

Integrated curriculum as an effective way to teach 21st Century capabilities

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Abstract

There is an emerging international consensus on the importance of developing 21st Century capabilities as part of education curricula. Yet, educators are uncertain about the definitions of the capabilities, and how to teach and assess them. This paper offers integrated curriculum as an effective way to resolve some of the challenges associated with developing the C21 capabilities. We present an overarching curriculum framework - the Know-Do-Be. Next, we identify the capabilities as they are described in various jurisdictions. Then we offer a backward design planning process that allows for creative and coherent curriculum design. Models of integrated curriculum are explored followed by research on the effectiveness of integration. Finally, we show how bringing together the competencies and integrated curriculum can create a rich learning situation. The paper concludes with recommendations for facilitating the foregrounding of the 21st Century capabilities through curriculum integration.

Keywords

21st Century capabilities, 21st Century competencies, integrated curriculum, curriculum design

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In our global networked world, there is a continuous explosion of knowledge. Students can no longer simply memorize a collection of facts to pass a test. They need to be lifelong learners who can manage and make sense of huge amounts of data, and be able to problem-solve the complex issues of the day. They need to be able to differentiate between relevant and reliable information and alternative facts designed to confuse. They need to be creative thinkers who can innovate in a world that offers open access to knowledge. In short, what is considered worth knowing, doing and being is shifting, given the global context. We all need the skills to navigate life in an increasingly complex and ever-changing environment.

Education in the 21st Century has been and is being profoundly influenced by technology and globalization. Capabilities such as communication, creativity, and critical thinking that have always had a place in education take on new meaning and relevance with technological advancements (Voogt, Erstad, Dede, & Mishra, 2013; Rotherham & Willingham, 2009; Silva, 2009). There is an emerging global consensus on the importance of developing 21st Century capabilities as part of education curricula (Ontario Ministry of Education, 2016).

Yet, concerns affecting both teachers in the field and teacher educators revolve around how to teach and assess these capabilities (Chu et al., 2017; van de Oudeweetering & Voogt, 2017; Thijs, Fisser, & Van der Hoeven, 2014). Educators know much more about how to teach subjects such as mathematics than they know how to teach the capabilities (Häkkinena, Järveläb, Mäkitalo-Sieglc, Ahonena, Näykkib, & Valtonend, 2016). There is little professional development around the capabilities or knowledge of innovative teaching practices (Voogt & Roblin, 2012).