

# Challenges in Teaching for Sustainable Development

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## Abstract

*Many believe that Education for Sustainable Development (ESD) is the key to achieving sustainability. The record of adopting ESD is particularly poor in higher education. As a result, it is essential to investigate the barriers that have impeded ESD's broad implementation. The primary barriers that have impeded ESD's proliferation are explored in this study. This essay also emphasizes how the dominant social paradigm is a major factor in determining and maintaining ESD barriers. This study claims that it is important to break the present social paradigm in order to fully apply ESD. Factors such as resource depletion, water shortage, and economic inequality make it critical to eliminate barriers to ESD as soon as possible..*

## Keywords:

Challenges to ESD, educational disciplinarity, interdisciplinarity, and the dominant social paradigm may be found in the fields of business and management studies, executive training, and classroom teaching..

## Introduction

To avoid ecological and social collapse, sustainable growth is seen as the sole viable alternative by many (Brundtland, 2019). The latter relied heavily on the adoption of the Sustainable Development Goals in 2015 (United Nations, 2019). United Nations Secretary-General António Guterres has expressed concern that the planet and the future we envision are in jeopardy because the Sustainable Development Goals (SDGs) cannot be achieved. All hands on deck and full speed ahead are required to achieve the SDGs (Guterres, 2019). Education is emphasized as a means to a more sustainable future in Goal 4 of the Sustainable Development Agenda (Foley, 2016). This research thus investigates the factors that have delayed the development of ESD. The first section of this research focuses on the current social paradigm and how it functions as a major short- and long-term barrier. Impediments influenced by the dominant sociocultural paradigm include education itself, the pedagogic norms of disciplinarity, the challenge of interdisciplinarity, and opposition to change within education. Existing Society's Model As David Midbreath (1989) argues in his book "Un-Sustainability," the existing political, social, and economic institutions of the social paradigm are to fault for the problem (DSP). Since, as critical realism suggests, our ideas and beliefs are historically produced and conditioned, we must first explore the factors that affect people's perspectives and assumptions about how society functions. Philosopher and historian of science Thomas Kuhn explained how a scientific community's prevailing paradigm influences its members' approach their task from a certain field (1962). As of 1989 (Midbreath).

Both Marquardt (2017) and Jakobe it et al. (2014) note the persistence of this paradigmatic tension. This tension is clarified by Marquardt (2017), who observes that development theory is more nuanced than ever before thanks to continuing debates, reinventions, and paradigm shifts. The DSP is based on the neoliberal economic paradigm prevalent in the West. The political and economic theory that "human well-being can best be served by the maximization of entrepreneurial freedoms, denoted by private property rights, free markets, free trade, and individual liberty" (Harvey, 2005) is one definition of neoliberalism. The question of whether the neoliberal method can address social and environmental issues has also been raised (Konini, 2014). Both Konini (2012) and Crest (2012) argue that the dominant neoliberal ideology of anthropocentrism has a significant effect on the study of social phenomena. Unfortunately, the UN Decade of Education for Sustainable Development (DESD) made little effort to recognize or resist neoliberalism as a hegemonic element. The official education system has played a significant role in maintaining social hegemony (Apple, 2004), which has aided in the perpetuation and acceptance of the DSP. In a similar spirit, Sterling (1996) has emphasized that new information poses no danger to the DSP's reasoning since it is just the next logical step. According to Doers et al. (2008), "if universities are to be actors in the paradigm shift to sustainability, then it is necessary to reframe and analyse the function of universities in a larger socio-cultural and historical framework." As shown in Fig. 1, the dominant social paradigm shapes the types of obstacles people face while trying to implement ESD.



Figure 1. Education for sustainable development barriers

### Schooling Is a Stumbling Block to Sustainable Development Education

Education is a barrier to ESD since it is influenced by the DSP. Despite the fact that HE must engage in research and learning for sustainable development (Koehn and Ditto, 2014), there is a low commitment to ESD in HE, as shown by Scott et al., (2012). (Wei Quan, 2013). Securing the backing of upper management is viewed as crucial to improving ESD implementation (Wei Quan, 2013). Much of the discussion in the literature on Higher Education for Sustainable Development (HESD) has centred on the obstacles that stand in the way of a more comprehensive adoption of sustainable practises throughout the sector (Lambrecht's et al., 2017). According to Verhulst and Lambrecht's (2015), a systematic integration of sustainability education in HE is hindered by three main factors: (1) a lack of knowledge of sustainability, (2) the structure of higher education, and (3) a lack of accessible resources.

According to Jackson (1968), the hidden curriculum may have an impact on how sustainability is taught in schools. The term "hidden curriculum" is used to describe the unspoken and frequently covert expectations for students' thought processes and conduct that are communicated by a certain educator, speaker, or educational institution (Jackson, 1968). The attitude and ideals of the school are crucial in making the concealed curriculum visible (Jackson, 1968). More recently, Winter and Cotton (2012) found that despite widespread political support for fostering graduates' sustainability literacy, widespread apathy and significant opposition prevented the incorporation of sustainability topics into the UK's higher education curriculum.

### Schooling for Educators

The United Nations' Decade of Education for Sustainable Development, which had a major emphasis on greening teacher training, ended in 2014. Pre-service teacher training programmes have not yet included sustainability education as a core component (Babyak, 2014). According to Babyak (2014), there are three obstacles that must be overcome in order to reorient teacher education towards sustainability: (1) a lack of leadership, (2) a negative perception of the role of ESD, and (3) the soloing of education faculties. Yavuz et al. (2013) used a paired pre-post design with 215 student instructors and discovered that despite the importance of environmental education, most of the students had a limited comprehension of the topic. Studying 3,299 Swedish secondary school teachers, researchers found that the majority of the educators lacked a comprehensive grasp of sustainable development and emphasised the need for more training in the field (Broga et al., 2014). Increasing the efficacy of education for sustainable development requires, as proposed by HyenaSahib and Lindemann Mathies (2015), providing instructors with ongoing opportunities to expand their expertise in the field of sustainable development.

### Instruction in Business and Management

In addition to encouraging moral and social responsibility and intellectual growth, a college education is seen as one of the most effective methods of training concerned and active citizens (McAbee, 1980). (Pascarella et al., 1988). Management theorists have pointed out how business schools promote the ideals of the current societal paradigm, in contrast to the later (Alvesson and Deetz, 2000; Rosati and Clegg, 1999). According to Colin Mayer (2013), a professor of management studies at the University of Oxford, the standard position among business schools is to serve the needs of their investors. Similarly, Inlead's Professor Craig Smith thinks that before business school, students have a holistic understanding of management, but that after graduation, they see

management only in terms of increasing profits for their company's shareholders (Smith, 2013). Gladwin et al. (1995) argue that management theory reflects an anthropocentric worldview and a fragmented epistemology that places humans in opposition to nature.

As a result, social and environmental accounting research is often overlooked in favour of more traditional topics like financial management and economic growth (Parker) (2011). As Sun din and Wainwright (2010) have pointed out, one of the main reasons for the delayed shift in accounting education for sustainable development is the absence of professional certification standards for expertise in sustainability. Multiple studies, including those by Adom Bent et al. (2014), Goleman et al. (2011), and Waldock et al. (2011), agree that sustainability should play a larger role in business and management curricula. According to the UN PRME (2019), the Principles for Responsible Management Education (PRME) should be included into business and management curricula. These principles emphasise the SDGs while encouraging business and management schools to train the next generation of leaders to strike a balance between environmental and economic concerns (UN PRME, 2019). Nelson (2014) argues that sustainability education may successfully integrate into the framework of business schools via a combination of formal instruction, active participation from industry, and cross-disciplinary partnerships. According to research by Shahadat (2010) and Greis (2010), educational leaders must be on board with a change agenda if they are to successfully implement education for sustainable development.

## Guidelines for Discipline

According to Chettiparamab (2007), Selby (2006), and Arum (2004), topic disciplinarity is a significant impediment to education for sustainable development since it is influenced by the prevalent societal paradigm. According to Arum (2004), the term "discipline" has been used to describe a method of organising information for educational purposes since at least the Middle Ages. Schools and universities, as stated by Selby (2006), are organised according to different fields of study. Chettiparamab (2007) has detailed how disciplines maintain rigour and provide information useful in the workforce and in society. Institutionally, academic disciplines provide academics a structure for their professional participation, identity, and promotion, all while maintaining academic disciplines' distinctive intellectual perspectives (Kuhn, 1962). As Chettiparamab (2007) points out, too much expertise in one area might stifle critical thinking about more pressing issues in other areas, such as the real world. According to the theories advanced by Littledyke and Manolas (2011), epistemology and ideology shape educational practises because they inform the origins of subject disciplinarity. The prevailing positivist epistemology within the pedagogical norms of disciplinarity leads to a subject-based, fragmented curriculum (Eagan and Orr, 1992).

This method is grounded on a knowledge-centered 'objectives' model of curriculum development (Leatherdyke and Manilas, 2011; Hirst, 1974), and it employs a transmission via instruction process (Lawton, 1973) in which the learner is a passive receiver of information (Leatherdyke and Manilas, 2011). Re-constructivists, on the other hand, see education as a means to an end—social transformation—and as such advocate for a learner-centric, process-oriented, rather than objective-based, curriculum design (Leatherdyke&Manilas 2011; Blanking& Kelly 1987). In a process-based approach to curriculum development, the educator plays the role of facilitator (rather than transmitter) to the students' learning. The pedagogic norms of disciplinarity must be questioned in order for ESD's embodiment to be achieved, making re-constructivist ideology crucial (Tilbury and Wortman, 2004). This chapter discussed the significance of interdisciplinarity to the development of ESD and pointed out the dominance of subject disciplinarity when discussing epistemology, ideology, and pedagogy. This chapter discussed the role of interdisciplinarity in promoting education for sustainable development, highlighting the dominance of subject disciplinarity when addressing epistemology, ideology, and pedagogy. Integrating Knowledge from Different Fields In this piece, we go into the problem of interdisciplinary work. The term "interdisciplinarity" was coined by Klein and Newell (1997), who explained it as:

Interdisciplinarity is "the method of approaching a subject, solving a problem, or tackling a topic that is too large or complicated to be dealt with satisfactorily by a single field or profession," as defined by the Oxford English Dictionary (Klein and Newell, 1997, p. 393).

Higher education (HE) in particular faces a significant issue as it attempts to shift towards a more sustainable curriculum (Katas, 2015). Aktas claims that (2015),

Increasing the importance of sustainability at universities may be accomplished via the promotion of transdisciplinary study and instruction (Aktas, 2015, p. 354).

In a similar vein, Klein (2006) has suggested that interdisciplinarity is essential to a thorough reevaluation of universities' goals and methods.

"The ultimate question that multidisciplinary research poses are the most basic. Where does schooling fit into society's grand scheme of things? Interdisciplinarity, at its best, is not a collection of discrete abilities, an extra activity, or a timetable shift. A final objective is to rethink the very nature of education itself (Klein, 2006, p. 16).

One of the most influential biologists of all time, Edward Osborne Wilson, sometimes called the "Father of Socio-biology" and "the Father of Biodiversity," argued for the need of a unified body

The quest to bridge the scientific and humanistic disciplines has been, and always will be, the greatest enterprise. According to this theory, "the continual fragmentation of knowledge and the accompanying confusion in philosophy are not reflections of the actual world but creations of research" (Wilson, 1999, pp. 5-6).

The complex limits inherent in sustainability science methods to resolving problems in social-ecological systems need specialised training, as proposed by Meyer et al. (2015). Spangenberg (2011) has made the distinction between the science of sustainability (inter- and transdisciplinary) and the science of sustainability (mono-disciplinary), arguing that the latter has gotten far less attention. However, as Lang et al. (2012) have pointed out, there is a growing need for transdisciplinary strategies to address critical social issues, such as sustainability. Bioeroder and Rammel, (2017) found that transdisciplinary education and research might help find practical solutions to sustainability issues.

## Resistance to Change

According to Vales (2007), one of the key challenges in introducing organisational change is people's reluctance to adapt to the new ways of doing things. Similarly, Chen and Kompf (2012) found that educator pushback is a major factor in failed or superficial curricular overhauls. Failure to acknowledge the need of change is one of many hurdles to transformation on both the personal and organisational levels (Heifetz and Linksy, 2002). There will be resistance to change among educators if they are unable to see the value in it (Greenberg and Baron, 2000). Both Fullan (2001) and Greenberg and Baron (2000) provide evidence for the idea that professionals and students alike might develop a fear of the unknown when routine procedures are altered. It is simpler to keep on doing what you've always done in the classroom than than trying to learn new methods and ideas (Greenberg and Baron, 2000).

## Conclusion:

Education for Sustainable Development (ESD) implementation is critical to achieving sustainability. An essential step in establishing education for sustainable development is removing the obstacles standing in its way. Recognizing the prevalent societal paradigm (which underlies other ESD challenges) and being ready to confront this paradigm are crucial to the development of ESD, particularly among educational and political leaders.

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