

Read Like an Expert: Preservice Teachers Use of Place-Based Literacy to Ground Students Disciplinary Learning Experiences

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Abstract

Effective learning, literacy and knowledge are framed within contextualized, real-world, place-based situations, not just within silos of expertise. Waite (2013) posits that “knowing” a place means being sensitive to, and aware of its nuances, similarities, differences, and complexity from one location/situation to another. There are four components of place-based education (PBE), learning in the place, learning of or about the place, learning from the place, and learning for the sake of the place (Granit-Dgani, 2021). Literacy is fundamental to everyday life, in everyday situations. Place-based literacy combines innovative pedagogy of PBE with the dynamics of disciplinary literacy offering relevant, meaningful, and student-centered learning opportunities. As part of their professional pedagogical coursework, preservice teachers discover the value of PBE while developing content area literacy strategies to support disciplinary literacy skills. Professionals approach reading and literacy tasks uniquely based upon what they do and where they are. Preservice teachers are challenged to take on the perspective of one who is a professional within their chosen content area and observe through that lens. Analyze the purpose, products, and perspectives of that place and those who interact in it. Examine how experts within that content read, write, listen, view, and speak. Grounded in that perspective preservice teachers construct learning experiences for students that focus on literacy, language, and content development that are requisite in the chosen place, for the chosen professionals.

Keywords: Place-Based Literacy, Disciplinary Literacy, Interdisciplinary Projects

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Introduction

Education in the United States stresses that teachers need to be highly qualified in the contents within which they plan to teach. Expertise is often gained through academic studies, yet there are multiple ways in which knowledge can be disseminated. Place-based education is one way in which learning, and knowledge can be interwoven. Place-based education (PBE) occurs when students, teachers, and relevant stakeholders within the community come together to create live inquiry-based learning opportunities that infuse social, cultural, and natural elements along with K-12 curricular knowledge and skills into a relevant, real-world learning environment (Sobel, 2005). While PBE has been around for the past few decades, this approach gained a renewed place within curricular design during COVID-19.

It was during COVID, after schools were shut down that many educators took a fresh look at how teaching and learning can be accomplished to be most efficient and impactful in its temporary modified format. While still experts in their independent disciplines, many educators began to explore ways in which they could break out of their silos of expertise and incorporate interdisciplinary opportunities within relevant and real-world settings. In addition to K-12 classrooms, this re-envisioning occurred within higher education too. Therefore, instead of taking a perspective of hardship and limitation as it related to COVID's disruption of schooling, this project's stance was one of benefit and value afforded by the unique constraints within educational settings. Within education preparation coursework, place-based education was paired with disciplinary literacy to create learning opportunities that were beneficial, enriching, and sometimes unexpected for all. "Something unexpected happens when you explore a community for the first time. Your worldview shifts with each question, each interaction, and the more you realize you have to learn. This is the power of place - it's an infinite mystery that continually leads to awe and wonder," (Vander Ark, Liebttag & McClennen, 2020, p. xiii). COVID's interference of life and education offered the chance to view local and global environments differently, exposing opportunities to learn and grow beyond traditional classrooms.

Theoretical Grounding

"Place-based education is nothing new. This approach, with its focus on the incorporation of local knowledge, skills and issues into the curriculum, involves an effort to restore learning experiences that were once the basis of children's acculturation and socialization prior to the invention of formal schools," (Smith, 2016). Waite (2013) posits that "knowing" a place means being sensitive to, and aware of its nuances, similarities, differences, and complexity from one location/situation to another. There are four components of place-based education (PBE), learning in the place, learning of or about the place, learning from the place, and learning for the sake of the place (Granit-Dgani, 2021). Place-based education is rooted in the theoretical frameworks of Dewey's pragmatism (1916), focusing on student-centered instruction versus teacher-fronted learning. The emphasis for students is learning through doing rather than from listening or memorizing. Research shows that you remember 10% of what one reads, 20% of what one sees, 30% of what one hears, 50% of what one sees and hears, but 80% is retained if one is doing it (Chi, Bassok, Lewis, Reimann, & Glaser, 1989). Aligned with a student-centered pragmatic stance within education, the autonomous learning model (ALM) aims for learners to be independent and self-directed. An autonomous learner by definition, "is one who solves problems through a combination of divergent and convergent thinking, and functions with minimal external guidance in selected areas of endeavor" (Betts & Kercher, 1999, p. 14). This sense of student-centered autonomously

fueled learning, coupled with Piaget's constructivism theory, creates the foundational environment of these place-based learning projects. Constructivism encourages students to actively construct meaning through interactions with their environments rather than acquiring knowledge passively (Piaget, 1971). Grounded in these theoretical perspectives, place-based literacy (PBL) projects were created.

Paradigms of literacy within content areas has shifted over the years. Rather than the notion that "every teacher is a reading teacher," the new concept goes beyond just reading and writing to focus on disciplinary literacy. Disciplinary literacy emphasizes how content is understood and knowledge applied (Lent, 2015). Disciplinary literacy while unique to each discipline require many of the same underlying skills; however, what those skills look like in practice varies drastically across discipline. Historians, mathematicians, scientists, writers, musicians, and artists all use literacy in their respective fields/professions, but how it is used is distinctive to their professional world view. Disciplinary literacy practices while unique often overlap and encourage authenticity (Gabriel, 2023). For instance, a scientist might be exploring the impact of water quality in a previously industrial city. They are exploring the water quality and reading data that would be something a mathmagician would also be skilled and need to proficiently do. In this same scenario, a historian might explore primary source documents from the industry that helped to develop the community and the impact it had on jobs and economic prosperity of the community. A journalist might take this same scenario and research about the different perspectives to report to the local community about the benefits created and challenges posed. This multi-disciplinary approach to literacy is the direction teaching and learning is taking in our post-COVID world. Teaching and learning are not discrete concepts but rather interconnected ideas, skills, and situations that create a more complete understanding of our culture and world.

Culture cannot be extrapolated from one's place or experiences. Culture is interwoven into everything. According to Betancourt (2004), culture is a pattern of learned beliefs, values, and behaviors that are shared within a group. This expands the original notion that culture is not only products or practices but also the perspectives of a group (Cutshall, 2012). Cultural products include things that a culture produces such as books, tools, foods, laws, music, and games. Cultural practices are the patters of social interactions within a cultural community such as how individuals greet one another, how people queue within a community, where and how people go shopping within a community, or how people take breaks for work. Arguably the most impactful element of culture are cultural perspectives, the meanings, attitudes, values, and ideas of a group; cultural perspectives answer the question why. Why does a group of people act the way they do, why do they interact the way they do, or why they have the government and traditions that they do. This is a simple question yet at the heart of interactions between groups of people and places.

It is with these theoretical underpinnings, place-based education based in pragmatism, constructivism, and autonomous learning, aligned with disciplinary literacy paradigms and cultural competence, that interdisciplinary place-based literacy projects were developed. The interdisciplinary place-based literacy projects sought to explore how they could strengthen collaboration with community, promote disciplinary connections, and foster cross-cultural interdisciplinary skills.

Pedagogy Into Practice: Interdisciplinary Place-Based Literacy Projects

Pedagogy is the study of teaching, putting educational theory into practice through methods and strategies that influence students and learning (Main, 2021). The pedagogy used within this assignment was the interdisciplinary place-based literacy projects. A case study approach was used to explore the design and impact of interdisciplinary place-based literacy projects on teaching and learning (Yin, 2009). Participants were a convenience sampling of preservice teaching candidates enrolled within content area literacy courses as part of their professional education degree. They were planning to teach a variety of subjects ranging from humanities like music and theater to English language arts (ELA), agricultural, to hard sciences. Informed consent was given by the participants prior to data collection. Data included researcher observations, classroom discussions and field notes, and participant artifacts related to their interdisciplinary place-based literacy projects. Data was triangulated and content analysis (Prior, 2014) was performed to examine patterns.

Participants unpacked the various theoretical underpinnings of the interdisciplinary place-based literacy projects as previously discussed over several class periods, reviewing concepts, and creating solid schema for the upcoming project. Prior to creating their PBL projects, participants were guided through a thought exercise during class in which they had to think about what made a positive learning environment. They brainstormed a list of attributes and from those they chose a word to expound upon, listing how the term could be used as a noun and as a verb. From there, they had to envision a place that would encompass these attributes of a positive learning environment, describing both the positive and negative aspects of the place. Finally, they were asked to use all their senses and glean as much data as they could about their given place that embodied a positive learning environment. This activity allowed participants to take an initial deep dive in exploring the various elements of place and the impact it can have. From here participants were ready to get underway and create their own PBL projects.

Participants were asked to partner and work together as a cross disciplinary pair. They were to take the mindset of a professional or an expert within their chosen discipline they plan to teach. For instance, if they wanted to teach social sciences, they would explore a profession such as a historian, social worker, geographer, or psychologist. Based upon the professional expert chosen, participants sought out a location in which that expert would interact and engage within their professional life. From there, participants were sent to spend time at this location making observations of the place, noticing who was there, what they were doing, how they were interacting with it, engaging in informal interviews with key people associated with the place when appropriate (ideally the expert/professional that was originally identified as the catalyst for choosing the place), collecting artifacts from the place when feasible (ideally artifacts related to disciplinary literacy practices), and recording personal reflections from experiences and interactions within the chosen place. Again, the rationale for creating such a deep understanding of this place and the goings on of this place was so that participants, future teachers, could use these insights to help support and foster their students understanding of their chosen discipline, engaging with this discipline as if they were to become an expert in that field. Once participants collected data from their place, they were to take the perspective of a professional expert within their chosen discipline to analyze the purpose, products, and perspectives of that place and those who interacted in it. Examining how experts within the discipline read, write, listen, view, and speak. Based upon participants analysis, they synthesized and evaluated the information into a reflective paper that explained how literacy is used by experts within the discipline at the chosen place, what is important

about the place, what can be learned from the place, and what literacy skills and/or characteristics are commonly employed by experts within the discipline. The Partnership for 21st century learning encourages, “teacher not just teach students how to understand content; they must also teach students how to think and how to learn” (P21, 2015, p. 1). As a result, participants must plan for how to support their students’ development as 21st century citizens through PBL practices. Then to make the PBL project come alive participants choose quality artifact(s) or text from their place and incorporated it into an interdisciplinary instructional plan/experience.

Findings and Discussion

The interdisciplinary PBL projects explored how collaboration with community was supported, disciplinary connections were promoted, and cross-cultural interdisciplinary skills were fostered. During classroom discussions and based upon participant artifacts, it was evident that regardless of the chosen place, interdisciplinary connections were made that demonstrated substance and relevance. For example, a preservice music teacher and theater teacher paired to explore a local concert hall. They explored the interconnections between how the orchestra and production cast interacted to put on a musical. The score and script became integral elements combining the literacy of both disciplines for a seamless and successful musical production. Interviews with the conductor of the orchestra and director of the play reinforced the collaboration that went into the productions.

Another participant pair of biology and social studies investigated a local dam where the lesson came to life. Biology chose to explore the ecology, diving into visible concepts like energy flows and habitats while the social scientist took an anthropologic stance to understand how humans need and interact with the dam. The disciplinary texts within this place were multidimensional and not always found at the dam site. The social studies teacher did research to pull primary source documents from local agencies as they related to the dam. While the biology preservice teacher was exploring the actual dam, the lakebed and water flows. Drastically different artifacts were collected, yet a more thorough and authentic picture was created about the place. The learning experience they created was a project-based learning task using disciplinary literacy artifacts to get students to find solutions to the questions; a) how has the construction of the dam impacted the ecosystem, biodiversity, and the local human community over time? b) what have been the ecological changes, including effects on aquatic life, water quality, and vegetation, as well as the social and cultural implications for the indigenous communities living in the area?

The interdisciplinary PBL project developed by an ELA and history preservice teacher took them back to their hometown in a rural part of the state. Their local town was doing some economic development along their main street. An old bank was being repurposed into a museum to document the town’s history and documenting the families and their stories that founded the town (many of the families still have ancestors that live locally today). This collection of pictures, newspaper clippings, interviews, stories, and artifacts created an anthology for the town resident’s past and present. A sense of pride for place was fostered as a result.

Each of the interdisciplinary PBL projects created were unique which highlights the value and charm of these projects within the learning process. Learning through interdisciplinary PBL projects can be personalized based on the needs and the interests of the learners, relevant based on the dynamics of the chosen place, and long-lasting in both the task completed and

learning accomplished. Participants unanimously believed that they would choose to use integrated PBL projects in their future classrooms. One participant stated, “this took more time to create than a normal lesson plan would’ve, but it was actually pretty fun to make, and I think my students would enjoy it and learn and I think I would have more fun teaching it too!” Another noted, “I learn best from doing and being hands on, I know if I was in my class as a student that something like this would have really stuck with me.” When it comes to long-term retention of essential learning, interdisciplinary PBL projects are effective and valuable.

Conclusions

Unlike more traditional classroom learning, place-based learning allows for “infinitely more opportunities to bring elements of learners’ identity to their learning and experiences, to help unleash their potential in a way that taps into their strengths and is authentic and more equitable,” (Vander Ark, Liebttag, & McClennen, 2020, p. 42). The interdisciplinary PBL projects demonstrated their instructional worth. However, as participants discussed the implications, it became evident that modifications could be made to expand the scope of the interdisciplinary PBL projects. For example, in our rural areas, there are limitations in physical places that can be used. However, due to COVID-19 many museums and venues created opportunities for virtual visits. Virtual or digital visits could open prospects of place to be used within instruction. So just because students are still physically within the brick-and-mortar classrooms, they can explore venues that are beyond their classroom walls, where distance, time and money do not pose constraints to learning. Personalized learning could be continued through digital gallery walks within the classroom using QR codes that students generate embedding resources and documenting their learning for others to benefit from too.

When it comes to creating interdisciplinary place-based literacy projects, it is important to keep in mind that the learning experiences are not just field trips, isolated events or one-time adventures that lead to short-term outcomes and brief interactions. Interdisciplinary PBL projects supports long-lasting learning. Long-term impacts from integrated projects yields long-term learning and connections to community.

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