Teacher Education in Novel Times: Designing Comic Strips to Explore Elementary Learners’ Experiences during COVID-19

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Abstract

This case study was conducted in Fall 2020 with two Elementary Education pre-service teaching candidates. The goal of the study was to better understand how students in this course developed new insights about teaching during the COVID-19 pandemic through their successful design of comic strip narrative artwork. The students created comic strips depicting the experiences of diverse elementary students during the pandemic, which were displayed in a campus art gallery. Data sources included two focus group interviews, written reflections, participants’ final comics from the gallery, and other artifacts. Analysis was framed using Eisner’s (1985/2005) concept of ‘aesthetic knowing.’ Findings regarding the insights the participants developed through this assignment were presented in the following themes: pedagogical perspectives, dialoguing, and audience. Conclusions and implications include a call for greater uptake of and research about arts-based teacher education assignments to better prepare candidates to enter the field as agents of change.

Keywords: teacher education, design, art

In Fall 2020, I began a faculty position in an Elementary Teacher Education program at a mid-sized state university in Georgia. The contexts and premises of what my fourth-year undergraduate Elementary Education students in my science teaching methods course had come to understand about teaching and learning had been upended to say the least.

Within the school district in which these teaching candidates were placed for field hours, teachers were working with classes split between face-to-face and virtual attendance at the discretion of students’ parents/guardians. Teachers significantly increased their use of digitally-mediated teaching and learning approaches (OECD, 2020). Vaccines and efficacious treatments for COVID-19 were not readily available in the United States; facial coverings, social distancing, and rigorous hygiene practices were the few available virus mitigants (CDC, 2021).
Having had my final year as a full time elementary classroom teacher cut short by the pandemic before my career transition, I empathized with the challenges these teaching candidates would confront in meeting the many needs of elementary learners in their practicum work. I began to brainstorm ways for my students to consider the impacts of the pandemic on the K-5 learners they would work with that fall.

It was important for these candidates to engage in critical reflection about how the pandemic had impacted different facets of teaching and learning, particularly the experiences of diverse students.

In alignment with objectives of my elementary science teaching methods course regarding inquiry-based science teaching and learning, equitable participation of diverse learners, and fostering the development of science process skills, I assigned readings and facilitated course discussions and activities in which students considered these impacts on all learners. For example, the students designed science WebQuests in which elementary learners would engage in active science inquiry in digitally-mediated ways and design a product of learning using technologies. In formulating these plans and virtual materials, the students and I discussed accommodations needed for students who may not have developed the digital media skills or have adequate home support.

In collaboration with an art professor at my institution, I designed “The Diversity Art Project.” The assignment objective was for these teaching candidates to highlight an issue elementary learners were facing during the ongoing pandemic by designing a short comic strip narrative; students were encouraged to consider needs of specific groups of learners, particularly those to whom they might relate, have observed, or directly worked with in the field. The art professor suggested comic strips as a fruitful medium for this project given its accessibility to a
wide variety of artists and readers (Akcanca, 2020). Also, comic strips offered the students a unique opportunity to creatively present and construct narratives through visuals and words, utilizing “panels to express the passage of time” (Eisner, 2008, p. 25) between pre-COVID and pandemic times.

In preparation for their artistic engagement, the students listened to a 2020 episode of NPR’s *Short Wave* podcast titled “The Science Behind Storytelling;” the episode details the relatable, cognitively engaging power of sharing and listening to stories as a means of understanding lived experiences of scientific engagement. Students participated in two workshops with the art professor in which they learned techniques for drawing and inking their comics, organizing them into panels, and designing cohesive narratives.

They shared and discussed drafts before submitting a final comic strip at the end of the course, which was scanned and professionally printed for display in an on-campus, publicly-visible window gallery. This project aligns with Standards 1 (Teaching) and 7 (Public Advocacy) of the Association of Teacher Educators (2008) Standards for Teacher Educators.

Given the dynamic shifts in public school contexts due to the COVID-19 pandemic, teacher educators cannot rely on past approaches to coursework design (Goldhaber & Ronfeldt, 2021). Novel times call for innovation to effectively prepare candidates to foster equitable participation for face-to-face and virtual learners, critically considering their diverse needs and life experiences (Carrillo & Flores, 2020).

The purpose of this study was to better understand how students in my course aesthetically developed new insights about teaching amidst the pandemic through their successful completion of the comic strip assignment. The research question for this study was:
How do elementary pre-service teaching candidates develop new insights about teaching during the COVID-19 pandemic through the design and creation of comic strip narrative artwork?

**Literature Review and Framework**

Arts-based approaches to reflection and participating in professional “Discourses” (Gee, 2008, p. 2) can be viewed as divergent from traditional forms of teacher education to which institutions and candidates have become accustomed (Dixon & Senior, 2009). The process of artistic discovery can challenge teaching candidates, especially if they do not see themselves as artistically-inclined (Shugurova, 2019). They draw upon their conceptions of schooling informed by past experiences as students (Bertling, 2019), complicating their art-based reflection and construction of new pedagogical meaning.

However, I harken Bruner’s (1986) call for narrative understanding as an alternative to positivistic knowledge, leveraging artistic engagement and expression for teacher education students. Candidates can workshop approaches and ideas for artistic work alongside peers and instructors, satisfying their “affiliative needs” (Allport, 1955, p. 32) as they find their place in a profession in which they seek induction (Bjorkland, Jr., et al., 2020; Gierhart, in press).

Eisner (1979) argued that teachers often view pedagogy and the act of teaching as an artform, as decisions made in real time to effectively meet students’ needs require “skill and grace” (p. 153). An arts-based lens can support the conceptualization of pedagogy and the process of learning to teach, viewing one’s experiences in dialogue with and relation to each other rather than in an isolated, prescriptive manner (Dall’Alba, 2009; Dewey, 1994; Rugg, 1952). I theorized about the students’ engagement through Eisner’s (1985/2005) proposition of the “aesthetic [mode] of knowing” (p. 96), framing the findings of this study in terms of
reflection and insights the participants designed in the process of creating their comic strips (New London Group, 1996).

Past studies have shown that approaches to teacher education coursework that incorporate comics and graphic novels have been conducive to fostering aesthetic understanding. For example, Lewkowich (2019) reported that his teacher education students made affective connections and engaged in deep reflection on adolescence by reading and discussing two graphic novel texts, applying their insights to contemporary educational contexts. Sockman et al. (2016) shared promising findings from a study in which graduate students in an educational technology course designed digital comic strips depicting technology integration issues in classroom settings. It was found that the students were able to engage in critical reflection around issues related to digital pedagogy and Information and Communication Technologies (ICT), especially as the activity was paired with relevant course readings.

It is through the stories we tell that we work through perceptions and past and present feelings as we consider future action (Brockbank & McGill, 2006). Designing comic strip artwork can serve as a means of engaging teaching candidates in forming “critical stances through and around texts” (Marlatt & Dallacqua, 2019, p. 18) about novel issues and problems of practice.

Each candidate’s journey of “becoming pedagogical” (Gouzouasis et al., 2013, p. 2), was disrupted and complicated by the pandemic, laden with new and previously inconceivable challenges. Therefore, learning how pre-service teaching candidates’ design and creation of artwork, such as comic strip narratives, support their aesthetic development of new insights about teaching during these novel times is incredibly relevant. In designing art for our public-facing gallery, they considered pre-COVID and present-day circumstances of teaching and
learning in the elementary classroom setting, “[conferring] aesthetic order upon our world...to make that world hang together, to fit, to feel right, to put things in balance, to create harmony” (Eisner, 1985/2005, p. 100).

It is through the arts and knowing aesthetically that new insights left uncovered by traditional “paradigmatic” (Bruner, 1986, p. 14) means can be illuminated, advancing pedagogical development (Eisner, 1991) and the construction of new meaning (Bruner, 2004). Teaching and making meaning of teaching as art can open new discourses and possibilities about what constitutes “excellence” (Eisner, 1979, p. 166) as we strive to forge educational equity for all learners in these evolving times (Ellis et al., 2020; Flores & Gago, 2020; Goldhaber & Ronfeldt, 2021).

**Research Design**

A single, “intrinsic” (Stake, 2003, p. 136) case study was conducted in order to describe and understand the phenomenon of interest during the Fall 2020 semester at a mid-sized state university in Georgia (Yin, 2010). Students enrolled in my elementary science teaching methods course were purposively solicited for this study due to their involvement in the comic strip assignment (Andrade, 2021). They were informed that their decision about participating in the research study would not impact their grade in the course, nor their academic standing (Glesne, 2010).

The case that was ultimately studied consisted of two students, Maureen and Sydney (pseudonyms). Their coursework in this semester required 90 hours in a local elementary classroom in which they participated in classroom activities and taught lessons across the curriculum. Participant demographic information is included in Table 1.
Multiple forms of data were collected in order to establish validity and fully describe the participants’ aesthetic engagement and insights (Moore et al., 2012; Stake, 2003; Yin, 2010). Two focus group interviews were conducted using semi-structured protocols with open-ended questions focused on the participants’ perceptions of the comic strip design process and what they took from it (Yin, 2009). The first focus group interview took place at the end of the Fall 2020 semester and the second during the participants’ student teaching experience in Spring 2021 after they had visited the gallery at which their work was displayed. Follow-up questions were posed to extend the discussion from the initial focus group regarding their design choices, pedagogical reflection, and potential insights about or applications to field-based practice (Taylor et al., 2016).

Artifacts were collected from the participants’ processes of designing their comic strips (Yin, 2009, 2010), including drafts, sketches, and relevant blog-based reflection posts. Finally, scanned copies of the participants’ final comic strips were collected. Utilizing artifacts from the participants’ artistic engagement contributed to the authentic portrayal of their experiences in completing the comic strip assignment (Burkette & Warhol, 2020). During the initial focus group

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**Table 1**

*Participant Demographics*

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Race</th>
<th>Gender</th>
<th>Field Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maureen</td>
<td>22</td>
<td>White/Caucasian</td>
<td>Female</td>
<td>4th grade</td>
</tr>
<tr>
<td>Sydney</td>
<td>21</td>
<td>Hispanic/Latinx</td>
<td>Female</td>
<td>1st grade</td>
</tr>
</tbody>
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interview, each of the participants’ final comic strips were displayed on the screen as a means of provoking rich discussion around their artwork and intended messages (Torre & Murphy, 2015).

The focus group interviews and blog-based reflection entries were coded in several rounds to increasingly construct understanding of the case (Williams & Moser, 2019; Woo, 2016). First, open coding was conducted in a spreadsheet followed by axial coding in which the codes were revised upon additional readings and review; then, selective coding was conducted to through the theoretical lens of ‘aesthetic knowing’ (Eisner, 1985/2005) in order to frame and present the results of the analyses to a wider audience (Hays & Singh, 2012). The participants’ drafts and final submissions for the gallery were used as evidence to support the analyses as visual renderings of their reflection and aesthetic construction of insights (Burkette & Warhol, 2020; Litts et al., 2019; Sockman et al., 2016; Song, 2020).

Limitations

This case in this study was limited to two individuals who consented to participate. Had more students agreed to participate in the study, additional insights and applications of the comic strip assignment may have emerged. Also, the results are not generalizable beyond these two pre-service teaching candidates (Gasson, 2004). However, the depth of understanding gained about this teacher education approach from the two participants was informative of the novel contexts of pandemic teaching and learning (Taylor et al., 2016).

I will describe how one of the participants (Maureen) incorporated comic strip storytelling into her elementary classroom teaching; however, in this study, I did not directly examine how the participants transferred their insights from the comic strip project into their observed teaching practices.
I also acknowledge that my positionality as a teacher educator and the instructor of record for the course in which this assignment was completed may have impacted my interpretations and analyses of the data (Zukauskas et al., 2018). Likewise, the data was mainly limited to what the participants perceived and chose to share (Ely et al., 1997).

**Findings**

The research question for this study was: How do elementary pre-service teaching candidates develop new insights about teaching during the COVID-19 pandemic through the design and creation of comic strip narrative artwork? Findings regarding the insights the participants developed through their design of and reflection on their comic strip artwork are presented in the following themes: pedagogical perspectives, dialoguing, and audience.

**Pedagogical Perspectives**

In their reflective writing and focus group discussions, the participants shared new perspectives on pedagogy and teaching at the elementary level in a post-COVID world. In particular, they spoke about how they aesthetically constructed new pedagogical perspectives regarding empathy, context, and designing instruction.

**Empathy**

Sydney engaged in a dialogue with her past experiences as a student who was bullied for having special needs. While the pandemic interrupted the educational experiences of all students, her thoughts went to students with special needs whose services and work with specialists were impeded to varying degrees.

Sydney’s comic strip depicts a child who receives speech therapy services and is bullied by peers (Figure 1). However, her story also shows the benefits of virtual learning. “[Bullying] was something that I had to deal with everyday and sometimes, the weekends were...my *safe*
spot,” Sydney explained. “That’s when I felt comfortable. I was at home. I didn’t have to worry about what other people...were going to say to me” (personal communication, December 16, 2020).

**Figure 1**

*Sydney’s Comic Strip Titled “A Silver Lining?”*

During Sydney’s student teaching in a first grade classroom in Spring 2021, she observed one of her students being teased:

The first day [it] happened, I had to, truly...bring back, you know, “Teacher Sydney” instead of “upset Sydney” [who used to be bullied]. So I was like, “Excuse me?!?”...This particular student who was being targeted has been...virtual this week...[They’re] at home. [They have] no access to those who have been bullying [them]. So at least that’s one less thing that [student] has to worry about. (personal communication, March 3, 2021)
Sydney showed empathy towards a student who experienced bullying like she had in the past. As depicted in her comic strip, she recognized the social hardships some diverse learners face in school settings that they can escape by learning from home.

Like Sydney, the narrative Maureen depicted in her comic strip (Figure 2) contains a message of empathy about challenges students face in virtual learning contexts. In particular, Maureen focused how students may develop misconceptions about science content without face-to-face, hands-on engagement:

The first student when it’s pre-pandemic is able to understand the concept more, because they’ve experienced it in person...It’s a little bit more difficult for the second student to...experience or...recognize something that they saw in class just because of, they’re seeing it through a computer screen and sometimes things don’t translate as well. And it’s not the same kind of...hands-on experience. (personal communication, December 16, 2020)
Maureen’s message about the challenges of effective virtual teaching and learning originated, in part, through her field work with a class of fourth graders primarily attending school virtually. In a mid-October blog post, Maureen noted, “I spent a lot of my time helping students [individually] in breakout rooms with class assignments while my CT was notifying students of assessments that they have to complete…[They] informed me that we would have 5 students attending in-person starting next week.”

**Contextual Considerations**

Maureen felt challenged by the work of teaching a majority of her class virtually, especially content like science that she felt was more suited for in-person, hands-on activities:
It’s one thing to be in the classroom and actually learning and having that hands-on experience [as opposed to] looking at things through a screen and you’re just watching...How do you participate in that actively? And it’s difficult to get a student to participate actively in that and to completely understand what’s going on. (personal communication, December 16, 2020).

Maureen had depicted these concerns through one of her early comic strip drafts she posted on her blog in mid-September 2020 (Figure 3). In this single-panel comic, Maureen shows the many distractions students encounter when attempting to engage in virtual learning from home.
Maureen also lamented how virtual learners may miss out on social learning and opportunities to interact meaningfully with peers:

My niece...is staying at home just because it’s easier on [her parents]. But she’s...missing out on a lot of...good interaction. But also, too, families wanna’ be safe...Overall, without a doubt, there is a lot of...loss in communication when learning is done through a computer screen...especially in science. (personal communication, December 16, 2020)
Sydney attended all course meetings in Fall 2020 virtually and shared her anxiety about the challenges of the pandemic. In a mid-September blog post, she uploaded a comic strip draft (Figure 4) that depicted her personal struggles at that time:

**Figure 4**

*Sydney’s Initial Comic Strip Draft (Untitled)*

As the semester progressed, Sydney turned her focus outward towards elementary students receiving special education services that she would be working with in the field and during student teaching. In her final draft, she connected her experiences as an elementary learner from the past to how she perceived similar students would be experiencing the pandemic within a virtual learning environment.
Instructional Design

Maureen incorporated the approach of storytelling through comic strips in her teaching practices. In October 2020, she implemented a lesson in which her fourth graders designed an original comic strip narrative using the website Storyboard That. The students analyzed their multimodal texts and summarized them, describing the main idea and supporting details.

In her written reflection on the lesson plan, Maureen recognized that students appreciated working with familiar texts that they had composed themselves. She noted, “In the future, I plan to immediately engage the students by connecting the content to their personal lives and experiences before working on texts that are [less] familiar.”

Maureen noted that students were very engaged in designing their own comic strip stories:

One student that I can never get to turn in work. Never. And this was one of the first assignments [they] turned in in weeks...Only in one [criterion were they] lacking...I immediately went in...and told [them], “That was awesome! I loved your story!”...When I saw [their] name, that [they] had turned it in, I couldn’t believe it! (personal communication, December 16, 2020)

Dialoguing

Sydney and Maureen both shared how they had engaged in a metaphorical dialogue with their life experiences as they constructed the aesthetic meaning of teaching and learning during a global health crisis.

Sydney dialogued with her experiences of being bullied. She considered what it would be like to receive special services during the height of the pandemic, interrupted by school closures or virtually working with specialists. Having to visually represent what her experiences would be
like, despite escaping the bullying of peers in the physical school setting, allowed her to reflect on and build new insights about special education during COVID-19:

As an elementary student, I was in speech therapy, physical therapy, and occupational therapy...I couldn’t imagine doing any of those virtually. Especially physical...There’s so much hands-on that goes into that. But speech therapy...it’s really hard...I mean, the speech therapist could be on one screen and then the student could be on the other screen. And then someone’s screen lags. The computer, the Internet messes up...You’re not truly able to practice that skill that you’re trying to learn. To be able to speak to where...your [teachers] and your peers can understand you and to really be able to display and communicate what you’re trying to communicate. (personal communication, December 16, 2020)

Miranda used the comic strip project to reflect on her teaching experiences during Fall 2020. Most of her fourth graders at her field placement virtually attended school. She witnessed how this complicated the processes of teaching and learning, particularly with content areas like science that she felt should be learned through hands-on approaches:

When I was last in the classroom, we had six in-person and 21 virtual...When kids come into the classroom, when they do some kind of assignment, instantly, you can check them off. You can evaluate them if you have them there. But...we’re begging kids to turn things in [online]...The experience in the classroom is [very different]. Like, it’s so much easier to explain something to a student when they’re right there with you than it is over a computer screen. [In my comic], I just wanted to highlight those two different experiences. (personal communication, December 16, 2020)
Audience

Initially, Maureen and Sydney had different reactions and outlooks to engaging in an arts-based assignment in a teacher education course. Sydney did not view herself as a very artistic person and was nervous about having to turn in an assignment that involved drawing. Once she developed a more focused concept of what she wanted to ‘say,’ her outlook shifted. “After truly starting to work on it, and...reflect on what I wanted to do,” Sydney explained, “I believe that...allowed me to tie it back to what I really wanted to display to viewers” (personal communication, December 16, 2021).

Conversely, Maureen felt confident in her artistic abilities, utilizing watercolor paint to portray her dichotomous narrative of face-to-face and virtual science learning. She expressed pride in highlighting the experiences of elementary science learners during the pandemic:

It felt so cool to see my artwork on display. Like, on a street that’s passed by so, so much....And I’m excited for other people to see it and make a connection or to think about...something that they hadn’t necessarily thought about. Maybe a couple’s passing by who doesn’t have kids. (personal communication, March 3, 2021)

Conclusions and Implications

The participants shared how they aesthetically developed meaningful insights through designing comic strip artwork. Both candidates constructed new pedagogical perspectives of empathy towards students during the pandemic. They considered the impacts of contextual barriers faced by students. For example, Maureen worked through the struggles of teaching students online, especially in content areas such as science that she believed were better suited for active, hands-on engagement. Sydney reflected on her experiences as a student who received
special education services and empathized with how difficult it would be to receive speech therapy through virtual means.

This comic strip project, as perceived by these participants, was a fruitful endeavor that allowed them to construct insights through an aesthetic lens (Hannigan & Raphael, 2020). Maureen found such value in this form of aesthetic engagement that she incorporated comic strips into her teaching, implementing a language arts lesson with fourth graders in which they designed and analyzed their own digital comics.

Britzman (2003) conceptualized teachers’ daily work as a process of dialoguing between one’s personal experiences, expertise, morals, and external forces such as standardized testing, education reforms, and particularly in Fall 2020, the restrictions and burdens of COVID-19. Through drafting and discussing their comic strips, the participants made aesthetic sense of the face-to-face and virtual contexts in which they would teach and how the pandemic had impacted the equitable participation of all learners (Baroud & Dharamshi, 2020). Like Sydney, teachers may be in dialogue with their past experiences as students (Greene, 1995). They may also dialogue with problems of practice in the present as they consider new approaches and solutions (Novoa, 2018), such as Maureen’s work with a primarily-virtual class.

Finally, both participants used the comic strip assignment as a means of engaging authentic audiences, illuminating - in a public-facing gallery - the pandemic experiences of diverse learners. In completing classroom-based field hours, they developed insights about approaches and competencies required of teachers in 2020 and beyond (Howell et al., 2021), such as consistent communication with families (Beaunoyer et al., 2020) and social, participatory learning activities across face-to-face and virtual contexts (Carrillo & Flores, 2020; Gallagher & Cottingham 2021).
Portraying stories in comic strips does not substitute for other forms of skill-based preparation for enacting critical pedagogy. Future research should explore how effectively arts-based pre-service coursework and assignments impact candidates’ observed professional practices (Kim & Xing, 2019; Novoa, 2018). Art-based assignments can serve as low stakes opportunities for teaching candidates to consider problems of practice, preparing to confront them with a critical mindset (DeMink-Carthew & Bishop, 2017; Liu et al., 2020). Teaching candidates must enter the field as agents of change, perceiving themselves “as participants in a dialogue rather than objects of [authoritative] reform” (Aydarova et al., 2021, p. 10). In future iterations of this project in my elementary science teaching methods course, I plan to integrate reflective activities in which students explicitly link their aesthetic insights to instructional design and classroom practice.

After teaching in Illinois public schools for 11 years, I transitioned into teacher education full time during some of the most challenging months of the pandemic. I was trying to understand new contexts of teaching and learning at the elementary level alongside my students. My practices needed to evolve in the college classroom to better support teaching candidates’ enactment of effective practices in pandemic and future endemic times. While it was beyond the scope of this study to examine how students’ insights from the comic strip assignment transferred to instructional design and implementation, it was evident that this project helped the participants construct insights around the contextual ‘canvas’ of their current and future teaching.

Teacher educators should consider aesthetically-oriented assignments in which students can transfer their knowledge (Felten, 2017), informed by theory and field-based experiences, in public-facing ways (Hannigan & Raphael, 2020). Such engagement would support their critical
reflection and empathy for diverse learners that will ideally continue into their professional careers (Martinie et al., 2016).

References


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