefore, part of developing a globally-infused course was to incorporate readings/media that reflected varied perspectives about communication diversity with both cultural and disability lenses and a concentrated focus on Central America (Aydarova and Marquardt 28). Reflecting on the source

choices, the findings suggest that the relatability of sources was important. Sources needed to either include personal narratives and/or address an issue that was both local and globally significant. Learning from the personal stories of individuals who identify as disabled and/or from a different culture requires accepting a lived experience as valid and worthy, and acknowledging that certain types of understanding can only be obtained through direct experience (Johnson and McIntosh 76; Nieto 3; Strauss 466). In other words, reflecting on an insider perspective of those who communicate differently than them offered the students the opportunities to disrupt assumptions and tendencies to rely on local experiences and knowledge of normalcy (Linton 532). The inclusion of sources that address significant global events that have a local connection provided students a way to approach issues by connecting personally and then extending and challenging their thinking (Boix Mansilla 11).

Completing five GTRs across the semester provided the first author a formative opportunity to understand her students' thinking and offer them feedback. While the feedback during the course experience focused on thinking critically about course content, research findings demonstrate that the routines would also afford the opportunity to provide feedback on students' developing global competencies. The global competency most evident in the written routines was students' ability to take perspective and express empathy for others. Not only did *Step In, Step Out, Step Back* routine encourage perspective taking, but so did *3 Whys* and B*eauty and Truth*. Assessing global competencies is challenging, so having a means to formatively assess this critical skill is essential to understanding if our pedagogical approaches in teacher education are having a positive impact on students (Cushner et al.). Our research findings

demonstrate that on-going use of GTRs are a valid tool for formatively assessing complexities of perspective taking.

Conclusion

Rather than an additional or separate component of teacher education curricula, we view global education as an innovation of existing practices and infused with pedagogies that support inclusion of all students (Boix Mansilla et al., Dukes et al.). The course provided a space for the first author to model how to value multiple perspectives to promote dialogue about issues of global significance—communication rights in education communities—by bringing together perspectives from global education, disability studies, special education and language education. As a result of this work, teacher educators and teacher candidates may be able to imagine future classrooms where students develop dispositions and critical thinking skills necessary to value multiple perspectives, empathize with those who communicate differently and disrupt local and global inequities. Teacher educators can incorporate GTRs into their classes to support the development of global dispositions and have a means to formatively assess students' global consciousness. Researchers can build on our findings to investigate how GTRs are used in teacher education and analyzed as an assessment of global consciousness for teacher candidates, as well as how teacher candidates use GTRs modeled in their education classes in their own classrooms.

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Appendix: Global Thinking Routine Rubric

	Sophisticated	Proficient	Developing	Incomplete
Quote Explanation	Quote is cited, clearly and accurately paraphrased in your own words and places quote in context	Quote is cited, accurately paraphrased in your own words and places quote in context	Quote is cited, somewhat paraphrased; some misconceptions/inaccuracies regarding the text, limited context provided	Quote is cited, minimal explanation/multiple inaccuracies, relied on authors' words; not placed in context
Critical Thinking	Discerning choice of global thinking routine used to analyze quote; demonstrates why the quote challenged you to think differently about communication, differences and disabilities and/or developing global competence	Global thinking routine used to analyze quote; demonstrates why the quote is significant to your understanding communication, differences and disabilities and/or developing global competence	Global thinking routine used to analyze quote; demonstrates why the quote is relevant for understanding communication, differences and disabilities and/or developing global competence	Global thinking routine is not used; limited understanding of how quote relates to communication, differences and disabilities and/or developing global competence, quote not focus of routine
Multiple Perspectives	Explores more than one perspective; thoughtful examination of how culture, identity and privilege influence yours and others' perspectives; values human dignity by resisting stereotypes and deficit perspectives	Considers both your own perspective and the perspective of others; some examination of how yours and others culture, identity and privilege influence perspectives; values human dignity by resisting stereotypes and deficit perspectives	Focus predominately on one perspective (own or other); minimal examination of influences on the perspective and/or includes some stereotypes and deficit perspectives	Multiple perspectives of are not considered Stereotypes and/or deficit perspective dominate
Connections	Logical and insightful support/examples provided from other texts, media, class discussions; relevant connections with own experience, world around us	Support/examples provided from other texts, media and class discussions; relevant connections with own experience or world around us	Minimal connections made to other texts/ posts/discussions; connections to self and world inapplicable	No connections made

Works Cited

A Life Without Words, directed by Adam Isenberg, Zela Film, 2011.

Alim, H. Samy, et al. "Responding to 'Cross-Pollinating Culturally Sustaining Pedagogy and Universal Design for Learning: Toward an Inclusive Pedagogy that Accounts for Dis/Ability'." *Harvard Educational Review*, vol. 87, no. 1, 2017, pp. 4-25. *Harvard Education Publishing Group*, doi:10.17763/1943-5045-87.1.4.

Artiles, Alfredo J. "Fourteenth Annual Brown Lecture in Education Research: Reenvisioning Equity Research: Disability Identification Disparities as a Case in Point." *Educational Researcher*, vol. 48, no. 6, 2019, pp. 325-35. *American Educational Research Association (AERA)*, doi:10.3102/0013189x19871949.

Asia Society and OECD. *Teaching for Global Competence in a Rapidly Changing World*. Asia Society, 2018. doi:10.1787/9789264289024-en.

Aydarova, Elena, and Sheila K. Marquardt. "The Global Imperative for Teacher Education: Opportunities for Comparative and International Education." *FIRE: Forum for International Research in Education*, vol. 3, no. 1, 2016, pp. 23-41. *Texas Tech University*, doi:10.18275/fire201603011066.

Baglieri, Susan, and Arthur Shapiro. *Disability Studies and the Inclusive Classroom: Critical Practices for Embracing Diversity in Education*. 2nd ed., Routledge, 2017.

Barahal, Susan L. "Thinking About Thinking: Preservice Teachers Strengthen Their Thinking Artfully." *Phi Delta Kappan*, vol. 90, no. 4, 2008, pp. 298-302. *SAGE Publications*, doi:10.1177/003172170809000412.

Beckman, Paula, and Don Montagna. "'It Takes a Village': Promoting Social and Educational Participation in Rural El Salvador — Childhood Explorer." *Childhood Explorer*, 2017, https://www.childhoodexplorer.org/rural-el-salvador.

Boix Mansilla, Veronica. "How to be a Global Thinker." *Educational Leadership,* vol. 74, no. 4, 2016, pp. 10 -16.

Boix Mansilla, Veronica, and Howard Gardner. "From Teaching Globalization to Nurturing Global Consciousness." *Learning in the Global Era: International Perspectives on Globalization and Education*, edited by Marcelo M. Suárez-Orozco, University of California Press, 2007, 47-66.

Boix Mansilla, Veronica, and Anthony Jackson. *Educating for Global Competence: Preparing Our Youth to Engage the World.* Asia Society, 2011. https://asiasociety.org/files/book-globalcompetence.pdf. PDF file.

Brown, Steven. "What is Disability Culture?" *Disability Studies Quarterly*, vol. 22, no. 2, 2002, pp. 34-50.

Burleson, Kathryn. *A Guidebook for the Development of Cultural Mindedness*. Field Hollar, 2015. PDF file.

Byker, Erik. "Developing Global Citizenship Consciousness: Case Studies of Critical Cosmopolitan Theory." *Journal of Research in Curriculum Instruction*, vol. 20, no. 3, 2016, pp. 264-75. *Research Institute of Curriculum and Instruction*, doi:10.24231/rici.2016.20.3.264.

Cushner, Kenneth, et al. *Human Diversity in Education: An Intercultural Approach.* 10th ed., McGraw-Hill Education, 2021.

Darling-Hammond, Linda and John Bransford. *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*. Jossey-Bass, 2005.

Dervin, Fred. "Making Sense of Education for Diversities: Criticality, Reflexivity and Language." *Multicultural Education: From Theory to Practice,* edited by Hasan Arslan and Georgeta Raţă, Cambridge Scholars Publishing, 2013, pp. 85-101.

Dukes, Charles, et al. "Preparing Teachers for a Global Society: What Special Education Teacher Educators Need to Know." *Teacher Education and Special Education*, vol. 39, no. 3, 2016, pp. 161–64, doi:10.1177/0888406416640861.

Estellés, Marta, and Jesús Romero. "Teacher Education for Citizenship in a Globalized World: A Case Study in Spain." *Journal of International Social Studies*, vol. 6, no. 2, 2016, pp. 21-33.

Ferguson-Patrick, Kate, et al. "Integrating Curriculum: A Case Study of Teaching Global Education." *European Journal of Teacher Education*, vol. 41, no. 2, 2018, pp. 187-201. *Informa UK Limited*, doi:10.1080/02619768.2018.1426565.

García, Ofelia, and Li Wei. *Translanguaging: Language, Bilingualism, and Education*. Palgrave Macmillan, 2014.

Gaudelli, William. *World Class: Teaching and Learning in Global Times*. Routledge, 2003.

Gholam, Alain. "Visual Thinking Routines: Classroom Snapshots." *Athens Journal of Education,* vol. 6, no. 1, 2019, pp. 53-76.

Grosjean, François. "Bilingualism, Biculturalism, and Deafness." *International Journal of Bilingual Education and Bilingualism*, vol 13, no. 2, 2010, pp. 133-45. *Informa UK Limited*, doi:10.1080/13670050903474051.

Hauerwas, Laura Boynton, et.al. "Glocality, Reflexivity, Interculturality, and Worldmaking: A Framework for Critical Global Teaching." *Journal of Research in Childhood Education,* vol 35, no. 2, 2021, pp. 185-99, doi:10.1080/02568543.2021.1900714.

Johnson, John R., and Angela S. McIntosh. "Toward a Cultural Perspective and Understanding of the Disability and Deaf Experience in Special and Multicultural Education." *Remedial And Special Education*, vol. 30, no. 2, 2008, pp. 67-83. *SAGE Publications*, doi:10.1177/0741932508324405.

Kerkhoff, Shea N. "Designing Global Futures: A Mixed Methods Study to Develop and Validate the Teaching for Global Readiness Scale." *Teaching and Teacher Education,* vol. 65, 2017, pp. 91-106.

Landorf, Hilary, et al. "Creating Permeable Boundaries: Inclusive Educators in a Global Society." *Proceedings of the Fifth Annual College of Education Research Conference: Urban and International Education Section*, pp. 58-63, Florida International University, 2013. https://digitalcommons.fiu.edu/cgi/viewcontent.cgi?article=1239&context=sferc. PDF file.

Levenson, Robert, and Anna Ruef. "Empathy: A Physiological Abstract ." *Journal of Personality and Social Psychology*, vol. 63, no. 5, 1992, pp. 234-46.

Linton, Simi. *Claiming Disability: Knowledge and Identity*. New York University Press, 1998.

Lowe, Geoffrey M., et al. "I See, I Think, I Wonder: An Evaluation of Journaling as a Critical Reflective Practice Tool for Aiding Teachers in Challenging or Confronting Contexts." *Australian Journal of Teacher Education*, vol. 38, no. 6, 2013, pp. 1-16. *Edith Cowan University*, doi:10.14221/ajte.2013v38n6.6.

Lord, Cynthia. *Rules*. Scholastic, 2018.

Lucas, Tamara, and Ana María Villegas. “A Framework for Preparing Linguistically Responsive Teachers.” *Teacher Preparation for Linguistically Diverse Classrooms: A Resource for Teacher Educators*, edited by Tamara Lucas, Routledge, 2011, pp. 55-73.

McAllister, Gretchen, and Jacqueline Jordan Irvine. “The Role of Empathy in Teaching Culturally Diverse Students: A Qualitative Study of Teachers’ Beliefs.” *Journal of Teacher Education*, vol. 53, no. 5, Nov. 2002, pp. 433–43, doi:10.1177/002248702237397.

McLeod, Sharynne. "Communication Rights: Fundamental Human Rights for All." *International Journal of Speech-Language Pathology*, vol. 20, no. 1, 2018, pp. 3-11. *Informa UK Limited*, doi:10.1080/17549507.2018.1428687.

Mirra, Nicole. *Educating For Empathy: Literacy Learning and Civic Engagement*. Teachers College Press, 2018.

Nieto, Sonia. "Diversity, Globalization, and Education: What Do They Mean for Teachers and Teacher Educators?" *Kappa Delta Pi Record*, vol. 49, no. 3, 2013, pp. 105-07. *Informa UK Limited*, doi:10.1080/00228958.2013.819183.

Noddings, Nel, and Paul J. Shore. *Awakening the Inner Eye: Intuition in Education.* Teachers College Press, 1984.

O'Connor, Kate, and Ken Zeichner. "Preparing US Teachers for Critical Global Education." *Globalisation, Societies and Education*, vol. 9, no. 3-4, 2011, pp. 521-36. *Informa UK Limited*, doi:10.1080/14767724.2011.605333.

Park, Shoshi. “How Deaf Children in Nicaragua Created a New Language.” *Atlas Obscura, 13 July 2018,* https://www.atlasobscura.com/articles/what-is-nicaraguan-sign-language.

Piller, Ingrid. *Intercultural Communication: A Critical Introduction.* 2nd ed. Edinburgh University Press, 2017.

Rosenbaum, Sara, and Patti Simon. *Speech and Language Disorders in Children: Implications for the Social Security Administration’s Supplemental Security Income Program*. National Academies Press, 2016.

Sanchez, Claudio. "English Language Learners: How Your State Is Doing." *National Public Radio (NPR)*, 23 Feb. 2017, https://www.npr.org/sections/ed/2017/02/23/512451228/5-million-english-language-learners-a-vast-pool-of-talent-at-risk.

Stake, Robert E. *Qualitative Research: Studying How Things Work*. Guilford Press, 2010.

Strauss, Joseph N. “Autism as Culture.” *The Disability Studies Reader*, edited by Lennard J. Davis, 2013, pp. 460–84.

The Silent Child, directed by Chris Overton, Slick Films, 2017.

Through Deaf Eyes, directed by Diane Garey and Lawrence R. Hott, WETA Washington, D.C. and Florentine Films/Hott Productions, 2007, http://www.pbs.org/weta/throughdeafeyes/.

United Nations. *Convention on the Rights of Persons with Disabilities (CRPD)*. United Nations, 2006. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html.

United Nations. *Disability and Development Report: Realizing the SDGs by, for and with People with Disabilities 2018.* United Nations, 2019. http://un.org/development/desa/dspd/2019/04/un-disability-and-development-report-realizing-the-sdgs-by-for-and-with-persons-with-disabilities.

Wahlström, Ninni. "Toward a Conceptual Framework for Understanding Cosmopolitanism on the Ground." *Curriculum Inquiry,* vol. 44, no. 1, 2014, pp. 113 - 32.

Waitoller, Frederico R. and King Thorius, Kathleen A. "Cross Pollinating Culturally Sustaining Pedagogy and Universal Design for Learning: Toward an Inclusive Pedagogy That Accounts for Dis/Ability." *Harvard Educational Review*, vol. 86, no. 3, pp. 366-89.

Walther, Joachim, et al. "A Model of Empathy in Engineering as a Core Skill, Practice Orientation, and Professional Way of Being." *Journal of Engineering Education,* vol. 106, no. 1, 2017, pp. 123-48.

Xin, Joy F., et al. "Integrating Global Content Into Special Education Teacher Preparation Programs." *Teacher Education and Special Education,* vol. 39, no. 3, 2016, pp. 165-75.

Yoon, Bogum. *Critical Literacies: Global and Multicultural Perspectives*. Springer, 2016.