# Chapter 15

# Effective Implementation of Sustainability Education in Higher Education Settings via Transformative Learning Approach:

Literature Review and Framework Proposal

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# **ABSTRACT**

In this chapter, the importance of equipping educators with transformative learning approach to implement sustainability education in higher education settings has been discussed. The chapter talks about sustainability education as a way to achieve sustainable development and transformative learning approach to implement sustainability education effectively in higher education settings. The entry discusses the literature introducing the prominent concepts and ideas for transformative learning approach and establishes the importance of providing educators with the right pedagogy for effective implementation of sustainability education, in higher education settings, using transformative learning approach. In the final section, the authors conceptualized a framework, based on literature review, highlighting the learning experiences and the pedagogies required to bring transformative learning approach to practice in the context of sustainability education in higher education settings.

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# INTRODUCTION

Humanity's unsustainable practices are evident as pollution, inequalities, illness, poverty, climate change, wars – all of which are complex, have high potential of damage and need immediate attention. Hence, sustainability as an emerging field has been established to respond to these wicked sustainability challenges through transformational action (Blackstock & Carter, 2007; Grunwald, 2004; Talwar et al., 2011). Sustainability education aims to educate future leaders who can contribute to building a sustainable society (Onuki & Mino, 2009). To nurture such leaders, sustainability education shall allow learners to construct, critique and act with high degree of autonomy and self-determination (Wals, 2011). Hence there is a need for the kind of learning which can explore the depth of things and brings about paradigmatic shift – a shift from transmissive to transformative learning (Burns, 2011; Cress, 2003). Transformative learning enables students to understand themselves (bringing in more autonomy) and their relationship to other humans and natural environment around them and that is why this kind of learning leads to a paradigm shift (O'Connor, 2002). It "transforms learners' values and perspectives so that they are able to embrace sustainability as a new paradigm or a lens through which to view the world and make a change" (Burns, 2009). This new form of learning can develop the capacities and qualities of individuals, groups and communities to meet the challenges linked to sustainability (Wals, 2011). Transformative education can be very helpful in higher education settings for adult learning in the context of sustainability education. Educators hold the key to build sustainability leaders in schools. This has been recognized by international agencies such as UNESCO, who have identified the professional development of teachers in education for sustainability education as 'the priority of priorities' (UNESCO-UNEP, 1990). In order to mainstream sustainability education in higher education settings via transformative learning it is important to equip educators with the right pedagogy to bring transformative learning in to practice. Despite the availability of well-established frameworks on transformative learning (Wals, 2006, 2010; Sterling, 2011) and the identification of need of transformative learning in sustainability education, there is a need to bridge gap between theory and practice. Therefore, this chapter aims to establish the importance of the role of educators to effectively implement sustainability education in higher education settings and then conceptualize a framework, based on literature review, to identify the appropriate pedagogical approaches for educators to bring transformative learning in to practice.

# **BACKGROUND**

# Sustainability Education a Way Forward to Sustainable Development

2030 Agenda for sustainable development was adopted by UN General Assembly on 25<sup>th</sup> September 2015. 17 Sustainable Development Goals (SDGs) are at the core of 2030 Agenda. Major development challenges for humanity are described by these transformational, inclusive and universal SDGs. The purpose of these goals is to ensure a peaceful, prosperous, sustainable and equitable life for everyone, on earth, now and in the future (UNESCO, 2017). In this agenda, SDG-4 (i.e. Quality Education), Target 4.7 highlights the vitality of education for sustainable development (or sustainability education), global citizenship for a sustainable and peaceful future for all.

Target 4.7 states: "by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and

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