Place-Based Education: Elements of Design
Why Place-Based Education?

As you look around and beyond your school campus, you may see many opportunities for learning in authentic settings. Students could be mapping the school grounds as part of a mathematics lesson, while learning the names of plants at the same time. Science Club students may be testing water samples from catchment tanks located on school grounds and in their community, while also working with students in Computer Science class to create brochures about safely treating water.

The study of place enables us to widen our focus to examine the relationships among disciplines. Learning to include place in education can change the way we organize learning and teaching practices, making our lessons, tasks, and resources more engaging and effective. The study of place involves harmonizing activities: direct observation, investigation, experimentation and skill in the application of knowledge.

Prompt: Think about a place that was special to you as a child.
Engage with the memory using several senses: How does the place look, smell, feel, sound, taste?
Recall the physical environment: Is there water? Are there trees, houses, vehicles, or other elements?
Are there other living beings or creatures or people in this place with you?
What kinds of emotions arise when you think about this place?

Notes or drawing here
Booklet Structure

The following big ideas, essential questions, and activities were developed from the experiences and observations among educators and students deeply analyzing and thinking about their reflections on the prompt above, and from learning and teaching in place.

At the end of each big idea, there are several essential questions to consider. You also have space to ask your own guiding questions and identify applicable content standards.

BIG IDEA #3

Place, by definition, is specific and contextual.

It is through close and intimate contact with a particular patch of ground that we learn to respond to the earth. We need to recognize the humble places where this alchemy occurs. Everybody has a ditch, or ought to. For only in the ditches – and the fields, the woods, the ravine – can we teach us to care enough.

- Robert Michael Pyle

In an increasingly modernized, materialistic, and homogenized world, unique and peculiar characteristics of a place is subsumed by unsustainable development and infrastructure. As more and more people migrate from rural areas to urban settings, or are displaced due to climate change, how can a sense of place transcend the actual biophysical place?

Biophysical (natural and built) dimension of place – the dimension where places are sensed. Certain places with unique biophysical elements immediately evoke an intimate and emotional connection, such as the magnificent views of a stormy Pacific Ocean or the beauty of the Sydney Opera Houses. Places, such as a wooden lot or small patch of sand where one played as a child, where autobiographical memories are formed, have specific smells, sights, sounds, tastes, etc. that create deep impressions and attachment.

Socio-cultural sense of place – the dimension where the human practices of each place bonds the individual to the community. Each setting has practices specific to the places, practices which are celebrated only by the inhabitants of the place during occasions such as Fisherman's Day in the Marshall Islands and Cherry Blossom Festival in Kamuela, Hawaii. These practices can form cultural foundations that "roots" one in the place and be a lens from which to view the rest of the world.

Activity: Draw a place or practice that is unique to your community

Reflect again on the activity: Draw a place or practice that is unique to your community.

Use the following questions to guide your reflection.

Essential questions

1. How does knowing the specific and unique features of your place lead to stewardship and care of the place?
2. How does caring for your place lead to stronger and healthier communities?
3. How does having a strong community lead to a global sense of responsibility?

What do you want to know about your students' learning?

Here is space for you to develop guiding questions to use with in your teaching. A guiding question is a more specific question that supports inquiry into the essential questions and big idea.

Standards

Identify which of your standards apply to this idea about place.

Group Reading Strategy

Consider reading this booklet with a group of students or fellow teachers. Group reading encourages cooperative learning and deeper understanding through discussion.

- Work in small groups and divide the reading into sections
- Each group reads their own section and becomes an "expert," ready to teach someone else the main ideas in the section
- When everyone is ready, mix groups so that each new group has an “expert” for each section.
- Experts share key ideas from their section and the group can discuss questions
BIG IDEA #1

Place includes both the environment and its people. A place is rooted in culture and shapes self-identity.

A place has human history and a geologic past; its inhabitants are part of a social, economic and political order: they import or export energy, materials, water, and wastes, they are linked by innumerable bonds to other places... Knowledge of a place – where you are and where you come from – is intertwined with knowledge of who you are.
– David Orr

A place is so much more than just the physical environment. From urban settings, with big buildings and four-lane highways, to rural areas with lush mountains and mangrove beaches, people and the relationship to their environment defines a place. Culture – the beliefs, customs, and daily practices of our community – are both deeply influenced by and influence our environment and environmental changes. And our community’s culture helps individuals to shape self-identity: how we define ourselves and our roles in community and the world.

From prehistory until recently, there was a strong human concept of belonging to a particular place. This belonging has to do with a distinct identity or characteristic of our place that makes it special and sets it apart from other places. Even seafaring cultures embody certain aspects of place-identity as they move from island to island. We see evidence of this travel and the importance of our previous places in our stories, as well as in similarities in our tools and art. The concept of belonging to a place continues to change as humans become more mobile and as more people live in cities. Memory and belonging – autobiographical memory, which relives specific, contextual experiences of place – is an essential component in developing self-identity.
Reflect again on the prompt: Think about a place that was special to you as a child.

Use the following questions to guide your reflection.

Essential questions
1. How does the place you live in influence how you live?
2. How does this place, including the environment and people, shape your identity?

3. How does place shape the identity of our community?

4. How does culture impact our environment?
5. How have changes in climate and/or technology changed cultural practices? Do these changes have an impact on identity?

What do you want to know about your students’ learning?

Here is space for you to develop guiding questions to use with in your teaching. A guiding question is a more specific question that supports inquiry into the essential questions and big idea.

Example: How are my students exploring the impacts of the environment on local practices?

Standards
Identify which of your standards apply to this idea about place.
BIG IDEA #2

The study of place requires the combination of intellect and experience.

ʻAʻohe pau ka ʻike i ka hālau hoʻokahi.
All knowledge is not learned in just one school
– Hawaiʻi ʻŌlelo Noʻeau

Ang hindi marunong lumingon sa pinanggalingan ay hindi makakarating sa paroroongan. The one who does not know how to look back at where one came from will not be able to reach the destination
– Philippines National Proverb

For us to develop a sense of our place, we need to engage in multiple ways of learning – including observation, experimentation, and opportunities to apply new knowledge (Orr, 1992). This approach allows us to access different sources of knowledge and then create local solutions for local issues, especially when we can rely on experts and elders in our own community, as well as information from the global community.

Several communities, for example, are living and reviving the art of traditional navigation. Apprentices learn by watching and studying master navigators as they read the movements of the waves, birds, and stars. Only after observing can apprentices begin practicing their new skills with the help of a master navigator. Transmission of knowledge in this way has been going on for generations. But recently, communities like Waan Aelōn in Majel (Marshall Islands) and the Polynesian Voyaging Society (Hawaiʻi) are using traditional navigation and canoe building to address contemporary community needs: providing life skills for youth, perpetuating cultural practices, and bringing attention to our global need for sustainability.

In class, when learning about our place starts with local – our history, economy, environment, culture, and art. We can invite community experts to partner with teachers and students. And for learners, observing, experimenting, and experiencing is critical because it encourages us to pay attention to changes. We can see patterns, and then sense and respond to issues affecting our place, its people and environment. In this way, we are honoring the past, and utilizing the potential of our place to transform our future.
Activity: Connect Your Circles of Knowledge Resources

In each empty circle write or draw the different knowledge resources of your community. Then, connect these circles to each other. Look for patterns of connectivity. Where are there strong connections? Where are there weak ones?
Reflect again on the activity: Connect your circle of knowledge resources.

Use the following questions to guide your reflection.

Essential questions
1. How does knowing about the different knowledge resources provide different ways to experience your place?

2. How do these different experiences contribute to developing different ways of thinking?

3. How do these different ways of thinking contribute to developing sustainable practices? What resources need to be preserved? What needs to be transformed?

What do you want to know about your students’ learning?
Here is space for you to develop guiding questions to use with in your teaching. A guiding question is a more specific question that supports inquiry into the essential questions and big idea.

Example: What are the stories of our place? What lessons are these stories teaching?

Standards
Identify which of your standards apply to this idea about place.

Notes
BIG IDEA #3
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It is through close and intimate contact with a particular patch of ground that we learn to respond to the earth...We need to recognize the humble places where this alchemy occurs...Everybody has a ditch, or ought to. For only the ditches – and the fields, the woods, the ravines – can teach us to care enough.
– Robert Michael Pyle

In an increasingly modernized, materialistic, and homogenized world, the unique and peculiar characteristics of a place are lost because of unsustainable development and human-created infrastructure. As more and more people migrate from rural areas to urban settings, or are displaced due to climate change, how can a sense of place transcend the actual biophysical place?

We can use physical senses such as sight, smell, and sound to engage with the *biophysical* (natural and built) aspect of a place. We can also engage with a place emotionally or spiritually. Certain places with unique biophysical elements immediately evoke an intimate and emotional connection, such as the magnificent vistas of a stormy Pacific Ocean or the beauty of the Sydney Opera House. Places where autobiographical memories are formed, such as a wooded lot or small patch of sand where one played as a child, have specific smells, sights, sounds, and tastes that create deep impressions and attachment.

*Socio-cultural* aspect of place is where the human practices of each place bonds the individual to the community. Each setting has practices specific to the places, practices that are celebrated only by the inhabitants of the place during specific occasions, such as Fisherman’s Day in the Marshall Islands and Cherry Blossom Festival in Kamuela, Hawaii. These practices can form cultural foundations that “roots” one in the place and be a lens from which to view the rest of the world.

**Activity:** Draw a place or practice that is unique to your community
Reflect again on the activity: Draw a place or practice that is unique to your community.

*Use the following questions to guide your reflection.*

**Essential questions**
1. How does knowing the specific and unique features of your place lead to stewardship and care of the place?

   Notes

2. How does caring for your place lead to stronger and healthier communities?

   Notes

3. How does having a strong community lead to a global sense of responsibility?

   Notes

**What do you want to know about your students’ learning?**

*Here is space for you to develop **guiding questions** to use with in your teaching. A guiding question is a more specific question that supports inquiry into the essential questions and big idea.*

Example: How do we make choices for a healthy future?

**Standards**

*Identify which of your standards apply to this idea about place.*

Notes
BIG IDEA #4

A place is a living, dynamic system and is part of other systems.

A place is ever changing and the changes in a place affect other places. Everything is connected.

Our places are systems and are made up of systems – sets of interacting parts working together to form a whole. Places have natural systems, like water and carbon cycles, energy flows, and food webs. Places also include human systems and built systems – the ways we connect with our families, neighbors, and the global community to exchange ideas, travel, grow and gather food, and trade goods.

In a system, the whole is more than the sum of its parts. Working together, the system does more than could its individual parts. For example, a car can move people and goods around in a self-propelled fashion under the control of a driver; none of the individual parts of a car – tires, engine, chassis, etc. – can do this on its own. The car’s sub-systems, such as the engine, have sub-systems of their own. And the car operates in a larger system, the transportation system, which has roads, signs, vehicles, etc. as its components.

By looking at the whole system first, we see both its parts and how its parts are connected. And often, the relationships among individual parts are more important than the parts. For example, an ecosystem is not just a group of animals, but is a community of living things interacting with nonliving things. Without each other to rely on for food or protection, they would not survive.

Because parts of a system are connected, disruptions or changes in one part changes the system – how it behaves, its results, and its sustainability or ability to survive in the future. When a system changes, its parts need to adapt to continue.

Water cycle as a dynamic system
Reflect again on the prompt: Think about a place that was special to you as a child.

*Use the following questions to guide your reflection.*

**Essential questions**

1. How would you describe your community as a system?

   Notes

2. How are natural and human systems connected?

   Notes

3. How do systems change?

4. How do things in a system adapt to change?

   Notes

**What do you want to know about your students’ learning?**

*Here is space for you to develop guiding questions to use with in your teaching. A guiding question is a more specific question that supports inquiry into the essential questions and big idea.*

Example: How are students identifying disruptions and changes in systems?

**Standards**

*Identify which of your standards apply to this idea about place.*

Notes
Activities

Sense of Place: Where you are shapes who you are

Students interview each other in this activity and record answers. They can look for similarities and differences in their descriptions. They can use information collected as prompts for research, writing, and art.

Resources: A copy and pencil/pen for each student

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the name of your clan or family? Does your clan have a sacred animal or talent?</td>
<td></td>
</tr>
<tr>
<td>What is the name of your village or town? Is it near the lagoon, mountain, or ocean?</td>
<td></td>
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<tr>
<td>What is the legend of your community?</td>
<td></td>
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<tr>
<td>Who are the leaders of your community?</td>
<td></td>
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<tr>
<td>What plants grow well in your community? What is the legend of one of the plants?</td>
<td></td>
</tr>
<tr>
<td>What animals and birds do you have in your community? What is the legend of one of the animals or plants?</td>
<td></td>
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<tr>
<td>How has the climate patterns changed over the past years in your place? What have you noticed about the rain, wind, temperatures, and sea level?</td>
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</tbody>
</table>

If you don’t know where you are, you don’t know who you are
- Wendell Berry
Getting to Know Our Place

During this activity, you are asking your students to draw their interpretation of place. This is to help you understand what your students know and start a class discussion about (a) how place is defined by people and their relationship to their environment and (b) how systems are working together within your place.

Resources needed: Chart paper (enough for groups of 5-6 students), markers (1 per student)

Opening

This activity is carried out silently and, ideally, at the start of class. Let your students know that there is complete silence (no talking) during this activity until otherwise instructed.

Process

1. Ask students to gather in groups of 5-6 around a large piece of chart paper.

2. **Draw**: In complete silence, instruct your students with only these words: “Draw place.”
   a. Give groups 10 minutes to draw in silence. If students ask for clarification, simply repeat “Draw place.”
   b. Silence keeps the integrity of each student’s thoughts about place, encourages them to collaborate differently, and strengthens the reflection that follows.

3. **Gallery Walk**: Still in complete silence, invite students to take a walk around the room to look at the other groups’ drawings. Ask them to observe (but not talk):
   a. What is common among our drawings?
   b. What is unique to each drawing?
   c. How do they imagine that each group worked? Did some work together to draw one picture, or did they each draw their own pictures?
   d. What is missing from our drawings?

4. **Class Discussion**: Students can talk again!
   a. Ask your students to reflect on the process. What was it like to work in silence? Did they work individually? Did they notice what other students drew and did that influence them?
   b. Ask your students to reflect on the elements of their drawings. What are the most obvious parts of their drawings? People, buildings, animals, plants? What’s missing?
   c. Ask your students to reflect on the relationships in their drawings. How are different elements interacting? Does the whole drawing show what’s best about this place? Or our challenges?

5. **Deeper Discussion or Writing Prompts**: Ask questions, or encourage students to ask questions, that help them connect their knowledge about their place to broader community or global issues. These questions can be used to further the class discussion or as research writing prompts. Example prompts:
   a. How is our place changing? How do we know?
   b. What are the stories about our place? What are the unique features of our place? How does knowing about our place impact our life choices?
   c. How are our local practices influenced by our environment? How is our environment influenced by our local practices?
Further Reading

about developing a sense of place


*Place-Based Resources for Pacific Islands Schools* series by PREL and iREi

- Our High Island Home
- Our Low Island Home
- Pacific High Island Environments
- Pacific Low Island Environments
- Mangroves: Living on the Edge in a Changing Climate
- Adaptations: Finding a Fit in the Changing World


Other resources for climate, environmental, and place-based education can be found at http://pcep.prel.org
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