## LEARNING PLACES: Place-Based Learning in an Interdisciplinary Approach to Undergraduate Research

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Higher education teaching is an ever evolving practice that responds to changing student preparation and learning needs, the contemporary needs of business, industry and the professions, research on teaching and practice, and the professional development of faculty. High-impact educational practices (HIEPs) outlined by the AAC&U give faculty a toolkit of specific practices that research identifies as having particular effectiveness in student engagement and learning in the 21st century. Included in this list of effective practices is undergraduate research, defined by the AAC&U as having the goal "to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions." While this high-impact educational practice is most often associated with the sciences, it has wider applicability to undergraduate learning where the methods of research can integrate strategies that further enhance student engagement and learning: place-based learning and interdisciplinary teaching. In this chapter, these two compelling approaches to higher education are presented as a powerful interwoven and integrated approach to undergraduate research.

Place-based learning is an increasingly applied strategy in higher education to increase student engagement and put the students in the role of generator of knowledge as opposed to passive recipient of knowledge. Interdisciplinary teaching is supported by research that identifies specific benefits to the students, including gaining insights from multiple perspectives and increasing ability to integrate diverse concepts into a *contextualized approach to analysis*. Both approaches to education are young in their development and evolution and require more exploration of applications and techniques. Faculty need more guidance on how to teach both in an interdisciplinary format as well as outside the classroom. Here a specific course that does both is presented as a case study of successful practices and pedagogical approaches that will help the reader develop their own approach to one or both.

The course presented here is best described as a part of the culture of Urban Studies curriculum, where primary source empirical research methods are explored using the city as the laboratory. Urban studies courses are increasingly important as the human population is in the midst of a remarkable transition moving from rural settlements to cities such that within a 100 year period (1950-2050) the world population will flip from 2/3 rural to 2/3 urban², making the study of cities an increasingly critical component of education and research. In the general education and liberal-arts context, urban studies courses make the city, or more broadly human settlements, the starting point for a broad range of investigations where interdisciplinary teaching that makes use of place-based learning is a natural fit.

In the Learning Places ID course at the New York City College of Technology, faculty from multiple disciplines are refining place-based teaching methodology that is enriching undergraduate baccalaureate students with an additional set of tools for research and increasing knowledge of the city around them. The combination of place-based learning and interdisciplinary teaching in this course is impacting not only the student knowledge of the city,

<sup>&</sup>lt;sup>1</sup> Kuh, George D. *High-Impact Educational Practices*. Association of American Colleges & Universities, 26 July 2018, www.aacu.org/leap/hips.

<sup>&</sup>lt;sup>2</sup> Our Urbanizing World. Department of Economic and Social Affairs, United Nations, 2014, www.un.org/en/development/desa/population/publications/pdf/popfacts/PopFacts\_2014-3.pdf.

its complexity and the myriad issues ripe for investigation, but is also working towards critical general education goals for life long learning and information literacy.

This chapter will present specific place-based learning strategies and techniques. These are then assessed for their impact on both the primary content knowledge and investigation skills as well as general education skills and values including their effectiveness of generating engagement and impacting the lifelong learning attitudes of the students. The relationship of place-based learning and experiential learning is explored. Discussion focuses on place-based learning utilizing careful observation, observational drawing, and reflection as a critical active learning approach for undergraduate research. In particular, the interdisciplinary combination of the Walking Seminar paired with Archival Investigation is introduced as a method for investigating current and historic conditions of a place. The role of the site report is discussed as a template to aid instructors adoption of the discussed techniques. Emphasis is placed on the central contested question of how urban environments should change in the future, with the context for this question accommodating multiple perspectives including social justice, sustainability, preservation, housing, and urban design among others. Students are shown to increase their understanding of the evolution and change of urban places as a central vehicle for assessing the complexity of the current conditions and anticipating the future impacts of the built environment on people and place.

While the course used here as a case study is focused on the city as the learning laboratory, the techniques outlined are applicable to other scales of human settlement that equally provide a rich laboratory for learning, including towns and villages in rural settings. While the world is rapidly urbanizing, the rural landscape is also going through significant change and the future of these places is unclear. Ecological sustainability, economic development, and social concerns pertaining to the future of smaller scale towns and villages are potent topics for undergraduate research and are actively contested questions in the 21st century. In these places the use of place-based learning strategies combined with interdicisplary teaching are no less useful than the city. Overall these techniques offer a broad range of applicability that can be of service to faculty in a range of contexts seeking to apply the high-impact educational practice of undergraduate research.