



# Reflections on Teaching Provocatively

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## **Abstract**

Moving beyond a facts and figures approach requires a pedagogy that specifically attends to the development of students' values, attitudes and behavioral changes needed to address the climate crisis. This reflection identifies key themes from students and the instructor of a place-based environmental methods education course.

## **Keywords**

Nature-based design principles, provocative pedagogy, ecological literacy, place-based education

In preparing a new place-based environmental methods education course for pre-service teachers, my focus was engaging in the local, natural world right at students' fingertips. Place-based approaches also advance the belief "school can be about getting smarter and making the community a better place and protecting nature," (Sobel, 2008 p. 8). After all, if we want teachers and students to be able to address the climate emergency, we need to move beyond a facts-and-figures approach to climate pedagogy attends to the development of teachers and students' values, attitudes, and behaviors.

I approached the curriculum through the lens of "provocative pedagogy," grounded in the methods of interpretation (Hunter, 2024). The methods evoke emotions, encourage the relationship between learner and nature, and validate

personal experience. As described in my other article in this issue of *CLE*, activities are experiential, emotive, and prioritize building behaviors before introducing or building content knowledge.

I chose a natural feature of campus, the Coulee, a stream that winds through the heart of campus with bridge crossings, benches for sitting, wood duck houses, and diverse flora and fauna native to northern prairies, as well as trash, debris and unpleasant smells. Taking up a charge to create “real projects connecting core curriculum to real places and real problem-solving in the community” (Sobel, 2008 p. 3), the Coulee offered a place to explore the concept of stewardship and a natural mechanism to embed concepts of ecological and climate literacy.

Using three of Sobel’s (2008) design principles (Adventure, Maps and Paths, and Special Places), I developed a series of guided walks and individual explorations of the Coulee. Students began by making a series of sketches of different sections, walking off the paved path to capture details not immediately evident, prompted by the following:

- how does the water flow?
- describe sounds and smells
- find different plant, animal and human communities
- describe in detail one specific element (tree, animal, leaf)
- describe your emotions and what happened that prompted those

Collecting items (or images) was required from each section for the map-making process.

Next, students designed their own curriculum to “teach the Coulee” to non-classroom peers, based on what they learned and deemed important for their peers to learn. Students presented their lessons and learning outcomes. They developed a student magazine that highlighted the Coulee and focused upon stewardship.

Reflecting upon the course experience, there are several key takeaways from students as well as the instructor. These are explained below.

## Day One

I asked students in how many classes they went outside in some capacity. I was surprised to hear that no student had participated in a single class session outside. Likewise, none had heard the term “the Coulee” and only a few knew we had a stream running through campus. “Oh, that’s the place that smells, right?” one student responded.

While we started at a deficit for place-based knowledge of campus, we ended with not just knowledge about the Coulee but also with students expressing a deep desire to engage more and advocate for attention to its care—precisely the goal of using the methods of provocative pedagogy.

In the final collaborative project presentation, one student identified a common theme across all the students’ teaching lessons. She explained, “[a] common theme that was always brought up, either during or after these walks, was how much [our peers] never took in nature. A recurring point was they took the scenery for granted and never took the time to appreciate what was truly around them.” Other students explained, “[w]e saw a family of ducks here and a turtle! I didn’t realize the Coulee was home to *actual* (emphasis theirs) animals,” and “I’ve been on campus for two years now, and I’ve never realized this was here.”

### **Getting students outside was more difficult than imagined but worth the effort**

After walking and exploring the Coulee together as a class, students mapping the Coulee on their own, and creating a class mural, we dove into their assignment to Teach the Coulee. As we were reviewing the assignment components, students were enthusiastic about all aspects except one. “What if I can’t get enough peers to participate?” or “What if I can’t find anyone at all?” I gave lots of reassurance that if their peers were only a few they could adapt the lesson and provided ways to encourage peers to get outside (such as mental and physical wellbeing).

All students included the Adventure design element (Sobel, 2008) when teaching their lessons to peers. They recognized the importance of kinesthetics to learning and the need for their peers to not know what was going to happen when they started. However, this required quite a bit of creativity from students. “I had to bribe my peers with ice cream, to get them outside and ‘take a walk’ with me to the

Coulee,” described one student. Another explained that she parked her car on the opposite side of the campus and told a group of her friends they were going on an adventure to help her get things from her car, which is how she managed to get peers to participate in her teaching lesson.

Even though every student noted that their peers have been initially reluctant, they were pleasantly surprised at how much their peers enjoyed their time outside and the overall opportunity to experience the Coulee. Students reported that their peers responded in overwhelmingly positive ways. One peer said, “the Coulee is a place where you can step away from the stress of college life and reconnect with nature.” Another student shared, “[w]hile my peers thought the Coulee was a stinky stream for a first impression, they learned that this Coulee actually has an impact on our environment here!”

### **Special Places don’t need to be big, but we all need them**

The initial class activities got students to experience and engage with the Coulee, which provided them time in nature that they had never experienced before. Students described in their final projects how their own activities “aimed to deepen students’ appreciation for the Coulee, encouraging them to see it as a vital, living space that enriches our university experience.” The Coulee—a “natural place” running right through campus—became the metaphor for breaking down notions that somehow we are distinct from nature. The Coulee, like all of elements of the natural world, runs directly through our daily lives. As future teachers, learning that right outside their doors are places filled with life that intersects with their own personal experiences and memories dissolves the false distinction between “human” and “natural world,” establishing interconnectivity and a springboard for stewardship.

The purpose of using the Special Places design element for college students is no different than using it for children. “There is a universal tendency for children to create or find their own private places,” Sobel wrote, “[and] these places serve as bonding with the natural world, allowing children to feel comfortable in that landscape, connected to it, and eventually committed to acting as stewards of it” (2008, p. 39).

One student explained why she had each peer photograph places that held personal significance:

[My peers] described quiet bends in the water or places where the sunlight filtered through the leaves of a dogwood tree. These places reminded them of home. The exercise helped discover what drew them to these spots and deepened their connection to the land. Through this creative tool, the Coulee transformed from just a stream into a place where memories and emotions are drawn out with nature's beauty, sparking a deeper sense of environmental stewardship for campus and the world around them.

Developing ecological literacy using nature-based design principles and the methods of provocative pedagogy, students accomplished the most important goal, behaviors that demonstrate stewardship for the green spaces that sustain us.

## References

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