Digital Storytelling: A Tool for Identifying and Developing Cultural Competence with Preservice Teachers in an Introduction to Middle Level Education Course

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Using five themes associated with a diversity intensive undergraduate course, preservice teachers in an upper level introduction to middle grade course described their knowledge of cultural competence using digital storytelling as the tool. Findings suggest digital storytelling provides a tool to explore and describe how cultural competence is developed from personal identity products to preservice teachers' beliefs as they relate to students in schools.

Culture plays a significant role in a child's identity and selfesteem (Powell, 2010). One of the four essential attributes in middle level design is the notion of a classroom, a school is equitable. According to the Association for Middle Level Education (AMLE), equitable means "advocating for and ensuring every student's right to learn and providing appropriately challenging and relevant learning opportunities for every student" (NMSA, 2010, p. 13). Professional Teaching Standards that guide middle level education call for middle level teachers who "understand the complexity of teaching young adolescents, and they engage in practices and behaviors that develop their competence as professionals" (Powell, 2010, p. 12). Stanford University faculty designed an assessment tool for preservice teachers that focuses on knowledge of students, planning, and assessment. One of the elements for getting to know their students involves analyzing students intellectually, culturally, based on their interests, and how they are engaged in the community. So where do those of us who teach in a college begin?

Ladson-Billings (1995) stated, "Culturally relevant teachers utilize students' culture as a vehicle for learning" (p.161). This manuscript highlights a current project that highlights one university's efforts to foster cultural competence in a teacher licensure program. Identifying a need for deep and meaningful exploration of one's personal identity the authors are using digital storytelling as a reflective tool for personal and professional growth. Inherent in the project is a belief that before a preservice teacher can meaningfully connect with students they must first understand their own complex identities and how those identities impact what teachers bring into the class-

room (Giroux, 1992; Landsman, 2008). In addition, given that almost 80% of teachers are white women and the student demographic is changing rapidly to a minority-majority, it is imperative that we create teachers who are culturally responsive (Center on Educational Policy, 2012)

Thus, this project evolved out of past failures to foster cultural competence (write a paper about cultural competence, read a book and reflect on your own cultural competence) which often resulted in superficial experiences and products. The tool we used to capture teachers' views was digital storytelling. Digital storytelling has recently gained traction in the classroom as a way to diversify and expand curricular opportunities for students in K-12 education (Sadik, 2008). Adapting digital storytelling pedagogy, this study seeks to develop and nurture preservice teachers' own cultural competence and teacher identity, while fostering technology efficacy. The author acknowledge that cultural competence "doesn't occur as a result of a single day of training, or reading a book, or taking a course" (NEA, 2016). However, we believe that the initial phases of teacher licensure can be a productive site for examining cultural competence development through meaningful and intentional reflection via digital storytelling.

Background

The University of North Carolina Asheville is a public liberal arts undergraduate institution. In the university's strategic plan there is a focus to "Assert and demonstrate our individual and collective responsibility to invite, honor, and learn from our differences, as preparation for an increasingly interconnected world" (UNC, 2010, p. 1). The Department of Education at

UNC Ashville seeks to develop candidates who respect the differences among people and ideas, and learn to clarify and articulate their own values. This project uses a department's intentional use of reflection and technology integration across semesters to examine students' view of their own development as culturally competent teachers.

A university-wide initiatives drives this focus as well. Every department must offer courses that have a Diversity Intensive focus. Faculty at the university can propose Diversity Intensive courses that focus on the following criteria:

- Students understand the socially constructed nature of identities
- 2. Students understand the significance of individuals' differing relationships to power.
- 3. Students understand how individuals, organizations, and institutions create, perpetuate, or challenge inequality.
- 4. Students understand how multiple identities intersect.
- 5. Students are better equipped to reevaluate their ideas about diversity and difference.

Currently, three courses taken prior to student teaching are diversity intensive. This study examines the second course preservice teachers take. The focus of the first course is goal 1: Students understand the socially constructed nature of identities. This course focuses on Goals 1, 3 and 4.

Across the educational journey of secondary pre-service teachers at UNC Asheville there is a thread that addresses the notion of cultural competence, cultural sensitivity, and cultural relevance. Recently a student commented, "We talk about cultural competence in every class." The professor then shared, "That makes me happy. It means that we are doing our job. We believe that if you are addressing cultural competence through many, many different lenses, then you are going to be going into schools with a much broader view of what it means to meet the needs of all of your students."

Our Candidates

The term colorblind is used by Choi (2008) to describe how colleges of education students, in which the majority of students are white, have difficulty identifying their own understanding of the problems inherent in ignoring race, culture, behavior, and beliefs. Our initial data suggest students beginning the program default to a colorblind position which in their early learning experiences keeps them from opening up to the need to consider multiple aspects of children (Adcock & Crave, 2016). In addition, we have seen that they struggle to understand nuances, yet important, distinguishing characteristics of equality versus equity in classrooms.

However, as candidates progress in their journey we are seeing that a focus on cultural competence, culturally relevant pedagogy, and cultural sensitivity is beginning to develop. Candidates are moving from an awareness of difference, to the importance and value of diversity in classrooms. We acknowledge that cultural competence cannot be developed in a day. Thus, the digital story-

telling projects were born out of a belief that intentional, reflective practice early and consistently in a teacher licensure program can begin to change and foster self-efficacy in culturally responsive practices. It is with this in mind that we believe we must provide opportunities for our students to not only reflect on the concept of colorblindness, but also to allow our students to share how their views of colorblind ideology develops over time.

Review of Literature

Identity has been defined in many different ways by Erickson (1968), Freud (1961), and Vygotsky (1978), which pertain to psychological self-concepts as rational beings. Late in the 20th century, social scientists began to look at identity beyond the individual and self-concept and in a much more culturally embedded way, examining the impact of race, gender, class, ethnicity, nationality, religion, sexual preference, etc. (Anderson, 1991).

Olsen (2008) elaborated on this idea that identity is a crucial component of a teacher, with support for teaching as a social, personal, and culturally embedded act that intimately engage with one's identity. Through these definitions of identity, we frame our projects as an exploration of pre-service teacher's acknowledgement of their identity, and bring to light the importance of acknowledging multiple cultural and personal traits that impact them as individuals and future educators.

We find the following statement by Palmer (1997), also to be particularly significant in teacher development and the shaping of a classroom community. "Good teachers join self, subject, and students in the fabric of life because they teach from an integral and undivided self; they manifest in their own lives, and evoke in their students, a capacity for connectedness" (Palmer, 1997, p.2). Palmer (1997) further stated, "We teach who we are," which aligns with the idea that knowing our identity is important for realizing and owning our biases, stereotypes, and beliefs in order to better understand the perspectives we use when we teach. This further supports the need to develop and foster culturally responsive teachers who are able to equitably respond and embrace the cultures of their students (Ladson-Billings, 1994).

Culturally responsive pedagogy serves as the foundation for the development of teacher identity exploration and formation, based on the notion that unless we know ourselves intimately, we cannot begin to understand the culture or perspectives of those we teach (Ladson-Billings, 1994). As students progress in our courses, through the lens of their own identity, the second course begins to look at cultural identity as our candidates consider the lives of the students they will be teaching.

The lens we address in the second course is cultural competency. We acknowledge the complexity of this term and understand that there are many definitions of cultural competence.

Giroux (1992) stated that understanding how one's beliefs, experiences, values, and assumptions are linked to culture and ultimately to one's teaching, is essential for creating culturally responsive teaching practices. The National Education Association (2016) defined cultural competence as:

the key to thriving in culturally diverse classrooms and schools - and it can be learned, practiced, and institutionalized to better serve diverse students, their families, and their communities. Cultural competence is the ability to successfully teach students who come from a culture or cultures other than our own. It entails developing certain personal and interpersonal awareness and sensitivities, understanding certain bodies of cultural knowledge, and mastering a set of skills that, taken together, underlie effective cross-cultural teaching and culturally responsive teaching (n.p.).

In addition, Gaye (2010) defined culturally responsive teaching as using the cultural knowledge, prior experiences, and performance styles of diverse students to make learning more appropriate and effective for them; it teaches to and through students' strengths.

In order to explore cultural competence, we use digital story-telling as the tool. Digital storytelling (DS) has recently gained traction in the field of education. Digital storytelling as a pedagogical tool can be used in a variety of ways, across multiple contexts to serve various skills levels. While there is no one agreed upon definition of digital storytelling according to the University of Houston (2017) stated:

Digital storytelling at its most basic core is the practice of using computer-based tools to tell stories. There are a wealth of other terms used to describe this practice, such as digital documentaries, computer-based narratives, digital essays, electronic memoirs, interactive storytelling, etc.; but in general, they all revolve around the idea of combining the art of telling stories with a variety of multimedia, including graphics, audio, video, and Web publishing (para. 1).

One of the strengths of using digital storytelling in the class-room is that it employs a wide variety of strategies including standard storytelling, multimedia publication, audio and video recordings, image production and shared mediated events (Skouge & Rao, 2009). The proliferation of digital storytelling in educational settings is partly due to the relatively low cost of digital devices, the ease of learning to create digital stories, and the availability of many sites on the web where stories may be displayed and shared (Meadows, 2003).

While long-term research on digital storytelling is scant, many attest the power of employing digital storytelling in the classroom for teachers and students alike. Robin (2008) posited that teacher created digital stories can help engage students in the content, facilitate discussion on difficult topics, and helping to make abstract content more digestible for students. Heo (2009) argued, "Knowledge and skills of personal technology can be transferred to educational technology settings with the help of digital story-telling" (p. 423). In their global study of DS uses in educational settings, Yuksel, Robin and McNeil (2011) found that student learning was improved across five themes including reflection

skills, language skills, higher level thinking skills, social skills, and artistic skills. In addition, they argue that DS in preservice class-rooms support deeper reflections on practice, fosters collaboration and critical thinking skills while also supporting constructivist pedagogy.

Recent digital storytelling projects in teacher education include Skouge and Rao's (2009) work with undergraduate and graduate students in an assistive technology class to foster technological proficiency and as a gateway into local community partnerships. Husband (2014) uses DS in a teacher education course to foster 21st century skills and literacies. Tendero (2006) used DS with English preservice students during a field placement to capture classroom moments to reflect upon and revise practice, as well as to develop a teaching consciousness and Green (2011) developed a DS project to help students learn how to teach the writing process. We have begun to use DS in our own pre-service courses to foster classroom community, critical thinking skills, reflection on practice, student engagement and cultural competency.

We have embedded these intellectual underpinnings into both this assignment and our courses, particularly as it relates to the university's goal of creating diversity intensive courses. It is our goal as teacher educators to provide the framework and knowledge for preservice teachers to be culturally responsive educators. As students in classrooms become more diverse, licensure programs need to respond with culturally relevant pedagogy and teaching to prepare new teachers to be culturally responsive (Gay, 2010). Cultural competence is a key component to preservice teachers and the university's development as equitable, just environments that promote inclusivity for all students. Thus, the focus of this project allows us to measure where preservice teachers are in relationship to their cultural competence skills. As a diversity intensive course, the digital storytelling project allows us to measure the following five, UNCA's (2016) five strategic elements that influence student ability to critically think about diversity in society: (a) understand the socially constructed nature of identities; (b) understand the significance of individuals' differing relationships to power; (c) understand how individuals, organizations, and institutions create, perpetuate, or challenge inequality; (d) understand how multiple identities intersect; and (e) students are better equipped to reevaluate their ideas about diversity and difference.

The Projects: Digital Storytelling in an introduction to middle grades course

Digital Storytelling is currently being used in two courses. The first course candidates take is an introduction to education course (EDUC 210: Teaching and Learning in the 21st Century). In this course, candidates look at their own identity as it relates to their own understanding of familial, social, cultural, and racial/ethnic influences affect one's own identity. In a second course candidates create a digital story around the themes identified in

Table 1 Student average scores based on five SLOs. N = 24

	% excellent	% good	% adequate	% needs improvement	% unacceptable
SLO 1 - Students understand the socially constructed nature of identities	93	-	7	-	-
SLO 2 - Students understand the significance of individuals' differing relationships to power	88	-	12	-	-
SLO 3 - Students understand how individuals, organizations, and institutions create perpetual, or challenging inequality	56	-	-	44	-
SLO 4 - Students understand how multiple identities intersect	88	-	12	-	-
SLO 5 - Students are better equipped to reevaluate their ideas about diversity and difference	50	-	50	-	-

the university's Diversity Intensive courses. Candidates use their knowledge and experiences associated with field work and research to address the five "student learning outcomes."

Based on the outcomes of these digital stories we have begun to consider what level of cultural competence our candidates are. It is hypothesized that as pre-service teachers develop theory and reflect on practice, their views of cultural competence will develop along the line of the cultural competence skills that are outlined from the NEA. In order to test this hypothesis, we used a rubric designed by the Diversity Intensive Committee at UNCA. Each product was scored using a five-point rubric: excellent, good, adequate, needs improvement, or unacceptable. Simple percentages of student scores were calculated.

Findings

Candidates completed a digital story using five Student Learning Objectives (see *Appendix*), based on something they love to do and relating it to teaching. The project was worth 100 points. The project had to be between 3-5 minutes, include at least 6 images, music and voice-over. A rubric was provided by the Diversity Intensive Committee, and projects were scored. The following illustrates the breakdown of student performance on each of the five SLOs. *See Table 1, page 33*.

Considerations and Discussion

Viewing these digital stories resulted in common themes across student products such as personal identity and how identities intersect. In the initial course at our institution, students focus on Goal 1: individual identity (Grant & Bolin, 2016). In this second course, students were able to relate their theory to their experiences based on teaching rather than past experiences. We were able to see that by the second course all of the goals were being addressed by at least half of the students. Instead of focusing exclusively on the student's identity, the second project asked candi-

dates to consider how the following elements are viewed through the lens of their future students. The project focused on Goals 1, 2 and 4. To that end, the highest ratings were with these goals.

The Diversity Intensive Student Learning Outcomes gives our students a framework to develop their own understanding of and application for developing cultural competence. The framework gave the Diversity Committee insight into how our students respond to the language of cultural competence. These goals gave us a common language to share with our students and gave them areas to focus on throughout their coursework and field work. The project allowed them to take the themes provided and apply them to their knowledge of how cultural competence plays into becoming a teacher.

We believe there are several reasons why digital storytelling is useful in teacher education and, in particular, this project. First, it allowed for multiple intersection such as technological skill development, pedagogical development, multiple narratives in the classroom, creativity, and critical thinking skills. Integrating technology into our own coursework and teaching candidates how to use technology is a win-win situation. It was engaging and students consistently responded positively to the opportunity to learn and use technology. Anecdotally, they were able to see how these kinds of projects can be transferred to the middle school classroom.

In order for students to develop cultural competence we believe they must reflect on their identities, even those areas that are difficult for them, namely their racial, ethnic, class gender, etc., and how their backgrounds define them positively or negatively. This project provided a creative space for students who do not normally speak in class to shine.

A major part of moving from a paper project to a digital story for us was that our students became more connected to their words. They had to represent their ideas in multiple ways, narration, visual performance, musicality, pace etc. Papers, too often,

particularly as it relates to tough topics, tend to be superficial. We find digital storytelling allows for and pushes our students to dig deeper into content and reflection. Our intent is to continue to explore ways our students are implementing cultural competence by examining their practices during student teaching.

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Appendix

Students are introduced to their initial Digital Storytelling project within the first two weeks of class. Students may use a variety of multimedia software packages to create their digital stories.

Digital Storytelling Project:

Students are asked to choose something they love to do and relate it to the five Student Learning Outcomes associated with a Diversity Intensive (DI) class.

Student Learning Outcomes

The Student Learning Outcomes (SLOs) are identified as key to considering diversity. The five SLOs are:

- SLO 1: Students understand the socially constructed nature of identities.
- SLO 2: Students understand the significance of individuals' differing relationships to power.
- SLO 3: Students understand how individuals, organizations, and institutions create, perpetuate, or challenge inequality.
- SLO 4: Students understand how multiple identities intersect.
- SLO 5: Students are better equipped to reevaluate their ideas about diversity and difference.

Throughout the course these five SLOs are revisited. Within the course students participate in two service-learning experiences. The first is an after-school enrichment program in the city middle school. Community businesses and schools provide exploration and experiences, including a wide variety of opportunities for middle school students. In addition, the college students work with a content area teacher in a diverse rural school to gain insights into understanding young adolescents and how to interact with and teach them. Reflections are recorded each week looking at content, pedagogy, and professionalism. These reflections are then coded and summarized to illustrate students' development as a 21st century teacher.

Using the five SLOs allows students to consider how their knowledge of children and teaching interacts with their development as culturally competent teachers. The project is introduced at the beginning of the semester. Once candidates have spent a month in the two service-learning settings, and again after eight weeks, they are asked to use their reflections and research associated with the class to consider what they are learning and observing relates to the five SLOs.

The project asks students to take their knowledge of young adolescents and how to teach them and using something they love to do to write a story that expresses their understanding of the five SLOs. An example is that one student looked at the five SLOs as they relate to working with young adolescents through the lens of mountain biking. Another looked at the five SLOs through the running of a farm. In each of the metaphors that were chosen, students dug deeply into their own knowledge of the impact family, social, culture, race, and ethnicity impact a classroom.