



HIGHER EDUCATION AND THE
SUSTAINABLE DEVELOPMENT GOALS

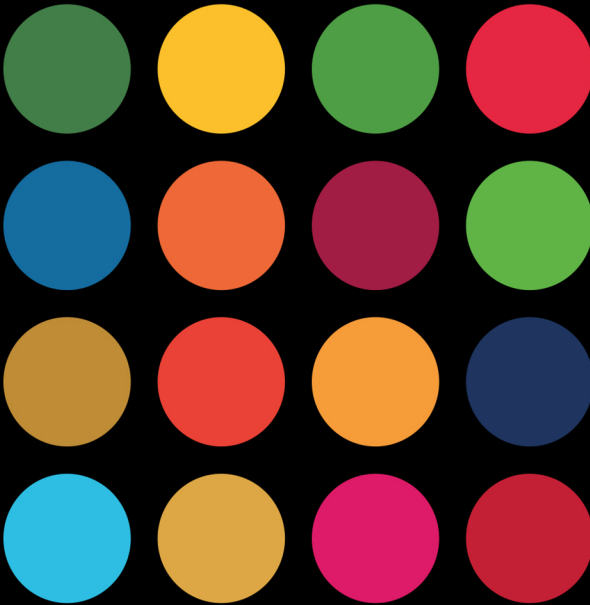


WENDY PURCELL
SERIES EDITOR

HIGHER EDUCATION AND SDG14



LIFE BELOW WATER



EDITED BY
SIMON J DAVIES AND
PAUL ROBERT VAN DER HEIJDEN

HIGHER EDUCATION AND SDG14

PRAISE FOR *HIGHER EDUCATION AND SDG14*

‘[This] is an ambitious series and I am especially interested to know that attention will be paid to SDG14, “Life Below Water”, dealing with a vital part of our planet that calls for urgent support. The book in question will clearly make a valuable contribution to our understanding of what needs to be done.’

‘As the Series Editor, Professor Purcell points out that higher education is well placed to drive the agenda forward. In my own research and advocacy, I have always emphasised the importance of harnessing the skills, knowledge and energy that young people can bring to the campaign. Delivering this crucial goal for the ocean requires action at all levels, through small organisations as well as large. We cannot simply wait for national governments and international bodies to take a lead.’

James Alix Michel, Former President of the Republic of Seychelles and Chairman of the James Michel Foundation

HIGHER EDUCATION AND THE SUSTAINABLE DEVELOPMENT GOALS

Series Editor

Wendy Purcell

Emeritus Professor and University President Emerita, and Academic Research Scholar with Harvard University

About the Series

Higher Education and the Sustainable Development Goals is a series of 17 books that address each of the SDGs in turn specifically through the lens of higher education. Adopting a solutions-based approach, each book focuses on how higher education is advancing delivery of sustainable development and the United Nations global goals.

Forthcoming Volumes

Higher Education and SDG11: Sustainable Cities and Communities
edited by Julio Lumbreras and Jaime Moreno-Serna

Higher Education and SDG2: Zero Hunger edited by Karen Cripps
and Pariyarath Sangeetha Thondre

Higher Education and SDG4: Quality Education edited by Tawana
Kupe

Higher Education and SDG16: Peace, Justice and Strong Institutions
edited by Sarah E. Mendelson

Higher Education and SDG10: Reduced Inequalities edited by
Priya Grover, Nidhi Phutela, and Pragma Singh

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Higher Education and the Sustainable Development Goals

HIGHER EDUCATION AND SDG14

Life Below Water

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United Kingdom – North America – Japan – India
Malaysia – China

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INVESTOR IN PEOPLE

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PREFACE

Professor Wendy Purcell, PhD FRSA

Higher education (HE) makes an important contribution to the delivery of the Sustainable Development Goals (SDGs). Through high-quality teaching and learning, HE supports the development of responsible citizens as scholars, leaders, entrepreneurs, and professionals. Universities and colleges undertake curiosity-driven and socially impactful research to help advance knowledge frontiers and find solutions for the world's most pressing issues. HE is also active in civic and community settings, often as anchor institutions. Nevertheless, given the fierce urgency of (un)sustainable development, the climate crisis, and widening inequity within countries and across the globe, HE needs to do more and go faster. For HE to deliver fully against the SDGs, it needs to adapt to this shared global agenda and embrace transformative change.

This book series focuses on the role of HE in advancing the SDGs, identifying some successes to date and pointing to opportunities ahead. In sharing the ways and means universities and colleges across the world are engaging with the SDGs, the series seeks to both inspire and enable those in the HE sector and stakeholders beyond to transform what they do and how they do it and hasten progress towards Agenda 2030. Insights gleaned from relevant case studies, innovations, reflective accounts, and student stories can help the HE sector both deepen and accelerate its engagement with the SDGs. Each book seeks to capture examples of how HE institutions (HEIs) are fulfilling the delivery of their academic mission *and* progressing the SDG concerned. Illustrating the work of students, that is undertaken by faculty and staff of the institution and conducted with others, positions HE as a change agent operating at a systems level to help create a world that leaves no one behind.

Taking up this global challenge, SDG14 'Life Below Water' calls on us to 'conserve and sustainably use the oceans, seas, and marine

resources for sustainable development', and thereby safeguard the planet's largest ecosystem. Healthy oceans and seas are essential to life, supplying food, energy, water, and supporting employment. However, ocean warming, acidification, over-fishing, algal blooms, biodiversity loss, and plastic pollution represent an ocean emergency and pose a threat to health and wellbeing. HE is at the forefront of science and education to help tackle these issues. Bringing key assets of curiosity and the pursuit of knowledge and its application to partners seeking solutions and driving innovation, universities, and colleges operate in global networks. Helping realise human potential connects the worlds of learning, work, and entrepreneurship in support of more inclusive economic growth. As place-makers, HEIs can use their convening power to draw stakeholders around a problem in support of the adaptive change needed to tackle the challenges of sustainable development.

This book on HE and SDG14 highlights the work of universities and colleges on sustaining life below water with examples drawn from research, knowledge sharing, and the activities of talented students and faculty. Several chapters reflect on the transformational experience of education, fuelling the desire to explore and discover through research and scholarship, and how personal passions related to the sea-shaped lives and careers. Some of the student stories capture the importance of science in action and being involved in projects that have real-world impact, with student mobility a source of innovation. The book includes examples of HE's work on nature-based solutions, sustainable aquaculture, and building with nature. The wonder of our oceans and the fragility of our relationship with life below water comes through the cases and reflects the dynamic tension between conservation and stewardship on the one hand and development and growth on the other.

The health of people, planet, and shared prosperity rely upon the full participation of HE with universities and colleges in turn needing to pursue greater engagement with the SDGs. As organisations that have stood for many centuries in some cases, this demands that they adapt to new models of learning, research partnerships, and leadership and governance frameworks to accelerate progress on delivering the SDGs. Immersive engagement with the SDGs can

catalyse pedagogic innovation, serve to refresh curricula, and stimulate new programme development. It can also open new avenues for research, attract new sources of funding and energise people to deliver on the academic mission. Sustainability is a goal for today and sustainable development is an organising principle. HEIs can play a critical role in developing new systemic and transformative solutions through interdisciplinary and multi-stakeholder collaboration and a purposeful focus on the SDGs. This book illustrates this approach as it relates to HE and SDG14.