

Handbook of Research on Study Abroad Programs and Outbound Mobility

Donna M. Velliaris

Eynesbury Institute of Business & Technology, Australia

Deb Coleman-George

International College of Hotel Management, Australia

A volume in the Advances in Higher Education
and Professional Development (AHEPD) Book
Series

**Information Science
REFERENCE**

An Imprint of IGI Global

Published in the United States of America by
Information Science Reference (an imprint of IGI Global)
701 E Chocolate Avenue
Hershey PA, USA 17033
Tel: 717-533-8845
Fax: 717-533-8661
E-mail: cust@igi-global.com
Web site: <http://www.igi-global.com>

Copyright © 2016 by IGI Global. All rights reserved. No part of this publication may be reproduced, stored or distributed in any form or by any means, electronic or mechanical, including photocopying, without written permission from the publisher. Product or company names used in this set are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark.

Library of Congress Cataloging-in-Publication Data

Names: Velliaris, Donna M., 1971- editor. | Coleman-George, Deb, 1960- editor.

Title: Handbook of research on study abroad programs and outbound mobility /

Donna M. Velliaris and Deb Coleman-George editors.

Description: Hershey, PA : Information Science Reference, 2016. | Includes bibliographical references and index.

Identifiers: LCCN 2016003167 | ISBN 9781522501695 (hardcover) | ISBN 9781522501701 (ebook)

Subjects: LCSH: Foreign study--Social aspects. | Student mobility. | Education and globalization.

Classification: LCC LB2375 .H364 2016 | DDC 370.116/2--dc23 LC record available at <https://lccn.loc.gov/2016003167>

This book is published in the IGI Global book series Advances in Higher Education and Professional Development (AHEPD) (ISSN: 2327-6983; eISSN: 2327-6991)

British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.

Chapter 16

Fostering Global Citizenship in Higher Education: Development of an International Course in Global Health

Lee Stoner

Massey University, New Zealand

Mikell Gleason

University of Georgia, USA

Lane Perry

Western Carolina University, USA

Michael A Tarrant

University of Georgia, USA

Daniel Wadsworth

Massey University, New Zealand

Rachel Page

Massey University, New Zealand

Krystina R. Stoner

University of Georgia, USA

ABSTRACT

Despite growing public awareness, health systems are struggling under the escalating burden of non-communicable diseases. Arguably, one must place themselves within the broader/global context to begin to truly understand the health implications of personal choices. Fostering a ‘global citizen’ perspective among graduates has become an integral part of the Higher Education (HE) discourse; this discourse can and should be extended to include global health. A global citizen is someone who is aware of global issues, socially responsible, and civically engaged. From this perspective, personal health is not solely an individual, self-serving act. Rather, the consequences of lifestyle choices and behaviours have far-reaching implications. This chapter details: (a) the development of an international global health course designed to foster global citizenship; (b) the research-led pedagogy; (c) the methods of student evaluation; and (d) the importance of such a course within the broader context of HE.

INTRODUCTION

Global citizenship development has become an integral part of the HE discourse; this discourse can and should be extended to include global health. Global health, alongside climate change, is one of the greatest contemporary challenges facing humanity. Considering this, universities have an opportunity to address contemporary societal issues that presumably their graduates will be grappling with after graduation. While there are many ways of engaging students with extant issues, study abroad and other internationally focused pedagogies can serve as a powerful approach. However, it has been argued, with specific reference to global health, that there is a ‘...need for a radical reform to curricula to foster engaged global citizenship; yet little is written depicting how individual courses and their instructors may support such reform’ (Hanson, 2010). This chapter will argue that HE and the process of study abroad can play a key role in the fight against non-communicable diseases (NCDs), a major global health issue. Specifically, a critical understanding of global health can aid in fostering global citizenship, which in turn may empower students to become civically engaged and potentially drive social change.

BACKGROUND TO NON-COMMUNICABLE DISEASES

From Personal to Global

Health systems are struggling under the escalating burden of NCDs. This is currently recognised as a global issue; worldwide there were 57 million deaths in 2008, 63% of which can be attributed to NCDs, with over 80% of these deaths occurring in low- and middle-income countries (Hunter & Reddy, 2013; WHO, 2015). Clearly, lives can be saved and the global economy would be much stronger if people did more to avoid poor lifestyle choices such as physical inactivity and unhealthy eating habits (WHO, 2013). Yet despite growing public awareness about NCDs and the consequences of such lifestyle choices, NCDs continue to rise. Based on this observation, perhaps ‘personal’-responsibility is not the answer, and conceivably the answer is ‘global’-responsibility, manifested as an awareness of and commitment to global citizenship.

Obesity, a prominent NCD (Stoner & Cornwall, 2014), makes an excellent *exemplar* for the ‘globalization’ of health. Globally, the prevalence of obesity (defined as a BMI ≥ 30) doubled between 1980-2008, from 6.4% to 12.0% (Stevens et al., 2012). Notably, as with the general trend for NCDs, obesity is now increasing at a faster rate in low-and middle-income countries than high-income countries (Kelly, Yang, Chen, Reynolds, & He, 2008; Popkin, Adair, & Ng, 2012), thereby particularly afflicting nations with limited public health resources and ensuring this phenomenon is a true global health concern. Since changes to our genetic makeup cannot fully explain this relatively recent obesity pandemic, lifestyle factors have been cited, including declining physical activity levels and less healthy food choices. These lifestyle choices are *modifiable*, implying that we have the power to change this crisis through personal responsibility. Yet despite growing public awareness, the trend has not been encumbered (i.e., perhaps ‘individual’ responsibility is not the answer). In fact, the global prevalence of obesity is accelerating and obesity is occurring at an increasingly younger age (Olshansky et al., 2005), leading to personal, community, national and global consequences.

Personal

Obesity is associated with a clustering of cardio-metabolic complications, including hypertension, hypercholesterolemia, Type-2 diabetes, and subsequent cardiovascular diseases (Dietz, 2004). This clustering of complications not only contributes to a decreased lifespan, but also to a decreased quality of life (Brettschneider et al., 2013). Notably, the higher populations in low- and middle-income countries, mean that NCDs, including obesity, will be responsible for three times as many disability adjusted life years as communicable diseases (maternal, perinatal and nutritional conditions) combined by 2030 (WHO, 2008).

Community

NCDs, including obesity, can exact enormous social costs (Hammond & Levine, 2010). Obesity and associated co-morbid complications may impair an individual both physiologically and psychologically, limiting the capacity of said individual to contribute to family and community. Moreover, if the complications of obesity become severe, the individual may require homecare, which may place a financial burden on the family and a psychological burden on the caregiver and family (Hammond & Levine, 2010).

National

The obesity epidemic is placing an increasing economic burden on greater society, including productivity costs, transportation costs, and human capital costs (Hammond & Levine, 2010). Limiting these costs to (lost) productivity, in the United States (US) alone it is has been estimated that total productivity costs are as high as USD \$66 billion annually (Hammond & Levine, 2010). Considering obesity is occurring at an increasingly younger age (Stevens et al., 2012), this figure is likely to grow.

Global

The financial consequences world wide of the escalating burden of NCDs are considerable, with the World Economic Forum predicting that by 2030 NCDs will result in a cumulative loss in global economic output of USD \$47 trillion or 5% of GDP (Alliance, 2014). However, arguably the most significant costs of this burden are more far-reaching; poor lifestyle choices, including those choices that contribute to obesity, have been linked to climate change and subsequent loss of biodiversity (Diaz, Fargione, Chapin, & Tilman, 2006). For example, the use of personal vehicles to commute to school or work, instead of walking or cycling, results in environmental pollution. Poor food choices, including high meat consumption results in inefficient land, soil and water resources use (Tukker et al., 2011). Environmental pollution and inefficient use of natural resources are contributing to the loss of biodiversity, implicating the production of food, fibre, potable water, shelter, and medicines (Diaz et al., 2006). These biodiversity-related consequences impact especially negatively on individuals and indigenous groups from low Gross Domestic Product (GDP) countries, who are more directly dependent on ecosystem services (Diaz et al., 2006).

Perspective

Above we have indicated some consequences of obesity from personal, community, national and global perspectives. These examples are by no means exhaustive, and similar lists can be constructed for other NCDs. However, these examples are sufficient to highlight that personal health is not solely an individual, self-serving act; rather, the consequences of our lifestyle behaviours can be wide-ranging and widely impacting. The remainder of this chapter will argue that HE can play a role in tackling the NCD pandemic by fostering ‘global’ responsibility, manifested as global citizenship. More specifically, we will argue that short-term international education programs, when appropriately designed, provide a delivery mechanism that can elicit a shift in perspective and engage students with beliefs and values different to those that individuals may have previously held. Using such a delivery mechanism, HE can enable global citizens who are civically engaged and capable of driving social change. The remainder of this chapter will detail specific steps required to foster global citizenship, provide a case study of an international global health program, and outline a working model for measuring global citizenship higher learning processes.

WHAT IS GLOBAL CITIZENSHIP?

Global citizenship, like other complex psychosocial concepts, being framed by a single definition does not typically capture the complexity of the phenomenon. Nonetheless, there have been three key dimensions identified by Schattle (2009), which serve as commonly accepted denominators of global citizenship:

1. **Global Awareness:** Understanding and appreciation of one’s self in the world and of world issues;
2. **Social Responsibility:** Concern for others, for society at large, and for the environment; and
3. **Civic Engagement:** Active engagement with local, regional, national and global community issues.

In one of the most thorough reviews of the global citizenship concept in the study abroad literature, Schattle (2009) proposed that it ‘entails being aware of responsibilities beyond one’s immediate communities and making decisions to change habits and behaviour patterns accordingly’ (p. 12). This clear delineation across seeking awareness or information, heeding and understanding responsibilities, and changing habits and behaviours on a scale, a scale which includes but goes beyond the border of one’s own community, is essential to the practice of global citizenship.

When it comes to understanding global citizenship in connection with the previously identified dimensions, the context in which global citizenship is framed is imperative to our understanding. There is consensus that both the natural and built environments are the context in which global citizenship can be best understood (Attfield, 2002; Bryant, 2006; Dobson, 2003; Winn, 2006), because concern for the environment benefits the individual and all others, invoking a sense of obligation beyond that of simply the individual. According to Dobson (2003), the environment constitutes a *community of obligation* in which social responsibilities and behaviours extend in the form of an ecological footprint. In distinguishing between a Good Samaritan (i.e., based on charity) and a Good (*Earth*) Citizen (i.e., based on obligations), Dobson (2003) argued that ‘the idea of the ecological footprint converts relationships we had thought to be Samaritan into relationships of citizenship’ (p. 105). Citizens, then, are not merely global by reason of their experience (e.g., exposure to new culture, international travel etc.), but as a

result of their pro-environmental (positive or negative) behaviours that make an impact (again, positive or negative) across populations. Central to this perspective is that experience can shape behaviour, but typically through a reflective process.

With the ever increasing role of HE institutions (HEIs) in the development of global citizens, global citizenship should be considered more of a frame of mind or worldview and approach, than it is a simplified learning outcome. It is inherently complex in comprehension and practice. With this, global citizenship should not be framed as simply an outcome of HEIs, but rather, it should be perceived and addressed as a process in and of itself.

WHY IS GLOBAL CITIZENSHIP IMPORTANT TO GLOBAL HEALTH?

There have been increasing calls (e.g., Lewin, 2009; Stearns, 2009) from both the political and academic arenas, to ensure the capacity of HE students to think and act globally in order to effectively address political, social, economic, and environmental problems on a global scale (for a more extensive review see Stoner, Perry, Wadsworth, Stoner, & Tarrant, 2014). A seminal publication from the National Leadership Council for Liberal Education and America's Promise (LEAP) - *College Learning for the New Global Century* (AACU, 2007), identified the tenets of global citizenship as an essential learning outcome of university students for the following reasons:

- To provide students with the skills to manage real-world demands of work and civic responsibility;
- To do so with an understanding of the broader context of life in a complex and globally connected society; and
- To be competitive for employment opportunities by being able to operate within an ever increasing and expanding global economy.

With regard to global health literacy, Hanson (2010) suggested a need for ‘radical reform to curricula to foster engaged global citizenship’ (p. 70). Hearing a call is the first step to pursuing a call like this one from Hanson (2010). This reform to the curriculum focuses on the process of practices for delivering the content and providing the experience necessary for learning to occur. Moreover, increased attention with the issue of global health education illuminates a demand for pedagogies that promote culturally sensitive practices, personal transformation (reflection), extended understanding of social change (Hanson, 2010), a renewed emphasis on social determinants of health (Baum, 2007; Hanson, 2010) and social accountability (Boele & Heck; Hanson, 2010). To these ends, Hanson (2010) unequivocally stated that there is a ‘need for educators to integrate global health and global citizenship in ways that foment action on the social determinants of health inequities’ (p. 75). This clearly extends and intensifies the clarion call associated with the connection between global citizenship and global health as an important joint venture to be considered.

Additionally, the intensification of and access to technology has established links between institutions, communities, cultures and individuals, and today’s university graduates live, work, and learn in a world that is more accessible than ever before (O’Steen & Perry, 2012). While the availability of modern travel and technology is not accessible to all of Earth’s seven billion ‘citizens’, those who have access and acceptance into HEIs also have greater opportunities for globalized experiences and, concomitantly, global literacy than previous generations. The opportunity for a student to contextualize their existence within a global context has the potential to promote deeper understanding of cultural differences and

provide a personally relevant counterpoint for juxtaposing their own beliefs with those of others (Perry et al., 2013) (see section: Digital Media: Integrating Technology and Reflection). In HE today, internationalization and globalization are fundamental components of the learning process.

HOW DO WE MEASURE GLOBAL CITIZENSHIP?

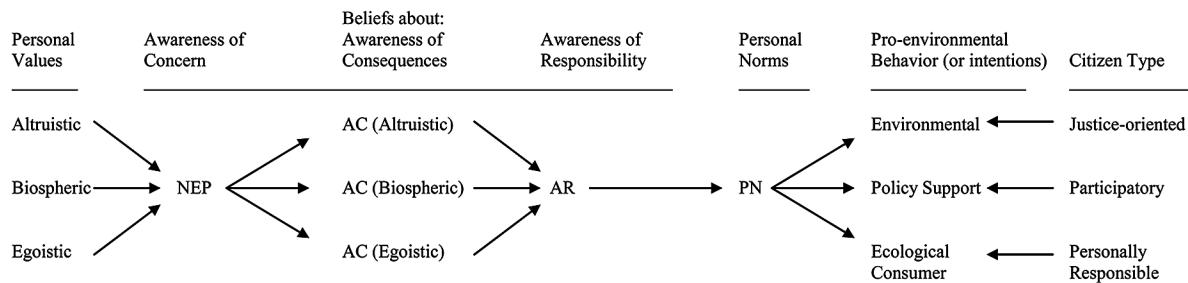
When it comes to measuring global citizenship in the form of learning outcomes, particularly operationalized within a study abroad framework, there are an array of proposed models (McKeown, 2009; McLeod & Wainwright, 2009; Sobania & Braskamp, 2009; Streitwiser & Light, 2010; Sutton & Rubin, 2004; Tarrant, 2010). When considering the reasons or justifications for how global citizenship, operationalized within a study abroad framework, may be correlated with predetermined learning outcomes, the modified Value-Belief-Norm (VBN) model is valuable (Stern, 2000).

As noted previously (see section: *What is Global Citizenship?*), there is a consensus that the natural and also the built environment is the context in which global citizenship can be best understood. Drawing on this context, Tarrant (2010) developed a VBN model to assess global citizenship and the ‘added value’ attributable to study abroad. Reasonably, issues such as health inequities among populations based on social-economic status, ethnicity, and gender, and the role of social determinants in these discrepancies are indeed global in design (and effect) and concomitantly transcend national and international boundaries. Adapting Stern’s (2000) VBN model, Tarrant identifies two components based on: (1) an awareness/belief that specific environmental conditions (e.g., poverty, health, climate change etc.) threaten or have adverse consequences for the things the learner values; and (2) an awareness/belief that the individual/learner can act to reduce the specific threat(s) (Stern, 2000; Tarrant, 2010). These components and the extent to which an individual learner aligns with these two beliefs are critical to the conceptual framework. Moreover, these components clearly demonstrate the imperative of awareness. In connection with this supposition, the first step to addressing global health—whether focused on disparities, causes, preventions, or treatments—is to start by raising awareness (Stoner et al., 2015). Currently, the world population’s access to information, treatments, opportunities, and resources are not equally available, an issue that relates back to global citizenship. This is a clear point of alignment with the explicit goals associated with the education of global citizenship and the discrepancies associated with public health on a global scale.

Figure 1 provides a schematic of the VBN model that has been used to examine the effect of study abroad on the development of global citizenship. The two components Tarrant (2010) identified (the connection between environmental conditions and the threats on a learner’s values and the belief that the learner can reduce the threats), which underpin Figure 1, have a common denominator. That denominator is a learner’s values and what the learner is willing to do about those values. Put simply, awareness is a critical predisposition or catalyst for informed action, but the learner’s understanding of their personal values is the filter whereby awareness can either permeate or stymie.

Based on the framing within pro-environmental behaviours (modified from Stern, Dietz, Abel, Guagnan, & Kalof, 1999) the following three measures are relevant to the VBN model and are demonstrated in Figure 1: (1) environmental citizenship; (2) willingness to support environmental policies; and (3) ecologically conscious consumer behaviour. This measure is then extended to align with the learner’s ‘citizen-type’ according to Westheimer and Kahne (2004). These particular citizen-types formulate a primacy from less intensive to more intensive actions and commitments associated with the learner’s

Figure 1. A modified value-belief-norm theory of global citizenship
Source: Tarrant (2010)



awareness of responsibility and personal norms. In this, the citizen-types classifications are described as: 1–*personally responsible citizen* (someone who acts responsibly in their community, recycles, gives blood, volunteers in times of crisis); 2–*participatory citizen* (someone who is an active member of a citizen sector, community, or civic organization); and 3–*justice-oriented citizen* (someone who critically assesses social, political, and economic structures to see beyond surface level justifications and challenges injustices within their community).

HOW DO WE FOSTER GLOBAL CITIZENSHIP (AND GLOBAL HEALTH)?

Nurturing a globally-minded citizen has typically been associated with a transformative learning experience and subsequently, Mezirow's (1991) Transformative Learning Theory (H. L. Bell, Gibson, Tarrant, Perry, & Stoner, 2014). This includes those pedagogies that engage the student with alternative lenses, orientations, or points of view related to a complex issue (such as global health), and ultimately leading to a change in perspective (Mezirow, 1991). Arguably, a key to transformation is educative experiences coupled with critical reflection (Dewey, 1938; Kolb, 1984). An experience without critical reflection is solely an experience, which does not necessarily provide an individual with the opportunity to shape perspective; it actually has the possibility of being *mis-educative* (Dewey, 1938; Wojcikiewicz, 2010).

In addition to critical reflection, Hanson (2010) argued for the following curricular modifications; interdisciplinarity and engaged learning practices. The factors of reflection, interdisciplinarity, and engaged learning will be reviewed here as key components for addressing the ‘how to’ of fostering global citizenship and global health as allied concepts.

Reflection

An integral component of any effective experientially-based learning process is critical reflection (Kolb, 1984). Critical reflection, as a process, seeks to engage an individual in ‘scratching below the surface’ to be deep and accurate when determining the value of a decision, experience, or theory (Alwehaibi, 2012). An educative experience should serve as a departure point for learning, not an end-result and subsequently should present an opportunity for response or an investigation of an experientially-based question or line of inquiry (‘why’). An investigation of ‘why’ begins with thought-provoking, informed questions and focuses on inspiring learners to pursue their own learning and meaning-making. Whether

an experience and subsequent reflection leads to a transformed self/perspective or an affirmed self/perspective is not relevant; what is relevant is that the process of reflection is imperative for learning (Dewey 1938).

This demonstrates the iterative nature of knowledge, which is typically bound by time and context, and shapes educator's goal of engaging students in obtaining an ever-growing understanding of their world. By engaging students in critical reflection and discussion, it becomes possible to foster a shift in perspective where students become 'critically aware of how and why their assumptions have come to constrain the way they perceive, understand, and feel about their world' (Mezirow, 1991, p. 167). From this process, it is plausible that a learner's reinvestment in informed application can lead to greater sensitivity, stronger acumen, and a more informed approach to the issues that are affecting the wellbeing of our communities both local and global.

The method or practice applied by learners to navigate the reflective process is important and should, as a consequence, shape the way teachers facilitate learning environments. This is supported by Peterson's (2002) argument that while experience is one of the best teachers, it is never as valuable as when it is combined with critical analysis, reflection, and the interpretation and filtration of learners. An established and widely accepted approach to critical reflection within experientially-based pedagogies is the *DEAL* model (Ash & Clayton, 2004). This model offers three-steps following a student's engagement with an experience:

1. Description of experiences objectively;
2. Examination of experiences through reflection prompts related to learning goals; and
3. Articulation of Learning goals for future action for improved practice and further refinement of learning.

The Description, Examination, and Articulation of Learning (*DEAL*) occur in sequence after an experience has been completed. *DEAL* can be used throughout a semester and assigned iteratively. For example, if a group of short-term study abroad students are studying local indigenous health disparities, the model could be repeated after each interaction/experience associated with their time abroad. *DEAL*, being used to its fullest potential, is applicable to experientially-based pedagogies.

Interdisciplinary Approach

Jacobs (2015) compared HE discipline centric approaches to focusing 'on a set of trees within a great forest' and extends this metaphor further by suggesting that interdisciplinary approaches tend to take a more inclusive view of the landscape by surveying the forest, generally, and 'drawing upon various tree experts depending on the needs, contexts, and circumstances' (p. 2). Through an examination of the literature associated with many HE disciplines, Jacob (2015) highlighted a trend 'away from disciplinary hypothesis-based research to problem-based, interdisciplinary studies' (p. 52). Specifically, an interdisciplinary approach seeks to involve two or more subject areas or ways of knowing, which is particularly relevant when studying complex global health models - or even a seemingly simple tenet of health!

While there are many accepted definitions associated with interdisciplinary approaches, Newell (2007) offered a definition that frames the approach as a two-part process associated with integration, 'it draws critically on disciplinary perspectives, and it integrates their insights into a more comprehensive under-

standing...[which] can also be adapted to the creation of a new complex phenomenon' (p. 248). From this, it may be postulated that a concerted effort may be formulated to address the broader, perhaps more complex issues being faced in our world and communities. Global public health, in alignment with the framework of global citizenship, is undoubtedly a complex phenomenon influencing our communities on both a local and global scale (Stoner et al., 2014).

It appears that, as social issues become increasingly complex (or are realized as being more complex) the connections between/among disciplines become more difficult to determine. For example, issues of public health and environmentalism can become issues of social justice and inequality that, in order to fully comprehend, must be addressed through a range of paradigms of inquiry and discourses rooted in political science, sociology, human geography or criminal justice. Addressing these complexities does not need to occur in isolation, but through integration across respective disciplines. This integration is what interdisciplinary approaches seek to achieve.

Engaged Learning

Student engagement as a theory, model, practice, and instrument of measurement and/or analysis has become one of the most recognized concepts in HE globally. Student engagement focuses on relationships between students' involvement and empirically-based university conditions that positively impact and influence students' commitment to participate (Kuh, 2008). Moreover, this conceptualization and measurement of engagement is based on two critical features of collegiate quality:

The first is the amount of time and effort students put into their studies and other educationally purposeful activities. The second is how the institution deploys its resources and organizes the curriculum, other learning opportunities, and support services to induce students to participate in activities that lead to the experiences and desired outcomes such as persistence, satisfaction, learning, and graduations. (Kuh et al., 2005, p. 44)

To capture a student's involvement in conditions that lead to higher engagement, personal growth, retention, and learning, a survey has been developed i.e., the National Survey of Student Engagement (NSSE) (Kuh, 2003). Since 2000, this survey has been completed by nearly 2,000 institutes of HE education, accumulated an aggregate sample size of nearly five million students, and been modified to fit the tertiary education contexts, cultures, and countries of Australia, New Zealand, South Africa, Canada, and Japan (AUSSE, 2015; NSSE, 2015; Strydom & Mentz, 2010). This survey has had a substantial impact on both the student affairs (co-curricular) and academic affairs (curricular) educational approach.

The teaching practices we adopt in order to bring about engagement within our classrooms and across our university are influential. According to 15 years of student engagement research using the NSSE survey to inform pedagogical practices, the following ten practices have been identified as 'high-impact':

- First-Year Seminars & Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing Intensive Courses
- Collaborative Assignments & Projects
- Undergraduate Research

- Diversity/Global Learning
- Service-Learning/Community-Based Learning
- Internships
- Capstone Courses & Projects (Kuh, 2008).

Most salient to this chapter and the ‘how’ of pedagogically creating conditions that can positively impact engagement, are Diversity/Global Learning and Service-Learning/Community-Based Learning. Diversity/Global Learning will be described in the section *Case Study: Short-Term Global Health Course*. Service-Learning/Community-Based Learning will be described as service oriented initiatives focused on analysing, addressing, and reflecting on issues with the community as an educative experience that prepares students for citizenship, work, and life (Kuh, 20013). These high impact practices have been applied in classrooms around the world and are currently some of the most adoptable and applicable methods for engagement and good teaching and learning practices.

GLOBAL CITIZENSHIP AND SHORT-TERM STUDY ABROAD

In order to nurture global citizenship, there is a requirement for a delivery mechanism that can compel a shift in perspective and engage students with a set of beliefs and values that may differ from their own current views. This shift can occur as a result of a transformative educative experience, where students not only reframe their own identity but also begin to negotiate a sense of belonging that ‘reimagines’ the global community, encounters and engages diversity, and constructs citizenship as a site of struggle (Pashby, 2008).

While short-term study abroad programs have been criticized for being academically ‘light’ (McKown, 2009), those programs can, nevertheless, present a unique opportunity for providing action-oriented experiences that encourage reflection, critical analysis, and synthesis (Perry, Stoner, & Tarrant, 2012). A growing literature demonstrates that short-term study abroad programs are capable of fostering global citizenship when aligned with traditional (see section below for further discussion, *Digital Media: Integrating Technology and Reflection*) methods of critical reflection (Tarrant & Lyons, 2012; Tarrant et al., 2014; Tarrant, Rubin, & Stoner, 2014; Tarrant et al., 2011; Wynveen, Kyle, & Tarrant, 2012). We assert that experientially based, short-term educational travel programs provide a relevant learning site for students to experience, grapple with, reframe, and reflect on issues global in nature—ultimately fostering the conditions necessary for transformative experiences that have been shown to lead to a shift in perspective, awareness, and worldview. Such programs may provide an experience of cultural immersion and exposure to values and beliefs that differ to students’ own beliefs, and can highlight common challenges faced by all societies. This can be achieved by exposing students to new cultures, places, and learning environments (Perry et al., 2012), and can serve as the disorientating dilemma necessary to initiate perspective transformation (Mezirow, 1978).

It is important to note that, while the *experience* is indeed a key component to the transformative learning, the catalyst for this transformation is the juncture between experiences and a sound pedagogy underpinned by critical reflection (Clark, 1991). As discussed above, critical reflection is the mechanism by which students begin to make meaning out of their experiences and adjust their frames of reference (Moore, 2005). Simply stated, the attributes of an engaged global citizen do not just happen, they accumulate through an educative experience, conscious engagement, critical reflection, and informed application.

CASE STUDY: SHORT-TERM GLOBAL HEALTH COURSE

Discover Abroad and Massey on the Move

The Discover Abroad office (www.discoverabroad.uga.edu) at the University of Georgia (UGA) in the US has provided international outbound study tours for over 3,000 US students throughout the South Pacific since 2000, and is among the leading efforts for short-term programmes in the US. In 2012, Discover Abroad was recognised by the Institute of International Education as runner-up for the prestigious Heiskell Award (the highest accolade in the field of HE) for Best Practices in Study Abroad. The courses offered by Discover Abroad are research-led, utilizing the *Conceptual Framework for Exploring the Role of Studies Abroad in Nurturing Global Citizenship* (Tarrant, 2010). A framework which couples sound pedagogical content with concrete experiences (*engaged learning*) and critical reflection. Using this framework, Discover Abroad has developed a number of *interdisciplinary* short-term courses (8-24 days) that have proven effective in fostering global citizenship (H. L. Bell et al., 2014; Tarrant & Lyons, 2012; Tarrant et al., 2014; Tarrant et al., 2014; Tarrant et al., 2011; Wynveen et al., 2012). This research paradigm is now being extended to investigate the value of these courses in fostering other HE outcomes i.e., in documenting the ‘value added’ of studying beyond the campus environment (Tarrant et al., 2014).

Massey on the Move (www.masseyonthemove.org) was developed at Massey University in New Zealand (NZ), to establish a partnership with Discover Abroad and to co-develop an international Global Health course (see below) designed to foster global citizenship. The Global Health course is open to students in both NZ and the US and serves as an experiment in ‘peer-peer’ learning.

Global Health: The Importance of Sustainable Environments

Despite growing public awareness, health systems are struggling under the escalating burden of non-communicable diseases. While personal responsibility is a crucial step in maintaining health, alone it is insufficient (Stoner et al., 2014). All decision-making is highly socially, culturally, and structurally contextualized (R. Bell, Lutz, Webb, & Small, 2013). Through examining the way these decision-making dimensions interact in other places, students can begin to understand the impact of their own decisions, and the extent to which those, too, are circumscribed socially, culturally, and structurally. From this perspective, we argue that one must place themselves within the broader/global context to begin to truly understand the health implications of personal choices (Stoner et al., 2014). For example, personal health is not solely an individual, self-serving act. Rather, the consequences of one’s lifestyle behaviours have deep and wide consequences extending to the community, national, and global contexts. Being a true global citizen means one is: (a) cognizant of these interconnections and the role personal decisions play in each context; and (b) civically engaged and capable of driving social change. Therefore, the overarching aim of this course is to promote global health by fostering global citizenship, where global citizenship is defined using three criteria: (1) aware of global issues; (2) socially responsible; and (3) civically engaged.

This 24 day interdisciplinary course represents a unique collaboration between Discover Abroad and Massey on the Move. At UGA the 6-credit *interdisciplinary* upper division course is cross listed in Anthropology, Ecology, Forestry and Natural Resources, Geography, and International Affairs. At Massey University the course is worth 30-credits (equivalent of 6 semester credits in the US) in the

Health Sciences, and students can split the credits to cover Science and Social Science requisites. The course examines the relationship between global health and sustainable natural and human environments, integrating diverse natural, biological, and social science perspectives. The stated learning outcomes are:

1. To evaluate relationships between human societies and their environments from multiple disciplinary perspectives, and to demonstrate how human-environment interactions influence lifestyle choices and health;
2. To describe the importance of biodiverse natural environments to global health, and address impacts of human actions on natural systems, and human responses to those changes;
3. To explain how health disparities that adversely affect indigenous cultures result from colonial, historical, environmental, global, and economic factors;
4. To distinguish and evaluate the challenges of maintaining health that may be particular to indigenous cultures;
5. To recognize ‘health’, ‘disease’, ‘prevention’, ‘risk reduction’ and ‘medical treatment’ as social constructs contingent on culture, environment, and global influences; and
6. To identify and describe sustainable approaches that help shape a community’s ability to maintain and promote health.

Itinerary

Australia’s Sydney and far Northeast Queensland offer ideal laboratories for comparing and contrasting cultures (notably Aboriginal Torres Strait Islanders, and Western) and environments (cities, Great Barrier Reef, rainforest, and outback) to understand the complex relationships between environmental sustainability and public health. One of the greatest benefits of these locations is that Australian approaches to both natural resource management and health care are different from what most of the students are accustomed to. Further, recent changes in the region allow for greater Aboriginal control over the planning and deployment of health care measures, providing students a unique insight into Indigenous health and community-led decision-making processes. This is vital as students need to learn how to differentiate between ‘constructive and destructive traditions’ in order to make and support decisions that enhance life in general (Bowers, 2003). Since Aboriginal (indigenous) traditions view the natural environment as a key part of any social, cultural, or structural dimensions of decision-making, this is an excellent way to introduce students to different ways of defining health, and measuring health outcomes, which may collectively enable them to question their own definitions of health and wellbeing.

The course is delivered in a modular format according to four subthemes, which are location dependent. The course begins in Sydney, where module one examines the interactions between ‘Urbanization and Public Health’. The effects of urbanization on public health are of particular concern to Australia, with approximately 75% of the population living in urban areas and 65% living in the eight capital cities. Of note is the fact that the majority of Aboriginal people live in these urban areas and suffer disproportionately from the effects of ‘lifestyle’ diseases. Key questions addressed include:

1. *What factors contribute to or impede healthier lifestyles in urban environments?* and
2. *Why may Aboriginal people be disproportionately affected?*

In Module 2 students travel to far Northeast Queensland and the Great Barrier Reef, where students spend several days examining ‘the importance of natural resources to health and wellbeing’. Coral reefs are among the world’s most biologically diverse and productive ecosystems and supply a vast array of goods and services. Those reefs are of particular importance to many indigenous coastal communities, who not only depend on these ecosystems for most of their protein needs, but also as a primary economic driver. The Great Barrier Reef World Heritage Area, extending 2,300 kilometers along Australia’s Northeast coastline, is the largest natural feature on Earth created entirely by living organisms, and provides an excellent context to examine direct and indirect importance of natural resources to human wellbeing. It is here that the emphasis is on the different ways that ‘environment’ is incorporated into indigenous and Western worldviews and the ways in which those worldviews motivate behaviour with regards to managing ecosystems.

For Module 3, students travel to the Daintree Rainforest, where they spend a number of days investigating the relationships between ‘climate change, biodiversity and indigenous health’. The cultural dimension of health decision-making is woven throughout the program with visits to health care facilities and decision-making bodies specifically related to Aboriginal health in Northeastern Queensland. The goal is to introduce students to different ways of defining health, some of which include maintaining a close relationship to the local natural environment, but also to show them that they too, ‘have culture’ meaning they too, make decisions based on their own cultural understanding of the world, of what is right and normal. Just as Aboriginal health and wellbeing may come through maintenance of their cultural practices, so may Western health and wellbeing be determined by factors beyond biology. At the same time, structural impediments, such as a lack of basic infrastructure, lower socio-economic status, and chronic health problems contribute to the lower adaptive capacity of many communities.

For the final module, students are taken to Tyrconnell (*Outback*) and Atherton Tablelands (*Outbush*), where they critically examine strategies for ‘improving indigenous health’. Here they explore Western approaches to health from cultural, economic, and environmental perspectives and make comparison to Aboriginal perspectives to sustaining healthy communities and environments. These remote locations are beneficial, too, in that they provide space and time necessary to process information (critical reflection). During that time it is envisaged that students are able to ‘unpack’ what they are learning, both through group discussions and personal reflection time.

Academic Model

As mentioned above, the course is delivered in a modular format according to four sub-themes, which are location dependent i.e., experimental (see itinerary above). Each sub-theme addresses relatively complex ecological, social, and cultural issues related to sustainability and global health, and is comprised of a short narrative/introduction, a series of readings, field activities, service-learning, seminars, and a collection of classroom lectures from travelling faculty and local experts (i.e., from local universities, government agencies, NGOs, organizations etc.). Modules consist of a series of essays, group debates, science projects, and critical reflection. There is also an iterative thematic essay, focused on ‘understanding the meaning of progress’ (sustainability, values, and the triple-bottom line), and a final two hour, open-book exam which addresses inter-connections between key concepts explored throughout the course. Finally, one week after the end of the course, students deliver a three-minute critical reflection video (see below *Digital Media: Integrating Technology and Reflection*) that addresses the same topic as the thematic essay.

The module approach outlined above provides students with a myriad of learning opportunities that are pieced together over the course, requiring active engagement, both physical and intellectual. While this approach may seem disparate, the course content and the style of teaching is iterative. More specifically, building upon the theoretical framework offered by Dewey (1938) and Kolb (1984), the course employs a simple pedagogical primacy, known as the three Ds: *Directing, Discussing, Delegating*, with each ‘D’ representing a unique style of facilitating learning (Thornton, 2013). Initially, the educator adopts the Directive Style, telling the students what to do, how to do it, and when it needs to be done. For example, through this style the educator will raise awareness about the global rise in NCDs, including obesity, providing a knowledge base to build upon (Global Citizenship Criteria 1: Aware of Global Issues).

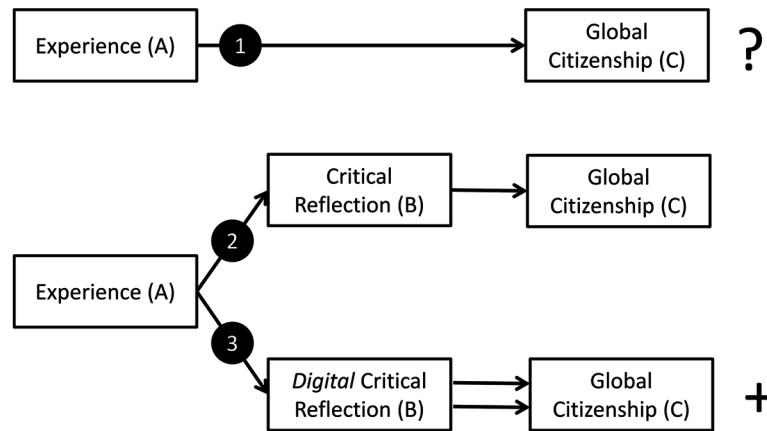
Subsequently, using the Discussant Style the educator, in a Socratic manner, frames the concept with challenging questions to guide discussion and illuminate the students’ biases, worldview, perspective, and attempts to challenge these preconceived notions and how they came to be. For example, through this style the educator will raise awareness about the consequences of lifestyle-driven obesity, and ask the students to begin to question how their health actions and lifestyle choices impact the global community (Global Citizenship Criteria 2: Social Responsibility). Finally, as a facilitator adopts the Delegation Style the challenging questions begin to come from the students themselves. As the task experience increases and the students become more empowered and *civically engaged* (Global Citizenship Criteria 3), this is where critical reflection (see below: *Digital Media: Integrating Technology and Reflection*) becomes imperative for student learning. At this point the facilitator assumes the role of learning facilitator and the students become the arbiters of their own learning and, just as importantly, become lifelong learners. While the content is always changing and adapting, the process whereby students make sense of the content is enduring.

Given the complexity of the latent construct of global citizenship, there is unlikely to be a ‘one-size-fits-all’ pedagogical approach. However, in order for a HEI to identify the most appropriate model, there must first be a philosophical platform to place the building blocks. Utilizing the pedagogical model described above, the context of environmental sustainability (including climate change) has been successfully applied to foster global citizenship (H. L. Bell et al., 2014; Tarrant & Lyons, 2012; Tarrant et al., 2014; Tarrant et al., 2014; Tarrant et al., 2011; Wynveen et al., 2012). This previous work has used *international* (study abroad) transformative learning experiences; it may be argued that engaged learning coupled with critical reflection on global issues is most powerful when there is ‘direct’ contact with said issues. In support, there is mounting evidence suggesting that international experiences provide powerful *dis*-orientating experiences, leading to deep reflection, critical analysis, and synthesis (McKeown, 2009; Sutton & Rubin, 2004; Tarrant et al., 2014; Tarrant et al., 2011).

Critical Reflection: Digital Storytelling’s Unique Value

For their final assignment students’ deliver a three-minute digital story focusing on the notion of progress, as a novel means of critical reflection. Traditional forms of critical reflection can and do work in the context of short-term study abroad (H. L. Bell et al., 2014; Tarrant & Lyons, 2012; Tarrant et al., 2014; Tarrant et al., 2014; Tarrant et al., 2011; Wynveen et al., 2012). Nonetheless, we argue that reflective experiences can be further enhanced by using technologies and services many students are intimately familiar with and use on a daily basis (Figure 2). In this regard, digital storytelling can provide students with a louder, clearer voice, utilizing a presentational form (Taylor & Ladkin, 2009) to reflectively articulate themselves and develop the foundation of a civically engaged citizen.

Figure 2. Pathway from experience to global citizenship



Pathway 1 presents the ‘just do it’ approach, where it is expected that experiential education (A) is sufficient to foster global citizenship (C). Pathway 2 couples experiential education (A) with a traditional critical reflection (e.g., paper-based) (B) approach, an approach demonstrated to lead to global citizenship (C) within the context of international education (H. L. Bell et al., 2014; Tarrant & Lyons, 2012; Tarrant et al., 2014; Tarrant et al., 2014; Tarrant et al., 2011; Wynveen et al., 2012). Pathway 3 replaces traditional critical reflection with digital critical reflection (C), an opportunity to meet learners on the platforms and forums where they live, communicate, and already engage, and subsequently enhance reflective process.

Reflective digital stories, when compared to traditional reflective journals, have been demonstrated to be more indicative of the impact experiences had on students' learning and competency (Walters, Green, Liangyan, & Walters, 2011). Walters et al. (2011) stated that '[w]hile journals recorded a catalogue of events, the digital stories, even at the lowest-level of reflection, were more indicative of the impact of the experience... than journals' (p. 49). While it has been clearly presented that critical reflection methods are imperative for students to make sense of experiences, the use of digital stories could be a medium that provides students with familiar space for the presentational form to be developed in an authentic, true-to-self, presentation-based format. Moreover, this forum has greater potential to take the learning experience beyond the classroom, helping students to connect with the global-community, and to potentially become truly engaged global citizens empowered with voices to evoke change (for further review see Perry et al., 2015).

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

While the Value-Belief-Norm model for assessing global citizenship (Tarrant, 2010) provides a basis for understanding a transformational shift in ‘citizen-type’, it does not provide an avenue to explore the ways in which students may (or may not) reach the desired outcome of becoming a justice-oriented (global) citizen. If the goal of short-term study abroad is to foster global citizenship, and if global citizenship is the result of a shift in perspective and worldview, then we need to uncover the critical moments at which students form deeper meanings about who they are in relationship to the ‘bigger picture’ of the globe.

Moving forward, a new conceptual model that includes the theoretical construction of critical reflection and subsequent transformative learning will be key in providing a deeper understanding of the juncture at which students' realities are reframed and new meanings are made. Furthermore, longitudinal research is required to understand the long-lasting effects of experiential study abroad programs; research in this arena may uncover information that will aid in the development of study abroad programs, ensuring that not only are the desired learning outcomes achieved, but that appropriate experiences truly provide opportunities for lifelong perspective shifts.

Lastly, while support should be given to international experiences, specifically those focused on global health issues, the research is limited with regards to the 'value added' of study abroad (i.e., direct comparisons to campus-based initiatives) (Tarrant et al., 2014). For example, it is more than likely that a student will not need to travel beyond the local community to experience the NCD pandemic. In particular, service-learning is a powerful medium which could be exploited to enable and critically reflect on engaging learning experiences (Kuh, 2008; O'Steen & Perry, 2012). Campus-based educational models could be particularly powerful if coupled with international education; by utilizing *local* contexts to engage students with *global* issues, there is potential for sustained student engagement following disorientating international experiences. Further research is warranted to investigate the interplay between/among on-campus, off-campus and study abroad experiences.

CONCLUSION

There have been increasing calls, from both the political and academic arenas, to ensure the capacity of HE students to think and act globally in order to effectively address political, social, economic, and environmental problems. This call can and should be extended to include global health, which together with climate change are, arguably, the *two* biggest concerns facing humanity. However, responding to these realities requires a considerable increase in the global literacy of the typical college graduate. A global citizenship competency, within the context of global health, should become an integral component of a university's core curriculum, alongside fundamental disciplines such as history or science. Simply put, there are practical pedagogical decisions that can be made to refocus the core curricula on learning outcomes directly related to the issues being encountered by today's communities.

One such pedagogical model includes short-term, faculty-led, experiential programs. Such programs are capable of not only playing an important role in not only fostering some of the outcomes considered critical to national security, globalization, global competitiveness, and social norms, but also to tackle the 'wicked' global health concerns. For example, such programs can help students to understand that personal health is not solely an individual, self-serving act; rather, the consequences of our lifestyle behaviours have deep and wide consequences extending to the community, national, and global contexts. Being a true global citizen means one is: (a) cognizant of these interconnections and the role personal decisions play in each context; and (b) civically engaged and capable of driving social change.

A word of caution must be clearly stated at this juncture. To date, the academic response to calls for greater global learning have focused on a 'just do it' approach. The number of students participating in education abroad is often the primary indicator of a HEI's success in achieving globalization aims. An experience without critical reflection, however, is just an experience, which does not necessarily provide an individual with the opportunity to shape perspective, and actually has the possibility of being *mis-educative*. Accordingly, we encourage faculty to incorporate field-based learning experiences into study

abroad curricula and to consider their role as facilitators of citizen activism (Hanson, 2010), promoting opportunities for civic engagement, responsibility, and global awareness. The challenge, evidently, is to develop programs in a measured and effective way. Such programs must be attractive to students, yet *not* turn the travel experience into a token service program of consumerism with little value beyond the tourism dollars it generates.

REFERENCES

- AACU. (2007). *College learning for the new global century*. Washington, DC: Association of American Colleges and Universities.
- Alwehaibi, H. (2012). Novel program to promote critical thinking among higher education students: Empirical study from Saudi Arabia. *Asian Social Science*, 8(11), 193–204.
- Ash, S. L., & Clayton, P. H. (2004). The articulated learning: An approach to reflection and assessment. *Innovative Higher Education*, 29(2), 137–154. doi:10.1023/B:IHIE.0000048795.84634.4a
- ASHE. (2005). Professionalizing science and engineering. *ASHE Higher Education*, 31(4), 51–74.
- Attfield, R. (2002). Global citizenship and the global environment. In N. Dower & J. Williams (Eds.), *Global citizenship: A critical reader* (pp. 191–200). Edinburgh, UK: Edinburgh University Press.
- AUSSE. (2015). *Australasian Survey of Student Engagement (AUSSE)*. Retrieved from <http://www.acer.edu.au/ausse/background>
- Baum, F. (2007). Cracking the nut of health equity: Top down and bottom up pressure for action on the social determinants of health. *Promotion & Education*, 14(2), 90–95. doi:10.1177/1025382307014002 2002 PMID:17665710
- Bell, H. L., Gibson, H. J., Tarrant, M. A., Perry, L. G., & Stoner, L. (2014). Transformational learning through study abroad: US students' reflections on learning about sustainability in the South Pacific. *Leisure Studies*. doi:10.1080/02614367.2014.962585
- Bell, R., Lutz, B., Webb, D., & Small, R. (2013). *Discussion paper: Addressing the social determinants of noncommunicable diseases*. New York, NY: UNDP.
- Boele, C., & Heck, J. E. (n.d.). Defining and measuring the social accountability of medical schools. Geneva: World Health Organization.
- Bowers, C. A. (2003). *Mindful conservatism: Rethinking the ideological and educational basis of an ecologically sustainable future*. Oxford, UK: Rowman & Littlefield.
- Brettschneider, C., Leicht, H., Bickel, H., Dahlhaus, A., Fuchs, A., Gensichen, J., & Zieger, M. et al. (2013). Relative impact of multimorbid chronic conditions on health-related quality of life: Results from the multicare cohort study. *PLoS ONE*, 8(6), e66742. doi:10.1371/journal.pone.0066742 PMID:23826124

- Bryant, D. (2006). The everyone, everywhere: Global dimensions of citizenship. In B. Holland & J. Meerropol (Eds.), *A more perfect vision: The future of campus engagement*. Providence, RI: Campus Compact.
- Dewey, J. (1938). *Experience and education*. New York, NY: Collier Books.
- Diaz, S., Fargione, J., Chapin, F. S. III, & Tilman, D. (2006). Biodiversity loss threatens human well-being. *PLoS Biology*, 4(8), e277. doi:10.1371/journal.pbio.0040277 PMID:16895442
- Dietz, W. H. (2004). Overweight in childhood and adolescence. *The New England Journal of Medicine*, 350(9), 855–857. doi:10.1056/NEJMmp048008 PMID:14985480
- Dobson, A. (2003). *Citizenship and the environment*. Oxford, UK: Oxford University Press. doi:10.1093/0199258449.001.0001
- Hammond, R. A., & Levine, R. (2010). The economic impact of obesity in the United States. *Diabetes Metab Syndr Obes*, 3, 285–295. doi:10.2147/DMSOTT.S7384 PMID:21437097
- Hanson, L. (2010). Global citizenship, global health, and the internationalization of curriculum: A study of transformative potential. *Journal of Studies in International Education*, 14(1), 70–88. doi:10.1177/1028315308323207
- Hunter, D. J., & Reddy, K. S. (2013). Noncommunicable diseases. *The New England Journal of Medicine*, 369(14), 1336–1343. doi:10.1056/NEJMra1109345 PMID:24088093
- Jacobs, J. W. (2015). Interdisciplinary trends in higher education. *Palgrave Communications*, 1.
- Kelly, T., Yang, W., Chen, C. S., Reynolds, K., & He, J. (2008). Global burden of obesity in 2005 and projections to 2030. *International Journal of Obesity*, 32(9), 1431–1437. doi:10.1038/ijo.2008.102 PMID:18607383
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Kuh, G. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges & Universities.
- Kuh, G. (2013). *Ensuring quality & taking high-impact practices to scale*. Washington, DC: Association of American Colleges & Universities.
- Lewin, R. (2009, Fall). Transforming the study abroad experience into a collective priority. *Peer Review*, 8-11.
- McKeown, J. S. (2009). *The first time effect: The impact of study abroad on college student intellectual development*. Albany, NY: State University of New York Press.
- McLeod, M., & Wainwright, P. (2009). Researching the study abroad experience. *Journal of Studies in International Education*, 13(1), 66–71. doi:10.1177/1028315308317219
- Mezirow, J. (1978). Perspective transformation. *Adult Education*, 28(2), 100–110. doi:10.1177/074171367802800202

- Mezirow, J. (1991). *Transformative dimensions of adult learning* (1st ed.). San Francisco, CA: Jossey-Bass.
- NCD Alliance. (2014). *UN NCD Review 10-11 July 2014*. Retrieved from UN NCD.
- Newell, W. H. (2007). Decision-making in interdisciplinary sciences. In G. F. Morçöl (Ed.), *Handbook of decision-making* (pp. 245–263). New York: Taylor & Francis.
- NSSE. (2015). *About NSSE*. Retrieved from <http://nsse.iub.edu/html/about.cfm>
- O'Steen, B., & Perry, L. (2012). Service-learning as a responsive and engaging curriculum: A higher education institution's response to natural disaster. *Curriculum Matters*, 8, 171–185.
- Olshansky, S. J., Passaro, D. J., Hershow, R. C., Layden, J., Carnes, B. A., Brody, J., & Ludwig, D. S. et al. (2005). A potential decline in life expectancy in the United States in the 21st century. *The New England Journal of Medicine*, 352(11), 1138–1145. doi:10.1056/NEJMsr043743 PMID:15784668
- Perry, L., Stoner, K., Stoner, L., Wadsworth, D., Page, R., & Tarrant, M. (2013). The importance of global citizenship to higher education: The role of short-term study abroad. *British Journal of Education, Society & Behavioral Science*, 3(2), 184–194.
- Perry, L., Stoner, L., & Tarrant, M. A. (2012). More than a vacation: Short-term study abroad as a critically reflective, transformative learning experience. *Creative Education*, 3(5), 679–683. doi:10.4236/ce.2012.35101
- Peterson, C. (2002). Preparing engaged citizens: Three models of experiential education for social justice. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 165–206.
- Popkin, B. M., Adair, L. S., & Ng, S. W. (2012). Global nutrition transition and the pandemic of obesity in developing countries. *Nutrition Reviews*, 70(1), 3–21. doi:10.1111/j.1753-4887.2011.00456.x PMID:22221213
- Schattle, H. (2009). Global citizenship in theory and practice. In R. Lewin (Ed.), *The handbook of practice and research in study abroad: Higher education and the quest for global citizenship* (pp. 3–18). London: Routledge.
- Sobania, N., & Braskamp, L. A. (2009). Study abroad or study away: It's not merely semantics. *Peer Review*, 11(4), 23–26.
- Stearns, P. N. (2009). *Educating global citizens in colleges and universities: Challenges and opportunities*. London: Routledge.
- Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *The Journal of Social Issues*, 56(3), 407–424. doi:10.1111/0022-4537.00175
- Stern, P. C., Dietz, T., Abel, T., Guagnan, G. A., & Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Research in Human Ecology*, 6(2), 81–97.
- Stevens, G. A., Singh, G. M., Lu, Y., Danaei, G., Lin, J. K., Finucane, M. M., & Ezzati, M. et al. (2012). National, regional, and global trends in adult overweight and obesity prevalences. *Population Health Metrics*, 10(1), 22. doi:10.1186/1478-7954-10-22 PMID:23167948

- Stoner, L., & Cornwall, J. (2014). Did the American Medical Association make the correct decision classifying obesity as a disease? *Australas Med J*, 7(11), 462–464. doi:10.4066/AMJ.2014.2281 PMID:25550718
- Stoner, L., Page, R., Matheson, A., Tarrant, M., Stoner, K., Rubin, D., & Perry, L. (2015). The indigenous health gap: Raising awareness and changing attitudes. *Perspect Public Health*, 135(2), 68–70. doi:10.1177/1757913915569965 PMID:25759315
- Stoner, L., Perry, L., Wadsworth, D., Stoner, K. R., & Tarrant, M. A. (2014). Global citizenship is key to securing global health: The role of higher education. *Preventive Medicine*, 64, 126–128. doi:10.1016/j.ypmed.2014.05.006 PMID:24836370
- Streitwiser, B., & Light, G. (2010). *University students and conceptions of global citizenship: A case study*. Evanston, IL: Northwestern University Center for Global Engagement.
- Strydom, J. F., & Mentz, M. (2010). *South African survey of student engagement: Focusing the student experience on success through student engagement*. Pretoria, South Africa: Council on Higher Education.
- Sutton, R. C., & Rubin, D. L. (2004). The GLOSSARI project: Initial findings from a system-wide research initiative on study abroad learning outcomes. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 65–82.
- Tarrant, M. A. (2010). A conceptual framework for exploring the role of studies abroad in nurturing global citizenship. *Journal of Studies in International Education*, 14(5), 433–451. doi:10.1177/1028315309348737
- Tarrant, M. A., & Lyons, K. (2012). The effect of short-term educational travel programs on environmental citizenship. *Environmental Education Research*, 18(3), 403–416. doi:10.1080/13504622.2011.625113
- Tarrant, M. A., Lyons, K., Stoner, L., Kyle, G., Wearing, S., & Poudyal, N. (2014). Global citizenry, educational travel and sustainable tourism: Evidence from Australia and New Zealand. *Journal of Sustainable Tourism*, 22(3), 403–420. doi:10.1080/09669582.2013.815763
- Tarrant, M. A., Rubin, D., & Stoner, L. (2014). The added value of study abroad: Fostering a global citizenry. *Journal of Studies in International Education*, 18(2), 141–161. doi:10.1177/1028315313497589
- Tarrant, M. A., Stoner, L., Borrie, W. T., Kyle, G., Moore, R. L., & Moore, A. (2011). Educational travel and global citizenship. *Journal of Leisure Research*, 43(3), 403–426.
- Taylor, S. S., & Ladkin, D. (2009). Understanding arts-based methods in managerial development. *Academy of Management Learning & Education*, 8(1), 55–69. doi:10.5465/AMLE.2009.37012179
- Thornton, P. (2013). *Three teaching styles*. Retrieved from http://www.facultyfocus.com/articles/philosophy-of-teaching/three-teaching-styles/?utm_source=cheetah&utm_medium=email&utm_campaign=2013.09.30%20Faculty%20Focus%20Update
- Tukker, A., Goldbohm, R., de Koning, A., Verheijden, M., Kleijn, R., Wolf, O., & Reuda-Cantuche, J. (2011). Environmental impacts of changes to healthier diets in Europe. *Ecological Economics*, 70(10), 1776–1788. doi:10.1016/j.ecolecon.2011.05.001

- Walters, L. M., Green, M. R., Liangyan, W., & Walters, T. (2011). From heads to hearts: Digital stories as reflection artefacts of teachers' international experience. *Issues in Teacher Education*, 20(2), 37–52.
- WHO. (2008). The global burden of disease: 2004 update. Geneva: World Health Organization.
- WHO. (2013). *Global action plan for the prevention and control of NCDs 2013-2020*. Geneva: World Health Organization.
- WHO. (2015). *WHO highlights need for countries to scale up action on noncommunicable diseases*. Retrieved from <http://www.who.int/mediacentre/news/notes/2014/action-on-ncds/en/>
- Winn, J. G. (2006). Techno-information literacy and global citizenship. *International Journal of Technology, Knowledge in Society*, 2, 123–127.
- Wojcikiewicz, S. K. (2010). Dewey, Peirce, and the categories of learning. *Education and Culture*, 26(2), 65–82.
- Wynveen, C. J., Kyle, G. T., & Tarrant, M. A. (2012). Study abroad experiences and global citizenship: Fostering proenvironmental behavior. *Journal of Studies in International Education*, 16(4), 334–352. doi:10.1177/1028315311426782

KEY TERMS AND DEFINITIONS

Critical Reflection: A process, seeks to engage an individual in ‘scratching below the surface’ to be deep and accurate when determining the value of a decision, experience, or theory. An essential step in transformative learning.

DEAL Model: A sequence of steps which occur after an experience has been completed: (1) Description of experiences objectively, (2) Examination of experiences through reflection, (3) Articulation of Learning. This model may be iterative e.g., if a group of short-term study abroad students are studying local indigenous health disparities, the model could be repeated after each interaction/experience associated with their time abroad.

Digital Storytelling (Critical Reflection): An alternative to paper-based reflection. An opportunity for critical reflection method to be intensified by meeting learners on platforms where they already live, communicate, and engage.

Engaged Learning: Focuses on relationships between students' involvement and empirically-based university conditions that positively impact and influence students' commitment to participate.

Global Citizenship: A multi-faceted term which is generally accepted to include three key criteria: global citizenship is defined using three criteria: (1) aware of global issues; (2) socially responsible; and (3) civically engaged.

Global Health: The health of populations in a global context. Places a priority on improving health and achieving equity in health for all people worldwide.

Interdisciplinary Approach/Interdisciplinarity: An approach which seeks to involve two or more different subject areas or ways of knowing.

Mis-Educative: An educative experience without critical reflection i.e., does not shape perspective.

Non-Communicable Diseases (NCDs): Also known as chronic diseases i.e., not passed from person to person. The four main types of NCDs are cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. NCDs are of long duration, generally slow progression, and are highly modifiable by lifestyle behavioural e.g., physical activity, nutrition, smoking.

Pro-Environmental Behaviour: Behaviour that consciously seeks to minimize the negative impact of one's actions on the natural and built world.

Tarrant's adapted Value-Belief-Norm (VBN) Model: Two components based on: (1) an awareness/belief that specific environmental conditions (e.g., poverty, health, climate change etc.) threaten or have adverse consequences for the things the learner values; and (2) an awareness/belief that the individual/learner can act to reduce the specific threat(s). In this, the learner's values and what they are willing to do about those values are significant. Simply put, awareness is a critical predisposition or catalyst for informed action, but the learner's understanding of their personal values is the filter whereby awareness permeates or is stymied.

Three D's: *Directing*, *Discussing*, and *Delegating*, with each 'D' representing a unique style of facilitating learning. An iterative approach to education, which ultimately contests students to derive the challenging questions themselves, and become arbiters of their own learning.

Transformative Learning Experience/Theory: Pedagogies that engage the student with alternative lenses, orientations, or points of view related to a complex issue (such as global health), ultimately leading to a change in perspective.

Value-Belief-Norm (VBN) Model: VBN focuses on values and moral norms. Individual choice about pro-environmental actions can be driven by personal norms; an internalized sense of obligation to act in a certain way. Norms are activated when an individual believes that violating them would have adverse effects on things they value. Personal values (e.g., altruistic values, egoistic values) are antecedents of environmental beliefs.