


Chapter 7

Research and Knowledge Transfer: Linking Education and Sustainability

Satya Subrahmanyam

 <https://orcid.org/0000-0003-0441-2742>

Holy Spirit University of Kaslik, Lebanon

ABSTRACT

This chapter, “Research and Knowledge Transfer: Linking Education and Sustainability,” investigates the crucial role of research and knowledge transfer (KT) in addressing global sustainability challenges, with a focus on transnational education. It examines how higher education institutions can advance the UN Sustainable Development Goals (particularly SDG 4) by integrating research with teaching and community engagement. Drawing on frameworks like the Triple Helix and Education for Sustainable Development (ESD), the chapter emphasizes applied, interdisciplinary, and collaborative approaches. It explores models for effective KT—including innovation hubs and international networks—and highlights the potential of transnational education to promote inclusive, globally relevant solutions. Barriers such as policy gaps and digital divides are discussed, alongside strategic recommendations to build a collaborative, action-oriented knowledge ecosystem for sustainability.

1. INTRODUCTION

This chapter explores the intersection of research, knowledge transfer (KT), and education for sustainable development (ESD) within higher education, with a

DOI: 10.4018/979-8-3373-4357-0.ch007

particular focus on how transnational education (TNE) serves as a strategic vehicle to advance global sustainability goals.

1.1 Purpose of the Chapter

The first aim is to investigate how research and knowledge-transfer mechanisms within higher education institutions contribute to sustainability outcomes. Here, “research” refers to the systematic investigation and generation of new knowledge in the sustainability domain, while “knowledge transfer” denotes the processes through which knowledge is applied beyond the academy - into policy, practice, and societal impact (Cheng, 2021). The second aim is to explore the role of TNE programmes, defined as cross-border higher education initiatives, in disseminating sustainability knowledge and building capacity across national boundaries (British Council, 2022). The third aim is to identify best practices and challenges in implementing research-driven sustainability initiatives via TNE, and to propose strategic recommendations for institutions, policy-makers, and researchers seeking to optimise TNE for ESD.

1.2 Rationale

There is a growing imperative for integrative approaches that connect academic research with real-world sustainability challenges. As noted by UNESCO, higher-education institutions are key actors in “knowledge-driven actions” for global sustainability. At the same time, TNE offers distinctive opportunities for cross-border knowledge dissemination, capacity building and global collaboration - extending the reach of domestic higher education systems into new territories and enabling greater access, adaptability, and context-specific impact (British Council, 2022). Given these dynamics, mapping the intersection of research, KT and TNE within a sustainability framework is both timely and necessary.

1.3 Objectives of the Study

This study addresses four specific objectives:

1. To examine how research and KT mechanisms foster sustainability in higher-education settings.
2. To explore the effectiveness of TNE programmes in disseminating sustainability-oriented knowledge across institutional and national borders.
3. To identify best practices and challenges in implementing research-driven sustainability initiatives in a transnational education context.

34 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/research-and-knowledge-transfer/401184

Related Content

Strategic Approach to Tourism Development in Namibia

Neeta Baporikar (2016). *International Journal of Sustainable Economies Management* (pp. 1-12).

www.irma-international.org/article/strategic-approach-to-tourism-development-in-namibia/174386

Institutional Paradigms Based on Cognitive, Ethos, Beliefs, Tradition, and Emotional Dimensions

José G. Vargas-Hernandez, Mario A. García-Camacho, Francisco Javier J. González and Omar C. Vargas-González (2025). *Promoting Sustainability in Psychosocial Travel Techniques* (pp. 85-112).

www.irma-international.org/chapter/institutional-paradigms-based-on-cognitive-ethos-beliefs-tradition-and-emotional-dimensions/357741

Environmental Vulnerability to Climate Change in Mediterranean Basin: Socio-Ecological Interactions between North and South

Ahmed Karmaoui (2016). *Handbook of Research on Climate Change Impact on Health and Environmental Sustainability* (pp. 105-138).

www.irma-international.org/chapter/environmental-vulnerability-to-climate-change-in-mediterranean-basin/140565

Innovation, Macroeconomic Effects, and Environmental Degradation: The Case of Mediterranean Countries

Ayfer Gedikliand Mehmet Rza Derinda (2021). *Management and Conservation of Mediterranean Environments* (pp. 134-158).

www.irma-international.org/chapter/innovation-macroeconomic-effects-and-environmental-degradation/271941

Employee Behavioral Intentions in Adopting Information Technology: The Case of the Greek Hotel Industry

Anastasia A. Katou and Margarita A. Vogiatzi (2011). *International Journal of Social Ecology and Sustainable Development* (pp. 17-30).

www.irma-international.org/article/employee-behavioral-intentions-adopting-information/55091