Sustaining Partnerships between Schools and Industry: A Minerals and Energy Case

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ABSTRACT
Internationally, there is a growing body of research on industry-school partnership, particularly regarding the principles that contribute to effective and efficient partnership models that facilitate vocational-industrial education. However, there are very few articles in the literature that seek to understand the sustainability of industry-school partnerships. Hence, this paper adopted ecological system principles as a framework for understanding the threats that impact on the sustainability of such partnership arrangements. The author reports on a large-scale government led industry-school partnership, the Gateway to Industry Schools Program, established in Queensland, Australia. Central to this initiative is the Queensland Minerals and Energy Academy (QMEA), a lead organisation for 34 schools and 12 multi-national sponsor companies. This research used an explanatory case study methodology sourcing data through interviews and documents. The main findings were that resilience and adaptive capacity are critical principles for the sustainability of ISPs.

KEYWORDS
Industry-School Partnership, School-to-Work Transition, Sustainability, VET

INTRODUCTION
Internationally, governments have, and continue to stimulate partnership arrangements between schools and industries through policy and funding mechanisms (Hay & Kapitzke, 2009; Stanley & Mann, 2014). The broad aim of these partnerships is to address the vocational-industrial education emerging needs of the knowledge economy in developed and developing countries. Such arrangements are commonly observed as part of government youth employment policies to help smooth the transition from school to work. While there is growing interest in establishing partnership to provide education services sustaining such partnerships is difficult, hence the aim of this paper is to present some key principles that may enhance sustainability by drawing on our study of a large-scale industry-school partnership in Queensland, Australia.

Despite, the potential benefits, there has been some criticism expressed as to whether they are an appropriate strategy. Robertson and Verger, (2012), for instance, challenged the development of industry-school partnerships on the basis that partnerships between schools and private stakeholders bring sectional interests into educational policy making and management of what is seen as a public responsibility. Others express concerns over the relationship to globalisation, where multinational firms “escape the constraints of territory and the control of governments” and influence school curriculums (Hay & Kapitzke, 2011, p. 204). In both the academic literature and various government

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In previous research we theorised industry-school partnership as an ecological system (Flynn & Pillay, 2013), presented critical principles and mechanisms for successful partnerships (Pillay, Watters & Hoff, 2013; Pillay, Watters, Hoff, Flynn, 2014), and evaluated various industry cases (Flynn, Pillay & Watters, 2015; Watters, Pillay, Hay, & Dempster, 2013). Within Pillay’s et al. (2013) research the critical attributes of public-private partnerships, sustainability was presented as one of four core principles. In the course of our research, problems associated with sustaining industry-school partnerships were consistently evident in data collected, as well as being identified as an issue in the literature (Bryson et al., 2006). For these reasons we thought it important to extend our research to better understand problems with sustaining industry-school partnerships. Of particular concern was sustainability of industry-school partnerships threatened by economic fluctuations, which tend to impact financial contributions of industry partners, curriculums for school students, and ultimately, school-to-work transitions.

PRINCIPLES OF SUSTAINABILITY

As an ecological principle, a system (including an industry-school partnership system) is susceptible to external and internal shocks, which may threaten sustainability (Anderies, Janssen, & Ostrom, 2004). Ecological theory includes two principles that the authors of this paper have adapted to better understand the sustainability of industry-school partnerships: (a) resilience capacity; and (b) adaptive capacity. These principles originated from Holling’s (1973) research on social-ecological systems and were further developed by other researchers in the field (Folke, Carpenter, Walker, Scheffer, Chapin & Rockstrom, 2010; Walker, Holling, Carpenter & Kinzig, 2004). It should be noted that literature on these principles is derived from the business sector and is consequently not considered within current literature on industry-school partnerships.

Resilience Capacity

Walker et al., (2004) posed a definition of resilience as “the capacity of a system to absorb disturbance and reorganise while simultaneously undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks” (p. 6). As a principle, resilience within an industry-school partnership relates to whether the system can: (a) absorb a shock and maintain core functions; (b) reorganise itself to respond to the shock; and (c) whether it can build capacity, learn and adapt (Folke, Hahn, Olsson, & Norberg, 2005). An example of a shock to a social-ecological system (industry-school partnership) is the departure of key personnel who interface between partner organisations.

Adaptive Capacity

Change in current times is inevitable but knowledge of how to ensure an industry-school partnership system’s existing resilience may not in itself ensure sustainability, and is not well researched. For this reason, the importance of industry-school partnership adaptive capacity is emphasised and defined as, “the capacity of actors in a system to influence resilience [to shape the adaptations required to continue serving the functions]” (Walker, 2004, p. 6). The capacity to influence resilience levels in industry-school partnerships is dependent on the nature of relational interaction between key partners. Such capacity strengthens interdependency between partners, and the governance arrangements throughout the entire industry-school partnership system, which are all essential to
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