


Defining place-based education in practice using philosophical perspectives

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ABSTRACT

Within K-12 education there are a vast number of pedagogical approaches that utilize “places”. These approaches are typically lumped together with a catch-all term of “place-based education”. This creates confusion as not all approaches that use place should be identified as place-based education. The purpose of this paper is to establish clarity of the definitions for place-based education in the field. We adapted three examples from Edupotia, a public educational website, all titled “place-based education”, and analyzed them through the lens of the following educational philosophies: essentialism, progressivism, and social reconstructionism. The goal of this paper is to reduce confusion in the literature and strengthen the use of place-based education as it benefits both students and the surrounding community. By clearly defining place-based education, the pedagogy can be implemented and studied using a succinct set of parameters, creating cohesion in the field. Additionally, the strengthening and adoption of a universal definition aids in teacher professional development and education by reducing barriers to entry that result from discipline-specific training.

Keywords: place-based education, educational philosophy, rural education, STEM, pedagogy

INTRODUCTION

A place is what people make it. Individual connections and attachments are what makes a place, which means that by using place, each person makes their own meaning as they have their own attachments and values in a “place”. For all student learning, the idea of “place” is important as it is a means to contextualize abstract content. Human attachment to a place is often built on meaningful experiences, which not only help us understand ourselves as people (Azano et al., 2020) but also how we are connected to the world (Smith & Sobel, 2010). By connecting classroom content to place, students are able to see and make meaning, connecting content to the context of a place meaningful to them (Emekauwa & Williams, 2004). Rather than using nature or environment, place encompasses the local ecologies and the anthropological aspects of location like communities and their histories (Wattchow & Brown, 2011). Place-based education “can (and must) be adapted to authentically represent individual communities” (Lowenstein et al., 2018, p. 36), resulting in instruction that is focused contextually on the students rather than a one-size-fits-all educational example.

Place-Based Pedagogies

Within K-12 education there are a vast number of pedagogical approaches that utilize “places”. These approaches are typically lumped together with a catch-all term of “place-based education”. This creates confusion as not all approaches that use place should be identified as place-based education. These approaches each hold their own definition and characteristics that might differ from place-based education. To better understand this confusion the authors use a soup metaphor. If we think of these pedagogical strategies as a soup, each variation adds its own ingredient or flavor creating a new, but divergent educational approach. By adding or taking away “ingredients”, the characteristics and goals of the pedagogy are differentiated but still retain the primary base - creating context through place. To continue with the soup metaphor, the pedagogical approaches of place-based education could be divided into two categories:

- (1) approaches with a broth, where you can clearly see each of the components and how they create context and
- (2) those that are of a cream base, those that are cloudier at first, each component may not be identified at first glance but are fully integrated in the final product.

To continue our discussion, broth approaches tend to focus on *the environment*, more specifically the natural environment as a place. The most common approach of this variety is “place-based learning” where learning is occurring in a specific location

Table 1. Place-based pedagogical models

“Broth” approaches	“Cream” approaches
Components are easily distinguishable from one another, able to see what elements are added or removed	Components are more thoroughly integrated so distinguishing what elements are added or removed may be difficult to determine
Example: Students had a field trip to Yellowstone National Park. They were assigned to study the geographic formation and wildlife habitats of the park. Students visited the visitor center and watched a film on how magma rises to the earth’s surface by heat convection—one of the geologic forces that shape Yellowstone. Then, they walked on trails to research the interpretive signs about wildlife and their habitats.	Example: Students are given the tasks to research how work has changed in the community over the past 50 years by interviewing elderly people, such as their parents and grandparents. Then, students decide what “dream job” they can find in the community 10 years later. After that, a teacher facilitates a discussion about who had/has the privilege to get a “good” job in the past, now and 10 years later in this community.
Focus on the environment, especially the natural environment.	Focus on the place and human interaction
<ul style="list-style-type: none"> ● Environment as an integrating context ● Place-based learning ● Land-based learning 	<ul style="list-style-type: none"> ● Place-conscious education ● Critical pedagogy of place

(Sobel 2004). Field trips are a great example of place-based learning, where students are physically traveling to another location and learning from knowledgeable others at the location (Vander Ark, 2020). Other approaches use specific aspects of the environment such as land-based learning (McKim, 2019) or environment as an integrating context (Lieberman & Hoody, 1998) where environmental aspects of place are being used like the soil or the forest. The focus is primarily on environmental ecosystems and natural elements like water systems or animal predation where the concept of “place” is geographically unique and specific.

In contrast, cream-based approaches have a heavier focus on place as a holistic/cultural idea including not only the environment, but also human interaction like culture, power, and privilege. Instructional approaches like place-conscious education (Gruenwald, 2003) and critical pedagogy of place (Azano et al., 2020), feature human concepts (Smith, 2008) like considerations of power and privilege (Azano et al., 2020). For example, students are tasked with interviewing their grandparents or an elderly person about their work histories. Students then study how work has changed in the community over the past 50 years. Students then imagine themselves in 10 years, what kind of work they could do in the community, what “dream job” they would like to have, and how to change communities to create opportunities for future jobs. This activity is contextualized in the community, and a discussion focuses on who had privilege to get a “good” job in the past (from a historical perspective) and who might have privilege to get a “good” job in their community now, and 10 years from now (Table 1).

While these approaches can be distinctly separated into two sub-categories, they are all still members of the broader “soup” or place-based taxonomy. The task lies in distinguishing their important nuances as they are often just referred to as “place-based education”. In this article, we focus on just one ingredient of the soup, the “base” of the soup—using place as context, in an attempt to bring clarity to the field and determine what is and what is not place-based education.

Smith (2017) highlights the definitional confusion referring to the numerous place-based experiences that were being introduced into local areas, but each author coined their pedagogical approaches with a different term. Gruenwald (2003) coined working with community ‘rehabitation’ and decolonization place-conscious education, as his pedagogy has strong critical theory backing. Sobel’s (2004) place-based approaches emphasized using the local community and natural spaces to teach traditional classroom content, such as science. Lieberman and Hoody’s (1998) used the local environment to contextualize classroom to-be-learned content, and they called the approaches as Integrating Context. Place-based education and community-based education also were found to be used as synonyms in the same sentence, such as Smith (2016). These variations of utilizing place-based education infer that the terms for place-based education/pedagogies can be used interchangeably, which further complicates the issue of not defining and upholding one term and definition of place-based education.

The purpose of the manuscript has three main objectives:

1. Provide a synopsis of place-based education,
2. Describe the complexity of the term, and
3. Analyze place-based education examples that were adapted from *Edupotia*, a public educational website, to provide a rationale as to why the complexity is so intense, through utilizing educational philosophical foundations.

Place-based education philosophy

As place-based education is a mixed soup entailing different terms, definitions, and characteristics, it is difficult to solely base comparison of implementation on the term “place-based education”. For instance, place-based education does not have its own theoretical foundation, rather it shares practices and purposes from experiential learning, problem-based learning, outdoor education, indigenous education, environmental and ecological education, and several others. These teaching approaches share the value of learning from specific places, communities, or regions as the educational context (Wattchow & Brown, 2011). In other words, the confusion of place-based education runs deeper than just vocabulary and terminology but can be rooted back to lack of its theoretical foundations (Gruenwald, 2003). Rather than comparing the pedagogical approaches based on definitions or terminology, a more effective way for comparison would be to analyze examples through foundational philosophies of education.

Educators use philosophies as a lens to apply their craft, therefore, analyzing place-based education practices through these philosophical lenses will help further clarify the distinctions beyond the dialectical soup. In the next section, we will examine place-based education using three foundational educational philosophies, essentialism, progressivism, and social reconstructionism.

Table 2. A deep dive into place-based learning

Instructional philosophies	Essentialism-	Progressivism-	Social reconstructionism-
Philosophical perspective	Students are given a series of chapters to read from an assigned book and take notes during a lecture on historic farming practices of common historic crops.	Students are tasked with determining how many calories are in their favorite snack foods by designing experiments and testing their hypotheses.	Students are tasked with researching impoverished areas of their community and create a food drive to address the societal problem.
Place-based education perspective	Students are given a local example for comparison of history lessons, for example, typical meals family ate during the 1800's using local food.	Students engage in determining calories in food by designing and testing their hypotheses. The food could be culturally relevant food, food from the cafeteria, or food from a nearby producer.	Students research the food security in their area and develop ways to address the problem. Students might discuss food deserts or community gardens and meet with individuals in the community who are combating food insecurity.

THEORETICAL FRAMEWORK

Philosophical Perspectives

Educational philosophies are a set of beliefs and core values focusing on the purpose and objectives of educational planning, curriculum, and processes (Bengtsson, 1993), philosophy drives how a teacher practices (Styres, 2011). Each teacher holds their own set of philosophies, typically stemming from established philosophies in the field. We can utilize these field philosophies as a lens to further clarify the confusion and assumptions of place-based instruction. For example, within the field, the same lesson or topic may be instructed in vastly different ways depending on the instructor. If the instructor aligns with a teacher-centered philosophy, they will implement vastly different instructional techniques as compared to an instructor who aligns with a more student-centered philosophy. Due to their foundational importance within the field and pertinence to this discussion, essentialism, progressivism, and social reconstructionism were selected as the three key philosophical lenses, and key characteristics and definitions are provided as framing for the analysis.

Essentialism

Essentialists believe that there is an important accumulation of knowledge and experience gained from the common human experience. Therefore, the purpose of education is to relay the most essential lessons from these historical experiences to the next generation (Bagley, 1939). In other words, essentialists assert that the world, and people interacting in the world, have fundamental characteristics and experiences in common that are essential and unchanging (Sahin, 2018). In educational practice, instruction centers around a universal core knowledge—values and skills are learned through traditional subjects like math, science, and language arts. Essentialist educators are often teacher-centered, directing the learning process through mastery of established core curricula rather than students learning through individual inquiry or exploration.

Progressivism

In contrast, progressivists believe that students must actively engage in and experience the world in which they live, creating holistic learning opportunities that are individually based (Tippett & Lee, 2019). They believe that education should be a “micro-community” representing the broader community in which the student lives and that the curricula should assist the learning in becoming a contributing member of society through the integrated curriculum (Sadovnik et al., 2017). Furthermore, progressivists assert that the teacher be a facilitator of learning rather than the direct purveyor of knowledge. When put into practice, students are engaged in the learning process and are connecting to the material through examples that provide meaning to the society in which they live.

Social reconstructionism

Educators who believe that the purpose of education is to reform or reconstruct society, critically evaluating evolving social norms, power structures and social inequities, often ascribed to the philosophy of social reconstructionism (Groenke, 2009). Social reconstructionists view education and schools as a utopian cognitive sanctuary where students contemplate the decay of society and collectively provide solutions for the future (Mosier, 1951). Akin to progressivists, social reconstructionists are student-centered, focused heavily on engaging students with first-hand experience through service-learning or community engagement to study and provide new solutions toward societal problems.

To operationalize the philosophies, **Table 2** provides examples of instruction of the philosophical perspective of essentialism, progressivism, and social reconstructionism. Additionally, **Table 2** provides an example from a place-based educational perspective for each philosophy.

To further exemplify how educational philosophies are implemented from the perspective of place-based education, the following examples will be examined through the three identified philosophical lenses. For the purpose of this article, the authors operationally define place-based education as learner-centered instruction that integrates interdisciplinary concepts and involves or takes place in the local community and/or natural environment. The following examples of place-based education are carried out in three distinct ways. These examples were adapted from *Edupotia*, a public educational website. All examples were videos titled “Place-based education” on the website to show how teachers implemented “place-based education” in the classrooms. We did not change how the teachers implemented place-based education in the videos, but created a unified context, the setting, to help demonstrate place-based education through an essentialist, progressivist, or social reconstructivist perspective. Our

purpose of adapting these examples is to show how different educational philosophies can drive the implementation of place-based education in various ways, despite having the same geographical location and academic discipline.

The Setting

The setting is a city in a midwestern state. It is located along the banks of a large river with tall trees and sandy shores. The area was once home to a sub-tribe of Miami people called the Waayaahatanwa, often called the Wea for short. Once French settlers arrived, their settlement Waayaahatanonki (meaning 'place of the whirlpool') was changed to Ouiatenon, a French interpretation of the Wea name. To this day, the ancestral home of the Wea people remains to be known under the French interpretation, rather than the name the Waayaahatanwa people gave it. In addition to the erasure of the name given to the land, the Wea people have also been erased from the land. The current land boasts a downtown area with small businesses and large corporate chains interspersed throughout and is home to a larger university.

Example 1 (middle school 6-8)

As the school district was reaching a major milestone, their 150th anniversary, social studies teacher Ms. Year decided to try a new way to engage her students in learning about history. She created a series of lessons that focused on the local geography, culture, history, and economy. The students were tasked with creating a museum in an empty room in their school to celebrate as the school building is one of the most historic in their community. The project began with Mr. Wall's history class creating a timeline where key events in the area were researched and was deepened by having students explore their community through the use of photos. For example, one group of students received a black and white photo of a bank that was in the city center and soon discovered that the bank no longer existed, and a coffee shop stood in its place.

In Mrs. Rock's earth science class, students explored the geographical history of the land development that their community is situated on through the creation of models. In Mr. Field's math class, students explored the land by calculating and visualizing an acre in their schoolyard. The students calculated how the schoolyard has changed over time and calculated percentages of how the space is being used, i.e., was it open field, playground equipment, or sports fields.

Living history: Analysis of case 1

In the first case, Ms. Year wanted to engage her students in the historic event of the 150th anniversary of the school district by creating a museum in an unused room in the school. To do this, Mr. Wall's students create a timeline of events in their town, as well as compare images of the town from years ago to current times to see what had changed. Mrs. Rock's class examined geographic principles using the local landscape and Mr. Field's class used the schoolyard to visualize an acre. While these examples engage students in a local place as a context, there is a very shallow amount of integration when it comes to place-based education. The examples align with the essentialism lens, as students are using the local city as a context, but do not take a deep dive into how the changes occurred, who was in charge, when changes were being made, or even negative consequences of the changes. Instead, students just simply observed whether change occurred, and if yes, described the change. For example, one of the archival photos showed a bank on a street corner. Students observed that there is no longer a bank in that building but a cafe shop in its place. There was no further investigation into what happened to the bank, when it closed if it was anything else beforehand. Moreover, while it is meaningful for students to see how their community or landscape has changed over time, it serves as a superficial example of place-based education. Students are not solving problems, or engaging in inquiry-based learning, therefore, we can determine that this example is from a philosophically essentialist point of view.

Example 2 (elementary school K-5)

At another local school, students looked at their place through an ecological lens and explored their schoolyard and nearby river. Mrs. Deer first introduced her students to the local wildlife by exploring habitats and biomes and having students design scent stations to attract animals. Using cotton balls and various scents, students set up stations and watched visitors who stopped by through the use of a trail camera. Once a week, students reviewed the footage and identified their fauna friends. Throughout the year, students began to question why animals they initially saw were no longer there, sparking discussions around migratory habits and hibernation. In Ms. Fish's class, students explored the local stream and conducted both chemical studies of the stream and biological studies to determine the health status of the stream. This allowed them to explore concepts related to chemistry, erosion, and runoff, all while using the natural, local environment. After quality testing, students worked with a local partner to raise trout from eggs. To mimic the local environment, the tanks in the classroom were monitored in a similar way, adjusting when necessary to match the natural habitat. Students raised and cared for the trout from eggs, all the way until release day, where students released them into the stream, supplementing the current population.

Local wildlife: Analysis of case 2

In the second case, Mrs. Deer's classroom examined local wildlife in their schoolyard. Her students first explore biomes, how scents attract animals, and principles like hibernation. Her students selected which scents they felt would best attract animals and set up scent stations with cameras to monitor who came to their stations. Once a week, the students identified the animals and tracked them when their visitors came and for how long. A few doors down in Ms. Fish's room, students explored wildlife in another way, by analyzing water quality and raising trout to replenish the nearby stream. The teachers from this case align with a progressive philosophical lens as learner-centered instruction and student choice is at the forefront. In contrast to the previous case, students are exploring and making decisions based on their hypotheses and learning by doing. Students are not only setting up a scent station to see what animals are in their schoolyard but also making decisions about what scents they think will best attract wildlife. They are designing where the scents will be placed and what animals they predict will come based on the biome

they are located in. Similarly, in Ms. Fish's class, the students conduct chemical water tests and matching the environment of their classroom fish tanks to that of the nearby stream. The students are replicating the habitat based on scientific exploration they conducted. Students also monitor and care for the fish, track their growth and behavior, and eventually release them into the stream. Additionally, students worked with a local Trout Unlimited chapter to obtain the trout eggs raised, emphasizing community connections and local knowledge. Based on the student-centered nature of this case, we determine that the teachers are employing place-based education through a progressive philosophical lens.

Example 3 (high school 9-12)

At a nearby high school, students took the lead in exploring the local waterway, a major aspect of the community. Students were tasked with designing their own exploration of the Wabash River. Some students took a biological focus assessing how runoff affects water quality and aquatic wildlife, others took a historical approach looking at how the river and city have evolved and changed over time, another used a political science approach exploring water rights and sustainability, and a pair of students planned an event for all students to share their findings with the community and public stakeholders. The students worked on projects toward a similar goal but were able to implement their own ideas and infuse their passions into the project. The teachers, Mrs. Sand and Mr. River emphasized student choice and exploration in an interdisciplinary nature as it reflects real-world problem solving.

River water: Analysis of case 3

The third case demonstrates place-based education from a social reconstructionism lens. Students selected and carried out projects related to a prominent water source in their town. They explored social issues like the encroachment of the community onto the riverbank, water rights, and sustainability. Other students focused on water health and quality by examining the chemical composition of water and how fertilizer run-off has affected it. Another group created an event for the students to present their work to the public and community stakeholders. Each student group was able to select a topic that interested them and carry it out in the best way they saw fit. The teachers, Mrs. Sand & Mr. River acted as facilitators, helping students as needed but ultimately turned over the reins to the students. As there is a heavy emphasis in inquiry-based learning and social justice with topics like water rights and sustainability, this case extends beyond just the learner-centered teaching of progressivism and reaches into social reconstructionism. The students are concerned with the causes and effects of pollution, who has access to the water, and historical elements like indigenous rights and knowledge.

The three cases represent how place-based education can be implemented in the same community, using the same natural formation, in vastly different ways—various age levels, a variety of topics ranging from chemistry to geology, to math, and even political science can be encompassed around the same topic. **Appendix A** shows the teacher subject and pseudonym for each case.

DISCUSSION

By analyzing three examples of place-based education through philosophical lenses, we begin to clearly see how the definition and application of “place-based” has been used in vastly different ways. Our analysis breaks down each example into their most basic elements and clearly demonstrates how the variety of definitions has caused confusion. As outlined by the three examples, despite the fact they were all titled “place-based education”, there was divergence in the execution, further showcasing philosophical discrepancies among the teachers. Some teachers focused on using place as a context only, while others considered complex social dynamics. The teachers used the same term or definition of place-based education, but each example had varying characteristics, foci, and goals. For some, place-based education was ideally implemented outside of the classroom, aligning with a progressive or social re-constructivist approach. For others, place-based education was solely implemented in the classroom, aligning with a more essentialist approach. In addition to location, there were a variety of ways students engaged in learning when teachers integrated place-based education with other instructional designs, such as inquiry-based learning and problem-solving.

After analyzing the three examples, we argue that in the practice of place-based education, the environment, both natural and man-made, offers complex problems and is rich with opportunities for engagement. Place-based education should incorporate the local community and environment in a meaningful way, whether it is to solve a problem or to bring forth a positive change, the inclusion of place should be more than a backdrop. Place-based education, from this perspective, helps students solve not just real-world problems, but problems that affect their neighbors, friends, family, and community members. It should also emphasize real-world skill development and application of knowledge in inquiry-based situations. This might look like developing a community garden or plot to grow culturally significant foods. This would not only increase access but allow students to make a positive impact in their community. Students should be leaders in most aspects of the project. They should feel a sense of ownership and value their own efforts.

Teachers have limited time and resources to do what they want to do, as well as how they want to teach in their classrooms (Boakye & Ampiah, 2017; Schuck et al., 2017). Based on the goals that the teachers wanted to achieve with limited time and resources, although implementation does not need to be identical and the variations do not mean one is better than the other, place-based education should have similar foundational elements in order to create consistency in the field. Defining place-based education through diverse philosophical perspectives helps teachers examine and improve their own practices when utilizing a place to build students' sense of ownership toward the place and engage their learning regarding specific subjects.

CONCLUSIONS AND IMPLICATIONS

This paper begins to clarify place-based education as a distinct educational pedagogy. Currently, definitions of place-based education are plentiful, creating a tangled mess of vernacular. This leads to large variations in implementation based on which definition is being used. In order for educators to adopt place-based education as a practice, we recommend clear definitions and characteristics. Without field agreement on a definition, there will continue to be confusion about what is and what is not place-based education. Additionally, using place-based education as a catch-all term, rather than a distinct pedagogy, further complicates matters of what is and what is not place-based education. This applies to both formal and non-formal educators, as well as teacher educators. Without consensus on defining characteristics, place-based education will be unable to grow and extend, limiting its reach and stiffening its potential impact.

To solidify academic content, most K-12 educational curricula include utilizing theoretical examples, often in the form of detached or vague case studies that are devoid of students' local culture and contexts (Avery & Hains, 2017; Beach et al., 2019). In fact, the majority of national curricula tend to be urban-centered, often excluding rural students and contexts (Åberg-Bengtsson, 2009), creating a metrocentric bias for instruction (Avery & Hains, 2017; Beach et al., 2019). Despite many students living in rural communities, national curriculum and state standards largely utilize urban or metrocentric examples, washing it of any cultural or community context (Azano et al., 2020).

The conundrum is that it creates cognitive dissonance between students' contextual knowledge and the new knowledge being presented in the classroom. More specifically, there is little to no connection between the rural student's daily context and the sweeping urban examples provided in the curriculum. Therefore, to bridge this cognitive gap, educators may use contexts much closer to the students' "place" or home and community.

From a curriculum development standpoint, using place-based education and other place-centric instructional design is vital as the current curriculum is sterile, devoid of cultural examples that create meaning and connection to students on an individual level. The metrocentric nature of the current curriculum limits student connections on a cultural and personal level unless they are within the urban areas in which the curriculum is designed. Students from rural areas face different challenges than those in urban and suburban areas such as higher rates of poverty, limited access to internet and mental health care, and lower rates of college enrollment following high school (Davis et al., 2023). In contrast, rural schools tend to have higher rates of teacher retention which suits place-based education as there is a stronger community network. Students may be familiar with teachers through their older siblings or extracurricular activities, or they may be familiar with them outside of a school context—for example, church or groups like Girl Scouts. As students have a stronger connection to their teachers and community, using place-based education reinforces the need to reinvest in the community rather than taking knowledge and skills out of the community and into more urban areas.

Lastly, from a research perspective, having solidified examples and cohesion in the field will lead to further developments in the efficacy and implementation of place-based education. Currently, there is a lack of quantitative tools for measuring the effectiveness of place-based educational programs, without consensus, establishment of such tools is difficult or near impossible. Not only is the implementation of place-based education important but ensuring that these programs are of a high quality to further the field and student and community impact.

Recommendations

As we continue to develop place-based education as a distinct educational pedagogy, we must contemplate next steps. First, while we examined definitions of place-based education and its philosophical applications within the provided examples, further research is needed within diverse instructional settings to test our assertions. Second, our discussion is focused on the examples provided to further scholarly discussion around place-based education, however, further studies should examine the philosophies of a multitude of science educators and analyze their instructional strategies pertaining to place-based education. Furthermore, we recommend obtaining the perspectives and voices of students who participate in place-based education to examine their experiences. Finally, if we are to provide an inclusive definition of place-based education, it is critical to analyze place-based education through a critical lens. This includes perspectives from indigenous scholars and other marginalized groups.

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APPENDIX A**Table A1.** Teacher subject and pseudonym for each case

Case	Pseudonym	Subject
1	Ms. Year	Social studies
1	Mr. Wall	History
1	Mrs. Rock	Science
1	Mr. Field	Math
2	Mrs. Deer	Elementary-1 st grade
2	Ms. Fish	Elementary-4 th grade
3	Mrs. Sand	STEM
3	Mr. River	STEM