

Research Article

**From Sharks to “The Big Ugly”:
A Rural Art Teacher’s Transition to Place-Based Education**

**Kristin T. Rearden
Joy G. Bertling**

This longitudinal case study explored one rural elementary art teacher’s praxis for two years after she participated in professional development sessions on place-based education (PBE). These sessions focused specifically on PBE within the discipline of art for K-12 art educators in a geographically-large southeastern school district. Through questionnaires, observations, interviews, and document analysis of curricular materials, the researchers investigated the teacher’s experiences with PBE as she taught art in a rural area of the district. Her curricular decisions transitioned from a focus on art reflecting her personal knowledge base to art that built on students’ expressions of, experiences in, and knowledge of, their rural setting. Implications for teacher professional development focused on rural education include strategies for promoting the contextualization of content and communicating the benefits of transitioning from place-neutral to place-based instruction.

With first grade we’re doing printing where they draw on the foam, and they do a reverse print. The theme was love We almost did like a community circle where every student had to say what they loved and what they were going to print, and this little girl goes, “Chickens.” And I’m thinking of a rotisserie and she’s thinking pet. (Patricia, Year 2 Interview)

As rural settings tend to offer children opportunities for outdoor experiences and families within those settings often have expectations that members will participate in daily chores, rural children often develop first-hand, experiential knowledge of their local environment, both socio-cultural and ecological (Avery & Kassam, 2011). Through this local knowledge or “practical wisdom” (Avery & Kassam, 2011, p. 1), rural children often acquire a complex sense of relationality: they can recognize their interdependence within local social, cultural, and ecological systems (Kassam & Avery, 2013; Avery & Hains, 2017). Shamah and MacTavish (2009) suggested that rural students “gain their knowledge of place through their own explorations—and by interacting with community members and the land through agricultural work, recreation, and outdoorsmanship” and “remain actively engaged in nature”(p. 1). Avery and Hains (2017) claimed such knowledge and relational understandings have significant societal value: the scholarly community increasingly recognizes the importance of local and indigenous knowledge for

addressing critical global issues, such as climate change.

Despite the wealth of knowledge that students in rural settings possess and the potential value their perspectives hold for promoting ecological stewardship, school-based experiences that are intentionally built around rural students’ experiences are limited. Recent educational reforms to standardize schooling, when indiscriminantly implemented, disregard the alternative ways of knowing and learning fundamental to rural life (Kassam, Avery, & Ruelle., 2017). Correspondingly, national curriculum standards ensure the curriculum’s genericity and severance from rural students’ place-based understandings (Kassam et al., 2017).

In the devaluing of place, the rural experience is also neglected. Corbett (2010) noted the consequences he realized for his students when, as a new principal in a rural community, it was clear that local content was absent from the curriculum: “. . . if we were to look at the school as a large text, it was fundamentally a story about somewhere else” (p. 117). Rural children’s diverse perspectives and experiences need to be acknowledged and fostered. In her analysis of Zimmerman and Weible’s (2017) study on rural students’ research of a local watershed, Eppley (2017) noted that “the centering of curriculum on rural places and people makes a stark contrast to standardized curricula and suggests to students that rural communities ‘count’ as places worth understanding, transforming, and preserving” (p. 49).

Using the curriculum as a means for fostering connection to, and appreciation of, place is an outcome of place-based education. This connection is not a naïve acceptance of the status quo, however. Wake (2012) stated that “rural education can be reconceived as a way to contribute to a sense of community pride and unity” (p. 24) with the caveat that the rural setting must be “analyzed critically and considered realistically” (p. 25).

Teachers can make a pedagogical choice to resist the standardization inherent in national reform agendas, that deny the lived experiences of rural children (Kassam & Avery, 2013), to adopt place-based approaches. By embracing curricula that recognize place and explore its complexities, we can facilitate rich learning experiences that honor and inspire rural children, thereby bridging the gap between learning outside the school and within the school. Avery and Hains (2017) explained, “Place-based educational practices allow for holistic cognitive processing; fusing familiar non-formal cultural knowledge with scientific theory” (p. 158). However, this approach is not without challenges. Even when teachers or teacher candidates in rural settings enter their classroom with the intent of building on students’ contextual knowledge, they may be faced with the reality of enacting context-free curricula. Schulte (2018) noted that teacher candidates placed in rural California school settings encountered barriers for enacting a place-based curricula that built on their students’ knowledge of place. Although these teachers candidates were able to connect with their students on a personal level, the “standard or established curriculum... didn’t make room for new approaches or engaged learning outside of the classroom” (p. 16).

Building on students’ lived experiences is a critical component of education. Over the past three decades, place-based education (PBE) has emerged in response to concerns of placelessness that include the declining state of the environment; the need for students to connect to communities and the biophysical environment; and the desire to help students cultivate ecological attitudes, paradigms, and behaviors. PBE situates educational experiences in the local environment, including the local social, cultural, political, natural, and economic arenas (Smith, 2002). A large body of literature demonstrates the general benefits of place-based education, such as students’ development of environmental awareness and appreciation; sense of place and place attachment; and academic

achievement and motivation (Azano, 2011; Buxton, 2010; Howley, Howley, Camper, & Perko, 2011; Linnemanstons & Jordan, 2017; Santelmann, Gosnell, & Meyers, 2011; Takano, Higgins, & McLaughlin, 2009). The range of contexts in which these studies were conducted suggests that the benefits transcend differences in participants’ geographic area, age, race/ethnicity, achievement level, or special needs.

Teachers who implement PBE “recognize and value alternate ways of knowing, such as local and indigenous knowledge, and incorporate them into their teaching” (Avery & Kassam, 2011, p. 2). That local knowledge must be drawn from the students themselves. As Azano (2011) noted in her study of a rural high school English teacher employed in his hometown area, understanding and knowledge of place must be derived from students rather than drawn from the perspective of the teacher. Even if teachers are originally from the same community as their students, their lived experiences differ generationally, at a minimum. Empowering students to draw from their own knowledge of place, rather than rely on a teacher’s perspective of place, provides an opportunity for critical reflection. Azano described how a teacher’s perspective may unintentionally hinder students from critically reflecting on their own perspective of place:

For example, students in Mr. Schaffer’s classroom had the opportunity to think about community membership through their reading of country song lyrics and Lyon’s poem, and through the writing of their own place poems during the learning experience. Framed by Mr. Schaffer’s genuine affection for life in Blue Valley, the majority of his students reflected positively on their own understanding of place. In fact, the affirming mood of the discussions on place may have implicitly discouraged students from offering contrary expressions. (p. 9)

Similarly, teachers cannot expect students to independently verbalize their local knowledge in school settings. Even when students’ backgrounds include knowledge associated with curricula, they may not articulate the connections without direct prompting. In their study of fifth- and sixth grade rural students’ understanding of science and engineering concepts, Avery and Kassam (2011) found that only one student of twenty articulated a connection between their place-based knowledge to school curricula. Despite detailed and sophisticated knowledge of concepts such as the mechanics of

simple machines, students failed to recognize the relationship between their lived experiences and the academic expectations at school. “The alarming finding is that the children did not explicitly connect their ‘home’ knowledge to the science presented in class, and thus effective linkages with previous classroom learning (knowing that) was absent” (p. 12). Therefore, the implementation of PBE requires teachers to be exposed to strategies such as probing for connections and be willing to transition to a praxis that values students’ understanding of place.

The exploration of content-area PBE instruction, such as science-based PBE, is prevalent in the literature (e.g. Beyea & Whitworth, 2017; Eppley, 2017; Leonard, Chamberlin, Johnson, & Verma, 2016; Zimmerman, & Weible, 2017). However, research on PBE in the fine arts is more limited. Prest’s (2013) research noted the need for adapting the predominantly metropolitan practices of music education to rural settings, which have a comparatively “fragile infrastructure” for supporting music education (p. 2). That lack of relevancy and “fragile infrastructure” similarly affects art education, thereby leading to our interest in researching place-based art education in rural settings. Additionally, as art education emphasizes experiential encounters and subjective engagement, its integration with place-based pedagogies might have the potential to facilitate rural students’ embodied experiences of place and enable them to communicate these experiences affectively. Research is needed to examine this educational approach and explore how this approach might be implemented in rural settings over time. This study examined the longitudinal progression of a rural elementary art teacher’s implementation of place-based practices after participating in a minimal-intervention PBE professional development program, with a focus on the perceived benefits and challenges of implementing a place-based art education curriculum in a rural elementary school setting.

Place-Based Art Education

The merger of place-based education and art education represents an experiential, affective, arts-based approach to community and environmental education. This integration manifests in a variety of forms, with a corresponding assortment of labels, including an art education of place (Blandy & Hoffman, 1993), eco-art education (Inwood, 2008), *Earth Education* (Anderson & Guyas, 2012), art

education informed by a critical pedagogy of place (Graham, 2007), and critical place-based art education (Bertling, 2013, 2015). Scholars (Bertling, 2015; Inwood, 2008) have argued that art education may be ideally suited for integration with environmental and place-based education. Art education offers affective modes of learning that may have the potential to shift students’ ecological paradigms, attitudes, and behaviors. Moreover, place-based approaches align with postmodern calls within art education for the study and making of art that is socially engaged (Ozga, 2016). Studies on place-based art education confirm that it can contribute to students’ concept of place (Paatela-Nieminen, Itkonen, & Talib, 2016); ecological paradigms and empathy with the environment (Bertling, 2015); and empathetic behaviors, pro-social skills, self-esteem, and confidence (Creel, 2005). In facilitating sense of place and connection with the environment, place-based art education demonstrates its relevance for rural education, as place-consciousness is critical for teachers and students in rural communities (Spring, 2013; White & Reid, 2008). As noted by Spring (2013):

Perhaps the most important aspect of place-based education is to inspire students to care for their community - the rural people, fellow students, teachers, parents, and particularly the environment on a local and global level. If students adopt a caring attitude toward their rural locale, they may attain the social habits necessary to expand their sense of caring for place further afield. It is also paramount that board personnel and educators adopt a reciprocal caring stewardship so that all directions in education, whether academic and/or social, promote a place-based framework based on concern and compassion for all. (p. 34)

Methods

This study operated as a qualitative, longitudinal case study (Yin, 2009) of one art teacher, Patricia Richards, who began implementing a place-based art curriculum in her rural, elementary art classroom in eastern Tennessee. This case study design offered us the ability to examine in-depth how place-based implementation occurred within this context and to focus on how this implementation evolved over a length of time (Yin, 2009). Upon enrolling in this study, Patricia was a veteran teacher with fifteen years of art teaching experience, over five of which

were in her current rural teaching context. She self-identified as a “city girl” who did not reside in the community in which she taught. Her commute to school was over 20 miles, with the final five miles primarily consisting of two-lane roads on undulating terrain, typical of the Appalachian region. Patricia was initially selected to participate in this study because of her involvement in a minimal-intervention professional development program on place-based art education and her subsequent intention to implement place-based art curricula in her classroom.

Data Collection

We collected data for this study over the course of 20 months in three phases, that spanned portions of three academic years. The first phase represents the Initial Professional Development phase, during which Patricia participated in two professional development workshops focused on PBE in art education. Following this participation, we examined Patricia’s experiences of implementing PBE during the two succeeding academic years, Years 1 and 2. Additionally, in Year 2, we examined Patricia’s experiences of participating in a third and final professional development session. By following Patricia’s implementation of PBE across multiple academic years, we gained valuable longitudinal data regarding her prolonged experiences of implementing place-based approaches.

Initial Professional Development phase. The Initial Professional Development phase of the study occurred one semester prior to Year 1. During this phase, Patricia participated in a minimal-intervention professional development program on PBE that we, the researchers, led (Bertling & Rearden, 2018). Integrated into existing district professional development offerings, this program was considered minimal-intervention because it required minor time and resource allocation. We initially engaged approximately 15 participants in two sequential workshops, offered one month apart. Workshops were held during district professional development sessions for visual art teachers in a geographically-large southeastern school district, which encompassed urban, suburban, and rural schools. Participants chose these workshops from a wide range of workshop options. While the second author led the sessions, the first author engaged in data collection. Data collection included pre- and post-workshop questionnaires on familiarity and interest

in PBE, a short unit plan in which participants applied practices of PBE to either an existing or new unit plan, and participant observation. For a full description of this phase of data collection, see Bertling and Rearden (2018). To minimize any threats to credibility that might arise from our direct involvement in the professional development sessions, we engaged in several practices, such as member checking, employing an unaffiliated researcher in the coding process, and peer debriefing (Mertens, 2010), detailed in the data analysis section. During the second workshop, Patricia adapted an art unit she had previously taught to make it place-based and specific to her rural teaching context. This unit became the place-based art curriculum she later implemented in her classroom in Years 1 and 2.

Year 1. During the following academic year, we observed Patricia teach one lesson from the place-based unit that she had previously designed in the second professional development session. We also collected curricular materials related to the unit including instructional resources, such as PowerPoint presentations and portfolio prompts, and select student products, including images of fish sculptures and portfolio entries. Upon the completion of the unit, we interviewed her on her experiences teaching it and audio-recorded the interview. Questions included, “Tell me about your experience implementing the place-based art unit,” “Tell me about any challenges you might have faced,” “Tell me about any successes you might have experienced,” and “How do you see place-based art education’s influence on your curriculum in the future?”

Year 2. In this phase, we observed two lessons that Patricia identified as “place-based.” By observing lessons Patricia selected, we aimed to assess her understanding of place-based art curricula and to obtain valuable contextual data that might help frame later interpretations. Following these observations, we interviewed Patricia on her continued experiences of implementing place-based art curricula. Semi-structured interview questions during this second interview were designed to understand the influences on her curriculum, the role that place-based art education might have played in her overall curriculum, and her future intentions (or lack of intentions) to implement place-based art curricula. For instance, questions included, “What factors do you consider when you design

curriculum?” “Is your curriculum this fall semester any different from your curriculum last fall semester? If so, how?” and “What role does place-based education play in your curriculum this fall, if any?” Additionally, during this phase, Patricia participated in a third, follow-up, professional development session, which included a post-questionnaire with questions related to confidence levels and interest in implementing place-based art education.

Data Analysis

To prepare data for analysis for this longitudinal case study of Patricia, we typed field notes and transcribed audio recordings of interviews. Then, both researchers researcher coded each data set individually. This process involved conducting an initial coding (Charmaz, 2006) of the data. We used incident-by-incident coding to code each incident in the observations and line-by-line coding to code each line of data in the interview transcripts, questionnaires, and curricular materials. Initial codes were diverse and included art media, teacher research, farming, student engagement, struggle, and personal experience. Toward the end of the initial coding process, the two researchers compared codes before moving onto the focused coding (Charmaz, 2006), where we reduced the codes to a small set of emerging themes collaboratively. While focused coding within the grounded theory tradition can lead to theory development, we used this strategy to identify the most common and significant codes to categorize the data “incisively and completely” (Mertens, 2010, p. 428). Examples of some early focused codes include student choice, environmental awareness, teacher control, and regional/cultural connections. Then, we compared data among the three research phases to achieve a fuller understanding of Patricia’s experience of place-based art education, particularly over time. Throughout the coding process, we wrote memos detailing our analytic process. Reflecting on Patricia’s stories and experiences (Spring, 2013), and using observation and document analysis data to illuminate these stories, we built the case of Patricia’s experiences as a rural, elementary art educator implementing place-based art education.

To contribute to the credibility of these findings, we employed a researcher unaffiliated with the professional development sessions to code the data independently and then debrief. We engaged with this researcher in extended discussion about our

analysis process, findings, and conclusions. Additionally, we conducted member checks with Patricia at several points throughout the research process to seek confirmation of our interpretations. At each point, at the conclusion of Year 1, toward the end of the second interview, and after we had written the research report, she verified our data and findings and often used the opportunity to elaborate on those same themes.

Findings

Patricia entered the first workshop of the professional development program with no knowledge of place-based education beyond the description of the workshop she received. However, by the end of the second workshop, she indicated that the workshop “significantly expanded” her understanding of place-based art education and that she was “very interested” in implementing this approach in her classroom. Over the following two-year period, she demonstrated this strong commitment. Not only did her interest level in implementing PBE remain high, as indicated by her post-questionnaire response in the third workshop, but she also followed through by designing place-based art curricula, first as one unit for one grade level and then, in the second year, as multiple units for multiple grade levels.

In this section, we present the findings by highlighting three overarching themes from the data. We begin with the redesign of her previously-implemented capstone project. The transition to a place-based approach appeared prominently in the iterative reconfigurations of an aquatic species unit of study that she initially redesigned as part of the minimal-intervention place-based professional development sessions in which she participated. Second, we chronicle her personal journey of recognizing and valuing her students’ knowledge of place. As she implemented place-based curricula, Patricia’s perspective towards elementary art education shifted from focusing on homogenous “showcase” products that reflected her interests to individualized products that reflected her students’ experiences in, and knowledge of, place. Third, we present Patricia’s perceptions of the benefits and challenges associated with implementing PBE in art. Benefits pertained to both herself as an educator and her students as learners; the only challenges she articulated related to herself as an educator.

From the Great Barrier Reef to Backyard Ponds

During each of the PBE professional development sessions and follow-up interviews, Patricia discussed a particular art unit she implemented with her fourth-grade students. The foci of the unit—representing physical adaptations of aquatic species and connecting species survival with environmental protection—were maintained throughout the iterations. However, the approach was modified to reflect students’ experiences of place and, ultimately, incorporate additional student choice.

Patricia had designed an original art unit several years prior to the research study. This unit had been a prominent and well-known component of Patricia’s curriculum: each year, it occupied a large portion of the fourth-grade art curriculum, and the resulting student products were displayed conspicuously throughout the school. The unit engaged students in creating three-dimensional representations of aquatic species of the Great Barrier Reef, with an emphasis on the physical adaptations of the species. During this unit, Patricia randomly assigned species to students. As she noted, she had to assign species because all of the students wanted to create sharks. She presumed this interest was because sharks were the only species about which students were familiar, perhaps due to popular television shows.

The kids all wanted do to sharks, and at that point, I did not allow them to choose their fish. I just pulled fish out of a bucket and handed it to them. “Here you go, you’ve got the crown-of-thorns,” and they are like, “No, I wanted the shark.” (Patricia, Year 1 Interview)

Once the random assignment process was completed, students created sculptures of their species based on folk art from the Oaxaca region of Mexico. The bright, colorful designs of this art style highlighted the vibrant colors of the marine animals. As students progressed with the project, Patricia indicated that they would integrate discussions of the importance of protecting the Great Barrier Reef from adverse environmental impacts in order to support species’ survival. The annual project culminated in their creation of a model reef along the hallways of the school—a showcase display of all of the sculptures. Patricia noted the reef display was a product to which both parents and students had become accustomed.

In her redesign of the unit as part of the PBE professional development immediately prior to Year 1, Patricia transitioned from centering the project on

species of the Great Barrier Reef to basing it on fish species of the school’s region. She maintained the foci of physical adaptations of the species and the connection to species survival and environmental protection:

The objective is for them to study physical adaptations of the particular animal that they are creating, and we created sculptures from the Great Barrier Reef off the coast of Australia, and we really get into the significance of reef life and its importance, and how the creatures need to coexist in their environment. And with this place-based project, I turn the attention to more the rivers and streams of East Tennessee and the fish that are in that. (Patricia, Year 1 Interview)

She also continued having students create sculptures reflecting the Oaxacan folk art style. Patricia expressed that she saw this integration as “expos[ing] students” to unfamiliar art traditions as well as addressing social studies and art standards. Since a fully place-based unit might draw more from local artists and art forms for inspiration or as a starting point to explore other cultural art forms, her use of this content signals some of the complexities of designing and implementing place-based curricula. Patricia’s need to address standards, desire to promote awareness of other cultures, as well as familiarity with teaching this art form might explain its continuance in her curriculum. As place-based education seeks more of a balance to local and global content, rather than a total reliance on nearby subject matter, we do not see this curricular choice as completely contrary to the aims of place-based education. Given its pairing with a strong emphasis on local ecological content, we see this unit as grounded within place.

The redesigned unit reflecting a place-based approach was implemented in Year 1. Prior to implementation, Patricia researched local freshwater fish species and printed out photographs with the names of the fish. She had asked her students about their familiarity with fishing, and she noted that all but two students had that experience. Rather than assign species randomly, she allowed her students to select the species:

This is a rural area, so they know about ponds and streams and lakes. And they have seen the fish that are in there, so they were so excited when they were choosing their fish. “Oh, I want a bigmouth bass because I went fishing with my dad,” and so there was that extra connection They were already choosing something that was

familiar to them. (Patricia, Year 1 Interview)
Students' connections transcended mere familiarity with the species through fishing. She noted how they also expressed personal connections to certain species:

They have been very, very excited to create their fish that they have seen, and it really makes that additional connection to their own experiences, which I really think enhanced their learning throughout the project . . . I even have one student, he wanted a catfish because in his pond there is this big catfish, and he calls it "The Big Ugly" . . . He was so excited that he's making this fish, and he is going to bring it home to show his dad. "Oh look, we have 'The Big Ugly.'" (Patricia, Year 1 Interview)

Once students selected their fish species, they created labeled drawings of physical structures such as caudal fins, pectoral fins, and gills. Next, Patricia presented images of Oaxacan folk art to support students' visualization of the final products, which were brightly colored, patterned sculptures reflecting the adaptations of their fish species. Students worked over several weeks to sculpt, paint, and decorate the sculptures.

From Homogenous Showcase Products to Products of Student Expression

An overarching manifestation of Patricia's understanding of PBE was a recognition of the value of student knowledge and expression. As the only art teacher in the K-5 school, Patricia had six grade levels for whom to prepare units. She noted that state art standards were "first and foremost" in the factors she considered for lessons, but given the "broad" nature of the standards, she had a fair amount of discretion with their implementation. In Year 2, she described how she had begun revising all her units to incorporate a greater focus on student exploration and expression.

In Year 2, Patricia continued to modify the aquatic species project to reflect an even deeper level of student choice. When asked if and how PBE was continuing to operate in her art curriculum, she explained how she was continuing the fish project using the local fish from East Tennessee but was now also incorporating student choice of media instead of having all students create models reflecting Oaxacan folk art. Papier-mache sculptures would still be an option, but she was also going to include air-dry clay and other options of media for students to select:

Last year, I began with the fish project, but it's with any project that I had, it was very much my ideas. They were my projects. They were my medium of choice, and it was very sequential, and the end result was just perfection. But were my students getting what they needed as artists out of the experience? And so that has completely changed . . . I have no idea where this project is going to wind up. I don't have an end result in mind, other than it's going to be a fish of some sort. (Patricia, Year 2 Interview)

An upcoming unit for third grade students was on musical instruments. Patricia planned to take her students to a local Appalachian museum on a field trip to see examples of handmade instruments after giving them a chance to make their own. She also wanted students to connect with their local heritage, and again commented on the incorporation of student choice:

I have no idea where bluegrass comes from, but I've been doing the research, and I found that in this region they had to make their own instruments . . . They created all these bizarre instruments out of whatever they had available to them. We are going to do the same thing in my classroom. I have no idea what these things are going to look like. I would be really pleased if they took on their own shape and their own abstraction or idea of what music is. (Patricia, Year 2 Interview)

In addition to modifying her units, she also redesigned her classroom to create centers at each of the tables. This reorganization was to support students with gaining experience with different techniques so that they could confidently use the various media when they chose to do so.

My room is completely different this year, where everything is center-based. At each table there's a drawing center and a painting center, and a printmaking center where eventually as they go through all of the mediums they will have choices in what they want to do as they master the techniques . . . And so, I'm really focused on more medium exploration this year. (Patricia, Year 2 Interview)

Perceived Benefits and Challenges of PBE

Patricia's perceived benefits of implementing PBE pertained to both her experiences as a teacher and her students' experiences as members of a rural community and as artists. When discussing perceived

challenges, Patricia only articulated aspects that related to her as a teacher: she did not articulate any student-based challenges. Perceived benefits included reinvigoration for her as an educator; increased motivation of her students, leading to fewer behavioral issues; increased student ownership of final products; and increased student awareness of personal impact on environmental sustainability. Perceived challenges included self-described incomplete knowledge of her students' experiences and understanding of place, and acceptance of relinquishing control over students' final products as she transitioned from "showcase" displays to student-generated art.

Benefits. In her interviews, Patricia articulated benefits of PBE that pertained to both her as an educator and to her students. The benefits she noted included having less physical input on products and her rejuvenated enthusiasm for teaching. For her students, she noted that PBE supported them with making connections between their action and the environment and enhanced their pride as artists.

With over fifteen years of teaching experience, she noted how it is commonplace for teachers to implement the same projects year after year, with potentially diminishing enthusiasm as personal interest wanes over time. Although she had not reached that point, she indicated that she felt "bored" by repetition yet continued with certain units year after year because of students' and parents' expectations. They expected to see the Great Barrier Reef display at the end of the year because they identified it as the annual fourth grade project. Incorporating local species generated an unexpected level of interest and enthusiasm. She perceived the level of student engagement in that project to be particularly elevated due to students' knowledge of the content on which it was based. In discussing the aquatic species unit, she noted the change in discussions with students about the fish after she shifted from species of the Great Barrier Reef to local species:

The conversations were much more interesting because these kids are not going to go diving off the coast of Australia . . . They can go to the aquarium to see that fish, but it's different to see them in an aquarium. But, they have actually had their hands on these [local] fish. They have caught these fish or they have seen them in a pond in their own environment, and so that personal connection just elevated the entire

project. (Patricia, Year 1 Interview)

She reflected on the change in the climate of her classroom, which she described as "alive" with students' excitement:

They were just wanting to get creative, and I'm like watching all this happen, and as a teacher that's great. That's what you want, to come to work and be excited about what's going on in the classroom, because the kids are excited, so I was motivated. (Patricia, Year 1 Interview)

An additional indication of success for her was a shift from being the leader in all projects to being a supporting guide. Even though students in Year 1 were still all creating their fish models in the Oaxacan folk art style, they relied less on her input than previous years because of their intrinsic motivation:

With the Great Barrier Reef project, I was a busy, busy teacher having to help them sculpt their fish. This [place-based project] was all them. I did not – I may have had to help one or two of my students who always just need a little extra help, but for the most part, I got to sit back, and watch, and guide, and teach. I did not have to have my hands in this project, and to me, that is success. (Patricia, Year 1 Interview)

Patricia also noted benefits for students, which included a greater awareness of their impact on the environment. Environmental awareness was built into several of her units. In her farming unit, they discussed knowing the pesticides sprayed on backyard fruit trees. In both of her interviews, she described how conversations with and among her students demonstrated their personal connections to the environment, particularly regarding trash disposal, during the aquatic species project. From these discussions, she determined that students recognized the adverse effect that trash thrown on the ground or in a pond had on local fish species.

Just little ways where they can have an effect and a positive impact on their environment. They are like, "Oh, you don't throw trash in the stream." Maybe they will think about that and discuss that with their families while they are out and about fishing. "Oh, we can't throw our soda cans in the lake. We have to throw them out in the trash can because it might hurt the sturgeon." (Patricia, Year 1 Interview)

Promoting students' pride as artists was a second benefit of the place-based units that Patricia perceived. Moving from an ordered, sequential set of steps for projects to a format that was more open-

ended and reflective of student choice resulted in greater student confidence and pride in their work. Patricia admitted that this shift was not easy for her, but she was buoyed by their success. An example of this shift was with a first-grade project on farming:

It was really amazing how much pride they had in their work because this was their idea that they came up with. They got to use these new materials, because what crazy person hands chalk pastels to a first grader? But they did it. They handled it It wasn't me pushing them. It was their own pride in their work that they took so personally. They had their own internal drive to finish at a high level, so that was awesome. (Patricia, Year 2 Interview)

Challenges. The two challenges articulated by Patricia included her incomplete knowledge of her students' experiences in, and knowledge of, their rural community, and her need to relinquish control of certain aspects of students' final products. Regarding her understanding of the region, being a "city girl" teaching in a rural school brought challenges. Learning to view situations from her students' perspectives, such as the instance of a student's love of chickens as a reference to the student's pets—not her meals—required a shift in viewpoints. Patricia recognized that her perspectives were often different from those of her students:

I think just the mind shift is the challenge. The fact that I'm a city girl, and I know absolutely nothing about farming Coming from a place of not understanding to where I really need to understand where my students are coming from. As a city girl, guns are a very negative thing. "Ooh, that's scary." But I have fifth graders that go out and squirrel hunt on the weekends. And so, it's not a big deal, and they're just, you know, "We skin them," and "Have you ever had squirrel, Mrs. Richards?" "I can't say that I have, but it sounds really interesting." (Patricia, Year 2 Interview)

Her reflections led to realizations about her growing awareness of her students' lived experiences. Statements about her increased knowledge of the region and her awareness of the differences in her lived experiences were discussed in light of both her personal research and her reflections on the community in which she was teaching.

I get to go fishing, but I don't want to pick my own pumpkin. Can we just go to Publix and buy one? And so, I mean it's a complete mind shift

for me. It's the research on my part. I have to do all the work so I have an understanding. They already know. They live here. They get it. I don't. So I have to understand it. That's another difficult piece. (Patricia, Year 2 Interview)

Patricia specifically mentioned the necessity of researching aspects of her school community as a challenge. She realized her background was different from her students. Through her research, she made connections between her lived experiences and her students. In one example, Patricia described how her research into locally-sourced food, conducted for personal health reasons, led her to the realization that she was actually learning about her students' lived experiences on small farms:

I researched farming My whole family has shifted to more clean eating, local produce, local food, pastured meat Just my own personal research into food sourcing, and going to farmers markets all summer long, and having conversations with these wonderful people who are dedicated to small farming. And then I realized my kids live here. That's where my kids are living. (Patricia, Year 2 Interview)

A second challenge pertained to control.

Increasing student choice could only occur with decreased teacher control. Recently, her state and district's visual art curriculum had been updated to reflect more opportunities for student media choice, which aligned well with her transition to place-based instruction. However, Patricia noted how strategies for achieving that "delicate balance" between student expression and teacher input were not always immediately apparent. As a teacher with nearly two decades of experience, she wrestled with the shift. However, as projects unfolded and she reflected on the outcomes, she realized that the change in her role was a positive one:

My challenge was not being the director combining what I see as a sequential step-by-step project. And then amending it so that it fits with our new curriculum with all that student choice My challenge was just personally as a teacher making that mind shift of: they need to make choices I really had to take a back seat and let go. As soon as I saw the positive results of me giving them more choice and control of what they were doing, it was easier for me towards the end. (Patricia, Year 2 Interview)

Implications

This longitudinal case study explored one rural elementary art teacher's praxis for two years after she participated in professional development sessions on place-based education (PBE). These sessions focused specifically on PBE within the discipline of art for K-12 art educators in a geographically-large southeastern school district. Through questionnaires, observations, interviews, and document analysis of curricular materials, the researchers investigated the teacher's experiences with PBE as she taught art in a rural area of the district. Her curricular decisions transitioned from a focus on art reflecting her personal knowledge base to art that built on students' expressions of, experiences in, and knowledge of, their rural setting. Implications for teacher professional development focused on rural education include strategies for promoting the contextualization of content and communicating the benefits of transitioning from place-neutral to place-based instruction.

Findings from this study and previous work (Bertling & Rearden, 2018) suggest that minimal-intervention professional development pertaining to place-based art education can provide the groundwork for teachers to transform their place-neutral art curricula and capitalize on rural students' understanding of place. In this longitudinal case study, we uncover not only Patricia's transition to place-based approaches but also an unexpected component that factored into deeper pedagogical changes: her willingness to shift from an art teacher who produced showcase products to an art teacher who showcased the knowledge of her students. She demonstrated an openness to eliciting and incorporating the rich experience-based knowledge of her students in rural contexts as well as the ability to view issues from multiple perspectives.

Documentation of this shift was noted most often in her discussion of the unit pertaining to models of aquatic species' physical adaptations. Transitioning from models of Australian fish to local fish capitalized on students' knowledge and resulted in increased motivation and increased recognition of their impact on the environment. A focus on local content does not mean that students should never be exposed to material outside of their local realm. As noted by Eppley (2017), PBE is not meant to be "a parochial pedagogy willfully blind to regional, national, and global contexts and the relevance of local places to other systems" (p. 47). Instead,

particularly at the elementary level when students' experiences and understandings may be more limited to the local context, incorporating relevant content in art can lead to increased motivation and appreciation. Shamah and MacTavish (2009) noted this in their description of school curricula, which "generally encourages students to study faraway places such as the South American Rainforests and African deserts without reference to local places and knowledge" (p. 2). Expecting young students to make sense of complex and globally distant issues, such as rainforest destruction and elephant poaching, often leads to fear and misunderstanding (Fretwell, 2009). Only when students who comprehend how their actions impact their local environment can they recognize the impact of their actions on a global level. The student who affectionately referred to the fish in his pond as "The Big Ugly" may not know how to keep coral reefs healthy, but he does understand that if he throws trash in his pond, his favorite fish could die.

Rural students bring significant background knowledge of science, math, and engineering, all of which have applications to the arts. Basing curricular material on content to which students are connected can support them appreciating the real-world connections (Donovan, 2016). Patricia's interdisciplinary approach for place-based education connected art with science, music, and geometry through integrating local content and contexts. Students applied their knowledge of physical adaptations to species from their ponds and streams. They investigated the structure and function of musical instruments while learning about the unique instruments of the Appalachian region. They analyzed the patterns of local barn quilts to create their own gel-based geometric prints. In doing so, she valued the knowledge her students brought, allowed them to share their stories of fishing and instrument-making, and reflected an appreciation of a place that, despite working in the same school for multiple years, she admitted she had not truly understood.

Conclusion

Professional development in PBE is just the first step towards cultivating rural educators who incorporate local content and contexts into a standardized and decontextualized curriculum. By critically analyzing the extent to which their pedagogical perspectives incorporate the students' views of the place in which they are teaching,

educators can begin to transition their lessons into rich, meaningful experiences that empower rural students to express their knowledge of their community. The experiential, environmental-based knowledge of students, particularly those from rural settings, can provide a foundation on which educators can draw for establishing meaningful learning. Although this one longitudinal case cannot be generalized to the broader community of art educators, it does provide insight into the benefits and challenges of framing components of an elementary art curriculum around content that is

inherently meaningful to rural students. Openness to, and appreciation of, the place-based knowledge that rural students bring to the classroom are needed for this process to occur. For art teachers in particular, this approach may require that their showcase-style products are replaced with ones that are more authentically reflective of rural students' sense of place as well as their artistic levels. With that empowerment, students will be able to showcase their rich knowledge of place while drawing deeper personal connections to, and pride in, their rural communities.

References

- Anderson, T., & Guyas, A. S. (2012). Earth education, interbeing, and deep ecology. *Studies in Art Education, 53*(3), 223-245. doi: 10.1080/00393541.2012.11518865
- Avery, L. M., & Hains, B. J. (2017). Oral traditions: A contextual framework for complex science concepts—laying the foundation for a paradigm of promise in rural science education. *Cultural Studies of Science Education, 12*, 129-166. doi: org/10.1007/s11422-016-9761-5
- Avery, L.M., & Kassam, K. (2011). *Phronesis: Children's local rural knowledge of science and engineering. Journal of Research in Rural Education, 26*(2), 1-18. Retrieved from <http://jrre.vhost.psu.edu/wp-content/uploads/2014/02/26-2.pdf>
- Azano, A. (2011). The possibility of place: One teacher's use of place-based instruction for English students in a rural high school. *Journal of Research in Rural Education, 26*(10), 1–12. Retrieved from <http://jrre.vhost.psu.edu/wp-content/uploads/2014/02/26-10.pdf>
- Bertling, J. G. (2013). Exercising the ecological imagination: Representing the future of place. *Art Education, 66*(1), 33-39. doi: 10.1080/00043125.2013.11519206
- Bertling, J. G. (2015). The art of empathy: A mixed methods case study of a critical place-based art education program. *International Journal of Education & the Arts, 16*(3), 1-26. Retrieved from <http://ijea.org/v16n13/>
- Bertling, J. G., & Rearden, K. (2018). Professional development on a sustainable shoestring: Propagating place-based art education in fertile soil. *Discourse and Communication for Sustainable Education, 9*(2), 5-20. doi: 10.2478/dcse-2018-0011
- Beyea, S., & Whitworth, B. A. (2017). Out in the field: Learning about plant diversity. *Science Scope, 41*(3), 50–58. doi: 10.2505/4/ss17_041_03_50
- Blandy, D., & Hoffman, E. (1993). Toward an art education of place. *Studies in Art Education, 35*(1), 22-33. doi: 10.2307/1320835
- Buxton, C. A. (2010). Social problem solving through science: An approach to critical, place-based, science teaching and learning. *Equity & Excellence in Education, 43*(1), 120-135. doi: 10.1080/10665680903408932
- Charmaz, K. (2006). *Constructing grounded theory*. Thousand Oaks, CA: Sage.
- Corbett, M. (2010). Wharf talk, home talk, and school talk: The politics of language in a coastal community. In K. Schafft & A. Y. Jackson (Eds.), *Rural education for the twenty-first century: Identify, place, and community in a globalizing world* (pp. 115-131). University Park, PA: Pennsylvania State University Press.
- Creel, M. S. (2005). *The endangered species sculpture garden: An interdisciplinary environmental art education curriculum for at-risk children*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (AAT 3183052)
- Donovan, E. (2016). Learning the language of home: Using place-based writing practices to help rural students connect to their communities. *The Rural Educator, 37*(2), 1-12. Retrieved from <https://journals.library.msstate.edu/ruraled/article/view/267>
- Eppley, K. (2017). Rural science education as social justice. *Cultural Studies of Science Education, 12*, 45-52. doi: 10.1007/s11422-016-9751-7
- Fretwell, H. (2009). Environmental education: The

- science of fear. *PERC Reports*, 27(3), 8-11. Retrieved from <https://perc.org/2009/09/24/environmental-education-the-science-of-fear/>
- Graham, M. A. (2007). Art, ecology and art education: Locating art education in a critical place-based pedagogy. *Studies in Art Education*, 48(4), 375-391. doi: 10.2307/25475843
- Howley, A., Howley, M., Camper, C., & Perko, H. (2011). Place-based education at Island Community School. *Journal of Environmental Education*, 42(4), 216-236. doi: 10.1080/00958964.2011.556682
- Inwood, H. (2008). Mapping eco-art education. *Canadian Review of Art Education*, 35, 57-72.
- Kassam, K. S., Avery, L. M., & Ruelle, M. L. (2017). The cognitive relevance of Indigenous and rural: Why is it critical to survival? *Cultural Studies of Science Education*, 12, 97-118. doi: 10.1007/s11422-016-9745-5
- Kassam, K., & Avery, L. M. (2013, May). The oikos of rural children: A lesson for the adults in experiential education. *Journal of Sustainability Education*, 169-185.
- Leonard, J., Chamberlin, S., Johnson, J., & Verma, G. (2016). Social justice, place, and equitable science education: Broadening urban students' opportunities to learn. *Urban Review*, 48(3), 355-379. doi: 10.1007/s11256-016-0358-9
- Linnemanstons, K. A., & Jordan, C. M. (2017). Learning through place: Evaluation of a professional development program for understanding the impact of place-based education and continuing education needs. *Journal of Sustainability Education*, 12, 1-25.
- Mertens, D. M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (3rd ed.). Washington, DC: Sage.
- Ozga, K. A. (2016). Effects of photography-based public art on the school environment. *Studies in Art Education*, 57(3), 203-220. doi: 10.1080/00393541.2016.1177365
- Paatela-Nieminen, M., Itonen, T., & Talib, M. (2016). Reconstructing imagined Finnishness: The case of art education through the concept of place. *International Journal of Art & Design Education*, 35(2), 229-242. doi: 10.1111/jade.12057
- Prest, A. (2013). The importance of context, reflection, interaction, and consequence in rural music education practice. *Journal of Research in Rural Education*, 28(14), 1-13. Retrieved from <http://sites.psu.edu/jrre/wp-content/uploads/sites/6347/2014/02/28-14.pdf>
- Santelmann, M., Gosnell, H., & Meyers, S. M. (2011). Connecting children to the land: Place-based education in the muddy creek watershed, Oregon. *Journal of Geography*, 110(3), 91-106. doi: 10.1080/00221341.2011.534172
- Schulte, A. K. (2018). Connecting to students through place. *The Rural Educator*, 29(2), 13-19. doi: 10.35608/ruraled.v39i2.201
- Shamah, D., & MacTavish, K. A. (2009). Making room for place-based knowledge in rural classrooms. *The Rural Educator*, 30(2), 1-4. Retrieved from <https://journals.library.msstate.edu/ruraled/article/view/448/411>
- Smith, G. (2002). Going local. *Educational Leadership*, 60(1), 30-33.
- Spring, J. (2013). Perspectives of a rural music educator: A narrative journey through "sense of place." *The Rural Educator*, 34(3), 27-37. Retrieved from <https://journals.library.msstate.edu/ruraled/article/view/397/365>
- Takano, T., Higgins, P., & McLaughlin, P. (2009). Connecting with place: Implications of integrating cultural values into the school curriculum in Alaska. *Environmental Education Research*, 15(3), 343-370. doi: 10.1080/13504620902863298
- Wake, D. G. (2012). Exploring rural contexts with digital storytelling. *The Rural Educator*, 33(3), 23-37. doi: 10.35608/ruraled.v33i3.409
- White, S., & Reid, J. (2008). Placing teachers? Sustaining rural schooling through place-consciousness in teacher education. *Journal of Research in Rural Education*, 23(7), 1-11. Retrieved from <http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/23-7.pdf>
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.
- Zimmerman, H. & Weible, J. (2017). Learning in and about rural places: Connections and tensions between students' everyday experiences and environmental quality issues in their community. *Cultural Studies of Science Education*, 12(1), 7-31. doi: 10.1007/s11422-016-9757-1

About the Authors:

Kristin Rearden is clinical professor of science education at the University of Tennessee, Knoxville. Kristin can be reached at krearden@utk.edu.

Joy Bertling is assistant professor of art education at the University of Tennessee, Knoxville. Joy can be reached at jbertlin@utk.edu.

Suggested Citation:

Rearden, K. T. & Bertling, J. G. (2019). From sharks to “The Big Ugly”: A rural art teacher’s transition to place-based education. *The Rural Educator*, 40(3), 49-61. doi:10.35608/ruraled.v40i3.559