

# Chapter 11

## Learning From Place: Developing a Relationship With the Land and Our Partners

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### ABSTRACT

*This chapter investigates how teacher candidates' experiences in STEAM field studies with community partners can inform work in teacher education within an integrated practicum based on curriculum of place. The overall goal of the inquiry is to better understand and articulate the particular ways in which people value place-based knowledge. Through relationships with Indigenous communities, the team of educators has a deeply held conviction that sustained deliberations on the connections between Indigenous knowledge systems and place-based thinking can provide significant opportunities for reframing education. Learning from place emphasizes a relationship with the land, something deeply respected in Indigenous communities and something absent from much of place-based education. The research explores this tension as we come to a deeper and shared understanding of co-responsibility within Treaty 7 relationships. The project seeks to close this gap by considering varying perspectives of place as it informs STEAM teacher education pedagogy.*

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## INTRODUCTION

We acknowledge the Blackfoot, Tsuu T'ina, and Stoney-Nakoda Nations on whose traditional territories we live and work. This chapter investigates how teacher candidates' experiences in STEAM (Science, Technologies/Education, Arts and Mathematics) field studies with community partners can inform our work in teacher education. As educators who teach within an integrated STEAM practicum semester, we are interested in linking STEAM courses, Indigenous knowledge systems, and place-based education. This project seeks to foster new understandings around a curriculum of place (Chambers, 2008) among Indigenous communities, not-for-profit organizations, public schools, and our Canadian post-secondary institution.

The research described in this chapter is part of a longitudinal programmatic qualitative study that investigates the impact of transformative pedagogies (described later in the chapter) on teacher educators, mentor teachers, and teacher candidates. Central to the longitudinal research is the study of how theory and practice can be integrated by attending to various perspectives of place within institutions and schools. Here, the goal of our inquiry is to better understand and articulate the particular ways in which we value place-based knowledge within a STEAM integrated practicum semester.

Many contributions to bridging theory and practice in STEM (Science, Technology, Engineering, and Mathematics) education have been made through non-Indigenous perspectives of place. The field of place-based education has strong roots in environmental education (Knapp, 1996; Orr, 1994; Raffin, 1995; van Eijck, & Roth, 2009). During the past twenty years, place-based education (Emekauwa, 2004; Greunewald, 2003; Penetito, 2009; Relph, 1992; Sobel, 2004; Wattchow & Brown, 2011) has become wide-spread as an approach to teaching that is grounded in the context of community and environment (Kincheloe, McKinley, Lim & Barton, 2006; Raffan, 1993; Theobald & Curtiss, 2000).

However, Indigenous knowledge systems embedded in relationships with nature have informed peoples' understanding of place over many centuries (Cajete, 1999; 2000). Emerging research suggests that place-based education is limited because it does not critique colonial legacies in theoretical frameworks of place (Calderon, 2014). Indeed, many Indigenous scholars are replacing the term *place* with *land* and argue that land-based pedagogies promote the decolonization of education (Ballantyne, 2014; Wildcat, McDonald, Irlbacher-Fox, & Coulthard, 2014) by recognizing the intimate relationship that Indigenous peoples have with the land. Learning from place emphasizes a relationship with the land (Blood & Chambers, 2006), something deeply respected in Indigenous communities and something absent from much of place-based STEM education. Our project seeks to close this gap by considering varying perspectives of place as it informs STEAM teacher education pedagogy.

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