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Understanding Transport Planning Education in an Australian Context

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Abstract

Transport planning professionals, upon commencing practice, are expected to be well-equipped with the knowledge and skills to address new and emerging urban transport challenges as well as to support the changing mobility and accessibility needs of communities. Because of this, the higher education sector is experiencing stronger pressure from industry, government and the public to demonstrate its ability to educate more work-ready graduates, including planning for transport. This research examines the education of transport planning professionals in the Australian context, examining to what extent students are being prepared to enhance their skills that would make them more competitive in the workplace. This research investigates the theory to practice nexus using a survey-based research design administered to transport planning educators and students. It examines the strategies and approaches employed by educators in higher education institutions to address the needs of industry and elicits perception of students within a single institution to examine what they perceive enhances their engagement and learning in taught transport planning course offerings. Results show that students favor activities that offer experiential education, and subsequently, learning. Moreover, while considered as relatively challenging, group work assessment was considered as an important exercise that simulated the workplace setting, engaged student in participatory transport planning process, and created a platform where students were able to bring in a number of key considerations into planning concerns, and overall, allowed them (students) to bridge the gap between theory and practice. The study significantly contributes in enhancing transportation planning pedagogy and informing overall practice in Australia and beyond.

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1. Introduction

1.1. Background

Transport planning professionals, upon commencing practice, are expected to be well-equipped with the appropriate knowledge and adequate skills to be able to effectively address new and emerging urban transport challenges, and to support the changing mobility and accessibility needs of individuals and communities. Industry, the government and the public often place undue pressure on the Education Sector to be able to demonstrate its ability to educate more work-ready graduates (Handy et al. 2002a; 2002b). This means that individuals who wish to practice transport planning must come out of their programs with appropriate knowledge and skills expected of a new transport professional while also being able to translate knowledge to action (Freeland 2009). However, the traditional approach in teaching transport planning was highly technical in nature, which has resulted in practitioners unable to keep pace with these challenges (Kotval 2003). Moreover, the current form of transport planning education continues to perpetuate the long cycle of theory-less transport planning education, which must be changed (Talvitie 2009) while students are also not provided adequate immersion in “real” transport planning situations (Baum 1997). This has prompted Burke et al. (2013) to call for improved student learning outcomes in transport planning education.

In Australia, urban planning programs, where the transport planning course generally sits, have started to progress from being a technical discipline to a multi-disciplinary, practice-based discipline (Mateo-Babiano and Burke 2014). The diversifying requirements of transport planning practice has encouraged higher education institutions to look into ways and means to equip students, not only with the tools of the trade to be able to connect ideas with action (Freeland 2009) but also to encourage practitioners to have a deeper and more practical understanding of the issues resulting in more reflective practice (Schon 1983). Clearly, it becomes imperative to examine the extent to which the planning pedagogy is able to respond to these changes and hone the next generation of transport planning practitioners to be receptive to the evolving urban contexts.

1.2. Paper’s purpose

By examining the provision and delivery of a number of Transport Planning courses offered in Australia, this study aims to: (1) examine different approaches to teaching transport planning; (2) investigate student needs and expectations in learning transport planning; and (3) identify best practices in teaching and learning transport planning.

1.3. Paper’s outline

The subsequent section, literature review, will examine the current state of research in transport planning education. This is followed by a discussion of this paper’s methodological design in Section 3. In Section 4, the results and findings from the survey and its implications are explored, particularly how the paper can support the development of an evidence-based evaluation framework to assist in the development of a multi-disciplinary, integrated curriculum design for discipline-based courses such as transport planning. This paper is then capped with the Discussion, conclusion and further research. The intent of this project is to ensure that future planners have the necessary skills to plan for transport effectively, and the capabilities required to lead the next generation of transport planning practice.

2. Literature review

Planning for better transportation first gained traction 60 years ago to counteract the increasing urban congestion, but more recently, enhancing transport was mainly to address challenges resulting from wicked problems of environmental pollution, poverty and climate change. Similar to planning theory which, lacks consensus in its definition (Friedmann, 1995), theoretical understanding and knowledge of transport planning has remained scant. Largely influenced by the innovations in the field of planning, planning for transport has continued to be framed...