CHAPTER 15

INTERNATIONAL SCHOLARSHIPS AND SUSTAINABILITY

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ABSTRACT

Sustainable Development Goal (SDG) Target 4.b calls to "substantially expand globally the number of scholarships" for enrollment in overseas higher education between 2015 and 2020. To advance knowledge on international scholarships and sustainability, this chapter examines notions of sustainability in literature related to international scholarships for students in the Global South. Based on an exploratory review of literature, ways that sponsored international student mobility – programs, students, graduates, and networks – maintain and sustain systems and outcomes are explored. Findings are presented through four frames: (a) programmatic sustainability, (b) organizational development, (c) national sustainable development, and (d) international and global actions. Challenges to sustainability, such as poor coordination between degrees earned and local market conditions, are also discussed. In addition, the findings point to several prominent ways that scholarships could contribute to sustainability that are mostly absent from the literature: transformative education for sustainable development, and international education for environmental sustainability. *The chapter closes with a vision of alumni networks – both within and among* programs – to work together to transform societies and tackle the most pernicious international challenges of our time.

Keywords: Higher education; international student mobility; international scholarships; Sustainable Development Goals; sustainability; alumni networks

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INTRODUCTION

Perhaps it is challenging to see the connection between talented individuals crossing borders to pursue higher education and the rising seas, melting icebergs, or record-breaking temperatures. Yet there are links between the components of this chain: higher education can lead to climate action (Vare & Scott, 2007), international education allows students see global interconnectedness and pursue social justice (Campbell & Lavallee, 2019), and international networks support global activism (Keck & Sikkink, 2014).

At the same time, there is also an understanding that international education contributes a "substantial and growing" amount of carbon, yet "changing patterns of mobility show that emissions per student are decreasing over time" (Shields, 2019, p. 599). Addressing the issue of global warming in comparative and international education (CIE) has been building momentum, with the 2019 and 2020 Comparative and International Education Society (CIES) conferences devoted to issues of sustainability and understanding how CIE influences the planet. The 2020 CIES conference website called on participants to consider "what it is to be human and a radical reconfiguration of the relationship between human and Earth. The central concern of CIES 2020 is what these planetary changes – and their political, economic, social, and environmental consequences – entail for education." Increasingly, CIE as a field is considering education's role in climate change and global warming, and how it should ethically respond to these growing concerns.

In 2015, the United Nations (UN) put forth the Sustainable Development Goals (SDGs) as an ambitious agenda to improve the world for its people and the planet by 2030. In terms of promoting and advancing education worldwide, the SDGs not only highlighted education as its own goal (Goal 4), but also included education as a mechanism to reach other outcomes, such as Goal 3: Health and Well-Being and Goal 5: Gender Equality. In the 2030 Agenda, international scholarships were specifically noted as one of the education tools to bring about sustainability. As Campbell and Mawer have noted, the 193 member states of the United Nations

have agreed that sponsored international student mobility should be among the tools and outcomes for a sustainable planet. For the first time in a prominent international-level agenda, international scholarships are advocated as a tool for development. (p. 168)

Target 4.b states:

By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.

Notably, Target 4.b has an earlier deadline than most SDG Targets, and as we approach its deadline in 2020, it remains doubtful whether it will be reached. Despite a significant global investment of US\$6.1 billion spent by governments in 2018 (and many more dollars spent by private foundations, corporations,

universities, and individual philanthropists), there is still a gap in monitoring the goal and no data collection mechanism in place to monitor scholarships worldwide (UNESCO, 2020). Using the data available, it appears that the funding is not equally available to all developing countries, with small island developing states and other small countries, such as Moldova and Eswatini, receiving a disproportionate amount of global scholarship aid per citizen (UNESCO, 2020).

At a policy level, Target 4.b also raises important questions about the tie between sponsored international student mobility and sustainability. As noted in the 2020 Global Education Monitoring Report, "scholarships must be well-targeted to affect sustainable development" (UNESCO, 2020, p. 297). However, questions remain: How do scholarships contribute to sustainable development? Do they advance individuals and societies, sustain the status quo, protect and preserve the planet, or transform individuals? In short, how do scholarships link to sustainability and sustainable development?

This chapter is devoted to exploring the relationship between sustainability and sponsored international student mobility through scholarships. To make the study manageable, I focus specifically on international scholarships, an emerging subfield within CIE; to narrow the study further, I focus on scholarships for students from the Global South. For the purposes of this chapter, the Global South is defined as those countries designated by the World Bank as low- or middleincome countries (World Bank, 2019). This definition also allowed the review to focus on the same recipients as identified in SDG Target 4.b.

The goal of this chapter is not to set forth a conceptual framework but to better understand how other scholars link sponsored student mobility and sustainability – in its myriad forms – and what points of connection are absent from the literature at this date. For the purposes of this chapter, I define *sustainability* as the ability of something to be maintained at a specific rate or level. It also can be defined as maintaining the planet's ecological balance. Keeping a loose definition for the term is an intentional choice, as exploring the multiple definitions of *sustainability* used among the scholars is part of the analysis. Moreover, in the implications, I propose ideas for the way forward to shift away from *sustainability* and toward *transformation* in the period after Target 4.b ends and in the time of COVID-19 and global warming. The chapter contributes to the 2020 edition of the Annual Review of Comparative and International Education by presenting the evolving research on higher education for sustainable development, in general, and international scholarships, specifically.

CONTEXT: SUSTAINABILITY THEMES IN CIE

There is a growing concern about the ways that educational systems are affecting the planet, both as contributors to a globalized consumption culture and as important stakeholders in addressing climate change (Spring, 2008; Vare & Scott, 2007). Various researchers are examining the multiple ways that higher education and sustainability are intertwined and influence each other, including how institutions are addressing global warming (Tilbury, 2011), how institutions consider their role in the stewardship of the planet (Aleixo, Leal, & Azeiteiro, 2018), and university student activism for a sustainable future (Murray, 2018).

This increased awareness is also appearing in CIE literature, with questions about environmentalism and culture (Komatsu, Rappleye, & Silova, 2019), higher education for sustainable development (McCowan, 2019), and the kind of education needed for sustainable lifestyles (Goebel, Fischman, & Silova, 2019). As further evidence of the rise of sustainability issues within CIE, a new Environmental and Sustainability Education special interest group (SIG) was launched as part of CIES in 2018. Additionally, education for sustainable development (ESD) is a longstanding approach within the field, with the UN having launched the Decade of Education for Sustainable Development starting in 2005. ESD is defined as "holistic and transformational education which addresses learning content and outcomes, pedagogy and the learning environment. It achieves its purpose by transforming society" (UNESCO, 2014, p. 12).

This connection between sustainable development and education appears to originate from the World Commission on Environment and Development's 1987 report, Our Common Future, which put forth three notions of development that need to be maintained in balance: the economic, the social, and the environmental. As part of this, education was a key dimension of achieving sustainability, especially in terms of access for girls. Building on this notion, sustainable development is defined by the UN as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UN, 2015). However, Holden, Linnerud, Banister, Schwanitz, and Wierling (2018) argued that sustainable development must also bring attention to environmental preservation and our ethical duty to preserve the planet. They define sustainability based on three moral imperatives – satisfying human needs, guaranteeing social equity, and respecting the environment - and explicitly avoid advocating for economic development as part of this definition. This is in line with the 2020 CIES theme of *Education beyond the Human*, which aimed to decenter the human experience and instead focus on the planet's major challenges – such as global warming and ecological disruption – and consider education's role in addressing these challenges. It also is in line with the 2021 CIES theme on Social Responsibility within Changing Contexts, raising questions about our ethical and responsible obligations in education worldwide.

LITERATURE REVIEW: INTERNATIONAL SCHOLARSHIPS IN THE GLOBAL SOUTH

As this chapter reviews the ways that sustainability appears in international scholarships literature, it is important to first define international scholarships. According to earlier work, Campbell and Neff (2020) defined international scholarships as grants to individuals where individuals must study at the higher education level outside their home countries and work toward a university degree at an accredited university, and that the award must cover the majority (over 50%) of

the total costs to study, travel, and live abroad. Moreover, the scholarship must be part of a program and winners must be competitively selected for participation.

International scholarships have been used as a tool of promoting student mobility and helping to develop countries, build ties between parts of the world, and advance global agendas for hundreds of years. The perhaps best known program is the Rhodes Scholarship at Oxford University, yet thousands of these educational grants are given annually to promote cross-border mobility. For example, in 2019 approximately 284,000 students were sponsored by their current employer, a foreign government or university, the US Government, or a private sponsor to study in the United States (Institute of International Education, 2019).

As a subfield of CIE, international scholarships are a growing field. In the 2016 volume of the Annual Review of Comparative and International Education, Perna and Orosz noted that inadequate attention has been given to multiple theoretical frameworks and methodological approaches in the subfield of scholarships. As they pointed out, among these different methodological frames, the most common for understanding scholarships was human capital theory, or the logic of investing in higher education so that individuals – and their communities and workplaces – will receive an economic return on these investments. While human capital theory continues its predominance in the literature, other theories have also been applied, including international scholarships for adult and intercultural learning (Enkhtur, 2019) and scholarships as extending students' capabilities and therefore freedoms (Campbell & Mawer, 2019). More recently, in a review of 105 articles about scholarships for students from the Global South, Campbell and Neff (2020) found that there were six major rationales for supporting international scholarships for students in the Global South: (a) scholarships for individual skills development, (b) diplomatic relations and building solidarity among countries, (c) social change in the home countries, (d) international and sustainable development and as humanitarian aid, (e) university internationalization, and (f) increased access to higher education, especially for marginalized populations, like refugees or students with disabilities.

Keys to these theories, although to differing degrees, are the influences of educational experiences, networks, and home country context. Specifically, the question about how and where the education gained overseas will be used in the home country is prominent. One example is from Lehr (2012) when writing about a Cuban government program that sponsored Ghanaian students:

Although the designers of the program had presumably correctly analyzed Ghana's needs and structured the program accordingly, the country's employment sector does not appear to have been ready to absorb the Cuban-trained polytechnical graduates. In addition to doubts about the quality and relevance of the graduates' Cuban education, employers appear to have lacked understanding of certain professional career programs that were available in Cuba, but did not exist in Ghana at the time. [...] Once some graduates had established themselves in positions, they were able to create their own small networks and help their peers find employment. This is one of the reasons why clusters of graduates can be found in certain work environments. (p. 96)

Lehr goes on to discuss how Cuba's education system "had prepared them well for working in a low-tech improvisation context of the type they found upon their return to Ghana" (p. 100). However, barriers to transitioning home after time abroad, gaining employment, and other challenges can interrupt the intended outcomes of such scholarships, not always leading to the sustainable development envisioned at the program's outset.

As seen in the excerpt above, questions about the program's design, outcomes, and impact are relevant to this chapter and to better understanding how international scholarships interplay with sustainability. This leads to the research question that guides this chapter: What does the literature say about the relationship between international scholarships and sustainability outcomes?

METHOD

This qualitative study is an exploratory literature review to provide an overview of how the academic literature connects, discusses, and perceives the notion of sustainability in scholarship programs for students from the Global South. Exploratory literature reviews aim for breadth over depth (Frederiksen & Phelps, 2018), and the goal of this study is to provide a survey to understand notions of sustainability and how they are used, both in an attempt to shed light on Target 4.b, but also to explore the range of terms used in the literature to portray international student mobility as lasting, worth defending, and influential – in this era of sustainable development.

Selection Criteria and Analysis

The review was conducted in two stages. First, relevant literature was sought through three databases: (a) Google Scholar, (b) Education Resources Information Center (ERIC), and (c) the Scholarship Program Research Network bibliography¹. In the Google Scholar and ERIC search, Emelye Neff and I searched for the terms "international scholarships" and "overseas scholarships" separately. For Google Scholar, we set the custom range for publications for the dates 2010 to 2019 and the first 300 articles which came up for each term were reviewed. In the ERIC search, we used the same two terms and selected only "peer-reviewed" literature, published between 2010 and 2019. The Scholarship Program Research Network is a group of more than 100 scholars and practitioners of scholarship programs, who contribute materials to an open source bibliography.

To be included in the literature review, the piece had to meet the following criteria:

(a) Focused on international scholarships for students in the Global South: By "Global South," we mean studies where some or all of the students came from countries designated by the World Bank as low- or middle-income countries (World Bank, 2019). To define scholarships that met these criteria, we reviewed all sources in the Scholarship Program Research Network bibliography. Next, articles or book chapters found on Google Scholar or ERIC were included if they used the term "international scholarship" or "overseas scholarship" in the title, among the keywords, or in the abstract of the article. For book chapters, we looked for these terms in either the book or chapter title.

- (b) Reviewed by peers: This literature is published in academic books and peerreviewed journals, and where authors are not required to pay a fee to submit their work. To make the total count manageable, program reports, evaluations (where publicly available) and dissertations were not included.
- (c) Published in the year 2010 to 2019 in a social science journal or academic book: Our assumption is that literature published during this window has the greatest chance of influencing the SDGs. We focused on social sciences and excluded information about medical training fellowships found in medical or hard sciences journals, as these findings are most likely to include CIE and related fields.

Approximately 450 items were reviewed to check if they were in line with these criteria. Of these articles and book chapters, 105 items were moved to the second stage.

In the second stage, attributes of these 105 items were put into a Google Sheet: (a) year of publication, (b) participants' home country or region, (c) participants' host country, and (d) the notion of sustainability used in the paper, if any. Identifying the notion of sustainability was done in two ways. First, one member of the research team searched the document for the word "sustain" or any of its derivatives. Second, we read the piece closely to look for examples or references to how the scholarship program, its participants, or its stated outcomes linked to notions of continuation or development. As the goal of this chapter is to explore the relationship, we were narrow in our definition of scholarships but liberal in our interpretation of sustainability or sustainable development.

After this review, we ended with 66 sources that met these criteria. I went back to these sources and examined the notions of sustainability again, categorizing them by level: activities at the program, organizational, national, and international levels. It is worth mentioning that not all of the articles and book chapters considered in this analysis are cited in this chapter; this choice was based on the word count limitations and choice to capture the breadth of interpretations.

FINDINGS

To advance knowledge about international scholarships and sustainability, this chapter explores notions of sustainability in literature related to international scholarships for students in the Global South. The findings are presented in four categories to show the level on which the sustainability occurs: at the programmatic, organizational, national, and international levels. These are the levels most commonly referred to in the literature, and this organization is in line with both how scholarship programs and their outcomes are often studied, at the micro, meso, and macro levels (Mawer, 2017). For the purposes of this chapter, I excluded any conception of sustainability for the individual as most research in this subfield moves beyond the individual's experiences to a wider influence at some level. Moreover, guided by Target 4.b, there is no focus on individual gain

but instead on links of program expansion, organizational growth, and national and international sustainable development.

Sustainability at the Program Level

The first layer of sustainable outcomes is at the scholarship program itself. In the literature, sustainability at this level comprises topics such as how the scholarship program continues to function, how it maintains its core values, how it develops and supports its networks, how it raises funds, and how it understands and evaluates itself. While these notions of sustainability are common in many higher educational programs, scholarships are considered a very expensive investment in one person's education – given the rising cost of university tuition, the associated living costs, and complex legal considerations related to visas and financing (Rosenfield, 2018). Given their expense, they also usually select a small group of students – typically a fraction of talented individuals seeking quality higher education – resulting in steep competition for a few spots. Therefore ensuring uninterrupted funding and justifying the cost of these programs are commonplace considerations for program sustainability (Simon, 2014).

The first topic that appears in the literature is the history of the program, including the number of awards given over time. This is often paired with changes in the program design during the course of the award, often toward updating or reforming the population targeted by the award (e.g., gender, nationality, or marginalized characteristics) and the type of education offered (e.g., shift from undergraduate to postgraduate funding, the fields of study, or the universities hosting awardees). For example, the Rhodes Scholarship Program is one of the longest standing programs. As Pietsch and Chou (2018) wrote, the Rhodes Scholarship has shifted over time from funding Rhodes's original vision of offering scholarships at Oxford "targeted initially to the British colonies of white settlement" (p. 34) to a program set on greater diversity and gender parity among recipients. In other cases, some scholarship programs - like the Ford Foundation's International Fellowships Program - planned to end at a predetermined date and some end once they estimate that their impact or change strategy has been reached. For example, Brogden (2018) noted that some scholarships from the Open Society Foundations have been discontinued after many years of consistent funding, where they have a "deeper legacy", and that "Open Society's long experience suggests that funding numerous individuals for long periods of time can indeed meet the mission of opening societies in the long term" (p. 143). One additional point, noted by Kent (2018), is that, "scholarships can, when not appropriately designed, entrench elites within already stratified societies" (p. 39).

Building on this point, scholars have argued that research and evaluation of scholarship programs are at the heart of sustainability of these initiatives – both for specific programs to determine outcomes and refinements and for the subfield of scholarships within CIE. In 2010, Rotem, Zinovieff, and Goubarev wrote that useful criteria for understanding scholarship and fellowship programs should include a focus on effectiveness, efficiency, and sustainability to "further exploration concerning the longer-term impact of fellowships on the performance of institutions and services" (p. 4) and that "sustainable benefits and impact requires a solid partnership between the recipients, the providers and the sponsors of the fellowship programme" (p. 6). More recently, Mawer (2018) noted that while we are moving toward a better understanding of scholarship program outcomes at the micro (individual), meso (organizational), and macro (national) level, there are still notable challenges in measuring programs, such as determining the difference between the specific ways that person's success can be attributed to scholarship and the scholarship's contribution to an individual's position trajectory – one often supported by many other privileges and opportunities. Martel (2018) discussed various types of international scholarship evaluation methods, advocating that multiple audiences – funders, administrators, recipients, applicants, alumni, policymakers, and researchers – benefit when the evaluation results, blemishes and all, are shared publicly. Toward that goal, the Scholarship Program Research Network has compiled a bibliography of research and program evaluations in international scholarships which is open source and can be found at https://bitly.com/ sprn-bibliography.

Another way that scholarships link to sustainable outcomes is through alumni engagement and alumni network development. Keeping scholarship alumni files updated and networks alive may lead to program strength, including asking alumni to participate on selection panels and as mentors for current grantees, as financial donors to the scholarship, as advocates for the scholarship, and as role models or spokespeople for the scholarship organization. Pérez (2012) noted that alumni in Algeria and Venezuela formed "solidarity groups" when they returned from study in Cuba. Campbell and Lavallee (2019) examined how a group of scholarship alumni association in Ghana acted as a community of practice to benefit both their own goals and support others through regular meetings. For example, the Fulbright Community alumni group often engages in encouraging renewed funding in the US Congress.

One threat to scholarship program sustainability is a shift in funders or funder's priorities. Examples include when funding and support for a program is led by an elected official or tied to a specific government administration. If the proponent leaves office, or if the funding is redirected in a response to a diplomatic crisis or other world event, scholarships can end abruptly. Johnson (2018) wrote about this shift of national priorities for the United States since the Fulbright program was founded in 1946. Campbell (2017) noted how scholarship alumni might not have employment positions available to them when they return home as a new government may not follow the agreements made by the previous administration.

Sustainability in scholarship programs may seem like an ancillary consideration in terms of suggesting policies to address sustainable development. However, as scholarships engage in the act of refining program design, evaluating themselves, sharing knowledge and experience, supporting their alumni, and acknowledging their role in sustainable development, programs can improve outcomes for their participants, partners, and the planet over time.

Sustainability at the Organizational Level

This second category focuses on how international scholarship programs engage with ideas of sustainability at the organization level, such as in industry, universities, professional networks, or government departments. In terms of sustainability at the organizational level, extant research considers this in two main ways. First, alumni of scholarships take up employment posts to influence innovation and organizational change. Second, the literature addresses organizational partnerships formed through scholarship programs and how these connections build over time.

In the first way of organizational development, alumni – either as individuals or in groups – bring knowledge and skills sought by the organization. Kalisman (2015) explained this in a review of a pan-Arab scholarship program at the American University of Beirut (AUB), writing:

After they graduated from AUB, bursary scholars and their peers played key roles in the formation of school systems, the composition of textbooks used throughout the Arabic speaking world, and the promotion of various political ideologies [...] An AUB degree guaranteed employability in the Arabic speaking world, allowing graduates to move freely from one Mandate to another and to rise through the ranks of each government's bureaucracy. (p. 609)

The idea here is that these individuals are bringing new knowledge that will have influence on practice, research, teaching, curriculum, and other activities that lead beyond their own benefit and have affect over time. Purdey (2015) provides another example of Australian government awards given to citizens of Indonesia, where graduates have become leaders in government and university across the country.

Another way that sustainability can be achieved is through scholarship alumni teaching students and educating fellow citizens. Maxwell, Nget, Peou, and You (2015) found that a key component to the development of women academics in Cambodia was an international scholarship, along with support from parents and family, and other policies that supported their hiring. Recently, Campbell, Kelly-Weber, and Lavallee (2021) found that through university teaching and voter rights education, scholarship alumni in Ghana and Nigeria viewed their activities as sustainable contributions to youth, students, and future generations in their countries.

In some scholarship programs, there is a coordinated approach to offer a funding toward a goal of building capacity in a specific sector. This can be done through years of similar funding or in a cohort model. This notion is referred to as building "critical mass" – the idea that groups of scholarship holders can have a greater influence than individuals (Kent, 2018), or that a scholarship program can be aligned with other university capacity development initiatives to extend the outcomes of a single initiative (Boeren, 2018). One example is the Eritrean Human Resource Development Project, a government-funded scholarship program by the Government of Eritrea (Tessema, Winrow, & Teclezion, 2012) which funded 2,600 civil servants from across 29 public sector organizations; of the 2600 awardees, only 674 received international scholarships and the rest either studied in the country or pursued an online degree.

The second way that scholarships lead to sustainability at the organizational level is through organizational partnerships, often between universities. Often under the umbrella of higher education internationalization, these partnerships can lead to the development of new programming, other student exchanges, and joint research projects. Boeren (2018) explained that scholarships were often part of larger initiatives, resulting in partnerships:

Sustainable academic partnerships take a long time to develop, but it is quite common for a partnership to start with a scholarship and subsequently evolve to a broader cooperation. A good scholarship student who returns home, or moves on, may provide possibilities for setting up joint research on topics of mutual interest or for setting up a joint or double degree program. Such initiatives may subsequently be expanded to form international academic networks, North-South-South collaborations, and cross-border education programs. (p. 58)

This logic was central to Brazil's large *Programa Cinêcia sem Fronteiras* or Science without Borders scholarships which aimed to fund more than 100,000 students to top research universities abroad (Zahler & Menino, 2018). In another example, through a partnership with Mastercard Foundation Scholars Program, the University of Gondar in Ethiopia and Queen's University in Canada were able to build capacity toward disability-inclusive campuses and engage in joint research (Aldersey, Abera, Mzinganjira, Abebe, & Demissie, 2019).

In addition, through hosting scholarship grantees, host universities may shift programs and expand student services – and these reforms outlast the term of the scholarship program. Examples from the literature include increasing opportunities for marginalized students (Devés & Mora-Curriao, 2014), expanding services provided (Albrecht, 2014), and adjusting curriculum and international education for more global audiences (Fisher, 2014). Bringing these points together, Baxter (2019) highlighted how some international students, especially for students on needs-based scholarships, those coming from post-conflict areas, or otherwise underrepresented in the international student population, may require additional considerations in internationalizing higher education efforts.

While ongoing relationships, projects, and connections within and between organizations are the cornerstone of sustainability, barriers to employment may interfere with these aims. For example, the jobs must be available and the organizations must be willing to change and welcome in the new knowledge. Pérez (2012) wrote about scholarship students returning to Nambia who found "very limited" employment opportunities in the post-independence economy (p. 134).

Moreover, talented returnees are also often recruited by top organizations and incentivized to work abroad. Marsh and Oyelere (2018) noted how medical staff are needed worldwide and globally-competitive individuals are often recruited and paid higher salaries from Western countries that far outweigh local salaries for similar work. Likewise, Poocharoen and Lee (2013) found that after a scholarship program, retaining foreign-educated individuals in the public sectors is challenging when the private sector in the countries of their study – Malaysia and Thailand – were "unable to pay as well as the private sector and so might not attract the best into the service" (p. 1204).

Building capacity in organizations and industry and developing and maintaining these global networks – especially in the STEM fields – seems to be what the designers of SDG Target 4.b had in mind when designing the target. However, the efforts to provide employment or account of sustainability of partnerships is absent from this Target, raising questions about the longer-term efficacy.

Sustainability at the National Level

At the national level, scholarships contribute to sustainability efforts primarily through human capital development, alumni in national government leadership roles, policy design and reform, and remittances sent from alumni abroad that sustain the economy. While many of the indicators aim to capture economic growth or sustainable development measured in GDP, sustainability can also mean national associations maintained, leadership development, and reformed or new policies that will have an influence on others and over time.

To continue to grow a workforce and support the national economy, international scholarships are seen as key tools for human capital, economic development, or poverty alleviation. This is the theory that undergirds many studies in this field, such as the exploration of Chinese scholarships in Tanzania (Makundi, Huyse, Develtere, Mongula, & Rutashobya, 2017), and scholarships available to Mongolian students to study in Japan (Enkhtur, 2019). These studies often connect the knowledge gained abroad and its application to the home country context, finding a range of ways that scholarship alumni contribute to national development, with most of the data self-reported by alumni. For example, Franken, Langi, and Branson (2016) found that Tongan alumni mostly reported contributions to their home country in terms of their employment, yet noted that these findings were "largely individual and possibly somewhat fragile and impermanent attempts to make a difference" (p. 699) instead of a longer-term vision for change. In another study, Campbell (2018) found that some Moldovan alumni reported that just going back home and having to cope with the daily struggles was their contribution to their home country. Abeuova and Muratbekova-Touron (2019) found that many scholarship alumni in Kazakhstan – especially if they were younger - were eager to leave their home countries again, either temporarily or permanently.

In addition to economic development, leading government and shaping national policies are also seen as important ways that scholarships link to national sustainable development efforts. Campbell (2017) found that alumni of scholarship programs proposed new policies, revised texts for existing policies, provided trainings to colleagues in government, and introduced new legislation. Similarly, Campbell and Baxter (2019) wrote about scholarship alumni associations as agents of change, highlighting how alumni associations shifted to become national social change organizations over time, working to advocate for improved national policies across the country. In a different approach to the idea of government leadership and scholarships, Del Sordi (2018) argued that Kazakhstan's Bolashak scholarship program promoted authoritarian stability, in addition to sustainable development outcomes. One additional way that international scholarships contribute to national development is by students at international universities sending remittances back home. For some countries, this financial support is significant, with large percentages of the GDP being constituted from these overseas donations – although it is not possible to isolate the percentage of overall remittances by those who were educated abroad. Another way remittances are considered is through sending advice or support, which is sometimes referred to as "social remittances." This may include spearheading organizations from abroad, raising funds for causes, serving on boards, volunteering, consulting, or sharing other expertise. These "social remittances" have been facilitated by technology and inexpensive flights.

Scholars are quick to note some of the challenges to national sustainable development. Most prominent of these is "brain drain," or migration of talented individuals for work abroad. Several studies, especially those related to human capital or sustainable development, highlight an inherent tension of scholarships providing individuals with specific skills needed in the Global South and then graduates taking their skills elsewhere. As Poi (2018) explained in the case of a Nigerian scholarship program,

[To] meet the sufficient condition or requirement of the primary purpose of the overseas scholarship programme, the successfully graduated recipients must return to the sponsoring country to add to the manpower pool. (p. 2)

In addition, challenges related to employment barriers exist, including sexism and racism, lack of technology needed to complement overseas training, and poor planning for the returned scholarship holders that influence the sustainable outcomes of these programs and nation-building. Bonilla and Kwak (2015) found that donor support for international scholarships has helped to develop capacity in Guatemala, yet noted that

the absence of public policies for human resource management, the dynamics of the international cooperation process, and particular features of the domestic context hinder the effectiveness of the international cooperation scheme, consequently limiting its outcomes and impact. (p. 294)

Moreover, as Amazan, Negin, Howie, and Wood (2016) point out, "links between scholarships and poverty reduction has been questioned" (p. 48) given the small number of awards given and the likelihood of selected elite individuals for the awards.

Surely, estimating overall sustainable development by country is a complicated task, and isolating scholarship program alumni contributions to it is impossible. Yet there are multiple examples in the literature of individuals and groups contributing to national-level outcomes and maintaining or advancing notions of sustainability and sustainable development.

Sustainability at the International Level

How do scholarship programs sustain global processes, transnational networks, and international relations? According to the literature reviewed and discussed below, it is through maintaining and developing economic and diplomatic bilateral relations, showing solidarity or exercising soft power, and promoting peace. Scholars also call into question the values leading these global efforts, including raising questions about spread of Global North liberal values, democracy, socialism, or social activism for human rights. In addition, a few articles mentioned alumni who worked for the United Nations directly.

In terms of bilateral relations, the main logic appears to be that international scholarship winners will have rewarding experiences abroad and develop a fondness for the host country, producing lasting relationship with individuals in the country that hosted them (see Campbell & Neff, 2020 for further discussion). These individuals will return home and become "opinion-leaders" who influence their fellow citizens and attempt to influence policies and bilateral relations (Scott-Smith, 2008). Having first-hand experience in the country leads to a favorable impression of and good will toward the host country – or as Wilson (2014) calls it, a manufacturing of sympathy – and noted that this goal has emerged as a central tenet of most UK scholarship programs, irrespective of whether it is an explicit goal. On the other side of the coin, Collins (2012) argued that through hosting of scholarship students, countries will have a more positive impression of other countries. This was the case through the Colombo Plan where scholarship students at New Zealand universities led to improved impressions of the students' home countries and "alerted policymakers and politicians to the benefits of good publicity in regards to New Zealand's international educational aid projects" (Collins, 2012, p. 141).

Similarly, some scholarship programs seek to maintain peaceful relations among countries through greater understanding of others and building stronger links between the nations. Atkinson (2018) discussed the worldwide exchange of military officers to promote defense cooperation, combined operations, and "to increase the ability of participating nations to instill and maintain democratic institutions and practices" (p. 263). Themes of building peaceful relationships have also come through recent examination of the Saudi Arabia program and research focused on exchanges following the age of terrorism (Hilal & Denman, 2013).

Recently, scholarships included as part of the large Forum on China-Africa Cooperation (FOCAC) have put solidarity as a core value of these scholarships for African students, characterizing these scholarships not as international aid but as funding for countries to work together toward mutually-beneficial goals. Niu and Liu (2016) wrote that China's most recent approach to Africa has shifted from "pragmatic economy driven to sustainable and human economy focused" (p. 274) under the South-South cooperation framework, calling attention to a Confucian saying that education provides sustainability, such as "give a man a fish, he eats for a day; teach him to fish" and he will stand on his own (p. 278). According to UNESCO (2020), China increased the total number of scholarships in 2018 to 50,000, up from 30,000 in the previous 3 years. The notion of solidarity was also common in scholarships given during the Cold War and in the post-Cold War years. Fiddian-Qasmiyeh (2015) highlighted how scholarships from Cuba and other Southern countries were provided for refugees in the Middle East to move "from dependency to self-sufficiency" (p. 11). Hessler (2018) and Loerke (2018) wrote about countries who were showing support to new governments in the former Soviet Union or other socialist states after 1991.

As a final point, scholars have argued that sponsored international student mobility has an important element of power and spread of Global North or hegemonic liberal values. While some of these values are considered part of the program's goals, others see them as more dubious in nature. For example, Ayoubi and Massoud (2011) wrote that the Trans-European Mobility Programme for University Studies (TEMPUS) focused on privatization of Syrian higher education institutions and the liberalization of different types of cooperation, including between higher education and non-governmental organizations.

DISCUSSION

As can be seen from the four categories above, the ways that international scholarships link to sustainability and sustainable development range considerably. The literature looks at individual grantees' contributions, alumni networks, and programs themselves – and how they have a larger influence. Much of the literature ties the contributions to the individual recipient's actions at the conclusion of the scholarship, especially as they influence others' thinking and wellbeing. There are many terms for this concept in the literature, often referred to as give back, program impact, ripple effect, or social remittances.

How individuals contribute to the organizational level or national sustainability, to both build and sustain innovation, is hinted at in the SDG Target 4.b. Logically, the goal to expand the number of scholarships in certain professional fields – information and communications technology, technical, engineering and scientific programs – implies building capacity in specific fields, bringing in new technology from abroad, and contributing to the overall knowledge economy of the country. Although it is not mentioned specifically in the 2030 Agenda, individuals who are educated abroad are also likely to have other influences on the home society, such as building new networks, fostering additional partnerships, and maintaining collaborations to bring about favorable conditions for ongoing sustainable development.

At the same time, it is important to consider the notions of sustainability which have emerged from other research in comparative education and on higher education and sustainable development, but which were not significant in the subset of scholarships literature reviewed for this chapter. While not an exhaustive list, topics that are not readily apparent in the literature include: (a) scholarships which focus on environmental education or within an ESD framework specifically, (b) measurements of scholarships' programs on carbon output or other environmental costs, and any attempts to offset or reduce programs' carbon footprint, (c) alumni leadership and engagement in social movements in support of the environment, and (d) the ethical response from major funders, university partners, or scholarship grantees themselves to care for the planet. It is not to say that these initiatives are not happening in higher education systems, they are just not prominent in the literature. Given these circumstances, there are significant possibilities for quality research at the intersection of international scholarships and environmental sustainability.

CONSIDERING SCHOLARSHIPS BEYOND 2020: MAKING A CASE FOR GLOBAL ALUMNI ADVOCACY NETWORKS

What if it were possible to bring together the graduates of these international education programs to work together to solve the globe's most pernicious problems? What if we could unite the individuals who have the energy, enthusiasm, and vision – across countries, years, and disciplines – to combat climate change, pandemic, social inequality, and poverty? It seems to me that as our world becomes even more interdependent and interconnected – and our climate steadily degrades – we need fierce global citizens and uncompromising thought leaders, who will work together to address the globe's most pressing problems. This team will need to represent different disciplines, be located in different countries, speak different languages, and have different value systems, yet must share a common experience of being a student in a foreign land, who value the importance of cooperation, dialogue, learning, and investing in the future.

With all nations confronted by increasingly complex global challenges like the COVID-19 pandemic, ever-increasing levels of greenhouse gasses, and continuing marginalization of vulnerable populations, international networks are essential. International scholarship program alumni are well positioned to help solve the world's most persistent and pernicious problems for several key reasons: (a) They were pushed to be open and independent while navigating new cultures, building humility and persistence; (b) They have been exposed to diverse and international perspectives and had to interrogate their own biases and reform existing assumptions; (c) They have experienced the transformational power of quality education and helped provide similar opportunities to others; (d) They have had to manage frustrations and embrace change, building creativity and patience; (e) They have come to understand and appreciate their own limitations and strengths, likely resulting in humility and empathy; and (f) They have built international networks.

Through my work with scholarship program alumni, and included some of the research included in this chapter, I have seen graduates parlay their education and experience into service for their communities, workplaces, and countries. Scholarship program alumni have come together to bring electricity to remote villages, advocate for physically-disabled children to attend schools, reform universities and teach classes, establish national foster care systems, and lobby for equal rights for children, women, sexual minorities, and individuals with disabilities, to name a few activities. Scholarship alumni also support one another: Alumni who campaign to be elected officials often have the support of their fellow alumni who show up at rallies, help get out the vote, or even lead their peer's campaign. In addition, they also use their networks to help respond to crises quickly. For example, anecdotal evidence indicates that networks formed through international scholarship and fellowship programs have brought together teams of public health experts, scientists, and policymakers to address COVID-19 globally (Duhigg, 2020).

The social glue of these networks often appears to stem from the shared experience of quality overseas education, where alumni learned trust and work with others from different cultures and background, and a vision of a better future. For example, an alumni association in Ghana regularly supports each other, celebrates and mourns together, and shares knowledge on how to advocate for change across fields (Campbell & Lavallee, 2019). Keck and Sikkink (2014) also write about the power of international advocacy networks and the way organizations support each other across borders to drive policy change, promote human rights, and change discriminatory practices within countries. Alumni associations are these advocacy groups: Campbell and Baxter (2019) found evidence of national alumni associations that turn into social advocacy organizations, often with the support of their scholarship funders. These alumni associations open their doors to others with similar passions and fight for improvements in public health services and human rights, encourage youth civic engagement, and promote disability rights – making lasting changes for marginalized individuals in Georgia, Ghana, and Mongolia. These activities were in addition to other work to select new candidates for the scholarship, keep up social ties among graduates, or participate in the sustainable development initiatives of the country. Their work was transformative, pushing new agendas, teaching new classes, and bringing new possibilities to their fellow citizens.

International scholarship alumni groups are exceptionally well positioned to address the collective challenges we all face today. The evidence strongly suggests alumni already self-organize to advocate and work for a better future – across scholarship programs, across professions, across countries – to tackle today's most complex and pressing problems. Unfortunately, many international scholarship programs are still in the early stages of supporting their alumni and that alumni support remains siloed. Few organizations have the capacity to fund or guide their alumni at even half the level of the attention reserved for current grantees. And those who do fund alumni tend to make funding available *only* to their grantees instead of pooling money or programming across scholarship alumni associations or networks that welcome in other members with similar goals, such as disability rights or environmental advocacy. Given the challenges facing our societies – and our planet – it seems somewhat surprising that funders do not pool their funds to support these grand challenges.

I conclude this chapter from my home in California, on a day where record-breaking wildfires roar through the state's forests, while smoke plumes billow into the atmosphere and ash falls from the sky. I can't help but imagine the transformation possible if we bring together alumni from international scholarships. What might be possible if they work together to hold local or national governments accountable, educate their peers and neighbors, and paint a vision of the future on a healthier planet – to holistically support the vision of the world as laid out in the SDGs?

NOTE

1. The bibliography is available at http://bit.ly/sprn-bibliography.

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