INTERNATIONAL SCHOLARSHIPS IN HIGHER EDUCATION

Pathways to Social Change

Edited by Joan R. Dassin,
Robin R. Marsh, and Matt Mawer

International Scholarships in Higher Education

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• Matt Mawer
Editors

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Acknowledgments

The idea for this book emerged from a meeting held in Boston in May 2015. At that time, we agreed on the need to demarcate a nascent field of inquiry and to build a stronger community of researchers, policymakers, and practitioners based on our shared interest in scholarships at the nexus of international education and development. We have now transformed that interest into a volume joining together original research and lessons gleaned from decades of experience about scholarships and social change. During this process, our contributors have been extraordinarily patient and supportive. We are grateful for their talent and dedication to producing a book that is much more than a compilation of individual chapters.

We are also grateful to the Ford Foundation for providing financial support for a memorable workshop held in October 2016 at the International House of Columbia University in New York City. With the Foundation's resources, we brought together contributors from five continents to share their reflections on decades of research and practical experience with international scholarships. Special thanks should go to Joyce Moock, who provided invaluable stimulus as an external expert throughout the three-day meeting. The workshop helped us develop the book's overarching themes and build a shared understanding of our commonalities—and differences—in addressing them.

Finally, meeting and interacting with hundreds of scholarship holders has left us with little doubt that international education, and the scholarships that widen access to it, adds great value to the lives of individual beneficiaries and to societies at large. Yet we also recognize the pressing need for better

data and analysis to guide scholarship programming and policy decisions. A new and dynamic field is emerging that will explore how international scholarships operate in today's world of fast-paced technological, political and economic change. It will also provide guidance on how to respond to the enormous demand of youth worldwide for the knowledge and skills they need to succeed and contribute to their countries. Through this research field and our community of practice, open to all, we hope to achieve greater understanding of how international scholarships can be a powerful force for social change and learn how best to harness that power to create more just and equitable societies.

Boston
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PART I

The Landscape

CHAPTER 1

Introduction: Pathways for Social Change?

Joan R. Dassin, Robin R. Marsh, and Matt Mawer

1.1 Introduction

At the dawn of the new century, the World Bank Task Force on Higher Education and Society released a prescient report, entitled 'Higher Education in Developing Countries: Peril and Promise'. The study drew renewed attention to "the role of higher education in supporting and enhancing the process of economic and social development" (2000, p. 15). Coming after more than two decades of focus on primary education, the report posed questions that have proved critical for today's knowledge-driven economy. Access to quality higher education drives national competitiveness, yet chronic underfunding, limited physical and human capital, poor governance and management systems and outdated curricula continue to affect universities in many parts of the world. The report's conclusion is relevant

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today: "While the benefits of higher education continue to rise, the costs of being left behind are also growing. Higher education is no longer a luxury: it is essential to national social and economic development" (2000, p. 14).

International higher education has played a fundamental role in training leaders worldwide and in influencing broader development processes. Substantial research documents trends in international educational mobility (British Council 2014; IIE 2016a; IIE 2016c; UNESCO 2016) and the benefits of international study both to individuals (e.g. Findlay et al. 2012; Wiers-Jensson 2008) and to wider society (Solimano 2008; Spilimbergo 2008; Stapleton et al. 2016). However, the role of scholarship programs in enabling access to quality higher education and creating pathways to social change—not only for individual beneficiaries but for their societies as well—is less widely articulated and researched. This book seeks to address the gap from multiple perspectives. It brings together academic researchers and practitioners with deep experience in designing, implementing and assessing international scholarship programs. The text explores the multiple connections among a diverse array of scholarship programs, their beneficiaries and those individuals' eventual role in changing and transforming society. Taken together, these connections constitute the social impact of international scholarship programs—the focus of this book.

The time is ripe for a book on this subject. Several reasons should be highlighted. First, increased intentionality in program design and greater focus on scholarship program outcomes are evident among governments and private donors alike. Both are increasingly concerned with the individual and social impacts of their investments. Second, research and evaluation in this field have blossomed in recent years, generating results and also raising significant methodological questions. Third, the world urgently needs sustainable solutions to a host of global problems. Rising inequality worldwide has offset gains obtained by a decline in extreme poverty. Climate change has intensified natural disasters and food insecurity in some of the world's poorest and most vulnerable countries, where already precarious education and health systems are under tremendous pressure to meet new demands and contain evolving threats. As this book makes clear, international scholarships play a powerful role in developing local talent, building institutional capacity and strengthening both public and private responses to these profound development challenges.

1.2 Scholarships and Social Change

This book focuses on mapping, analyzing and assessing the multiple pathways from international scholarships to positive 'social change'—disruptions to the status quo that lead to more equitable, sustainable, inclusive and prosperous communities. Positive social change, in our view, unleashes opportunities for individuals and communities to reduce injustice and increase well-being in all forms. These changes may be intellectual, economic, social, cultural or environmental in nature, but their common feature is an impact on issues or problems that transcend an individual's educational trajectory. It is to this kind of social change that we argue international scholarship programs can (and do) contribute.

There are numerous 'pathways' by which scholarship programs and award recipients break down barriers and foster positive change. Five such routes are highlighted in this book:

1. The 'change agent' pathway—where individual scholarship recipients generate positive social change through personal action;
2. The 'social network' pathway—where networks formed by scholarship holders and alumni catalyze positive social change through collective action;
3. The 'widening access' pathway—where scholarships contribute to social mobility and positive social change by broadening access to international education for talented students from marginalized groups;
4. The 'academic diversity' pathway—where scholarship programs influence host academic institutions to be more inclusive of high-performing, non-traditional students;
5. The 'international understanding' pathway—where scholarship programs promote inter-cultural communication, tolerance and international cooperation between cultures and countries.

These pathways, particularly the first four, are explored in detail in the book's thematic chapters and case studies. To foreshadow these discussions, we outline their basic characteristics below.

1.2.1 The Change Agent Pathway

The classic leadership theory of change posits that investing in individuals' capacities transforms their ability to influence the institutions and organizations where they work. Studies of scholarships aimed at the change agent pathway typically track recipients' promotions to managerial positions, higher levels of responsibility and autonomy and increased earnings. Successful outcomes on these indicators are taken as evidence that advanced study enables graduates to apply greater knowledge and skills to their subsequent employment. Increased capacity, in turn, may generate broader impacts at a societal level, such as improved policies and more effective administration, particularly in public agencies (World Bank Institute 2010). While traditional capacity-building scholarship programs enable students to acquire expertise in key fields, other scholarships have expanded programming beyond academic training to include skill building and experiential learning that enhance students' leadership capacities. The nature and effectiveness of these enhancements are a topic in this book. What role can and should scholarship programs play in broadening the experience of recipients during study and investing in their post-graduation careers? Although the evidence is still thin, studies have shown that international scholarship recipients who later thrive as social change leaders attribute critical thinking, exposure to diverse cultures, civic participation and post-graduation international networks and collaboration as key factors in their success (Marsh et al. 2016; Martel and Bhandari 2016).

1.2.2 The Social Networks Pathway

A second pathway to social change is through linking individual recipients' scholarly pursuits to the establishment and nurturing of rich and resilient social networks. As most knowledge-based and socially focused professions are inherently collaborative, those aspiring to create change may seek to establish new networks among likeminded—and similarly trained—individuals. Scholarship programs can facilitate social networks by funding many individuals from a single organization, sector or country to undertake advanced study, creating a critical mass for innovation and mutual support.

The book offers examples to gauge whether a critical mass of networked scholarship recipients *does* influence change more profoundly than dispersed individual change agents. The Open Society Foundations (OSF), for instance, are convinced of the power of alumni networks to support open

society movements under hostile and post-conflict conditions, for example, among their scholarship fellows in Burma, Ukraine, and Egypt (see Brogden, Chap. 7). Early results from the Ford Foundation International Fellowships Program (IFP) tracking study show that 95% of IFP alumni have maintained contact with fellow alumni and are collaborating on “various social justice issues and initiatives” (Martel and Bhandari 2016, p. 3). A recent study provides numerous examples of African alumni of international universities who have leveraged their international social and professional networks to withstand and overcome political and economic crises at home and launch new career opportunities (Marsh et al. 2016). In contrast, recipients who are not well networked and who face negative work or political environments at home are often unable to overcome these barriers and find their pathways to social change blocked (Campbell 2016).

1.2.3 The Widening Access Pathway

A third pathway to social change is opened by scholarship programs that prioritize access to quality higher education among individuals and communities who are typically overlooked by, or unprepared to participate in, traditional scholarship selection processes. Individuals may be excluded from competitive programs because they live in remote rural areas and therefore lack application information. They may have attended poorly performing schools, lack knowledge of a foreign language or not consider themselves competitive with more privileged students. Scholarship programs that ignore these types of constraints and pursue selection strategies based solely on standardized academic criteria tend to perpetuate elite capture and social inequality. Although history is replete with examples of international students from relatively prosperous families who later became social change leaders (e.g. Kofi Annan, Jawaharlal Nehru and Juan Manuel Santos, among many others), targeted selection mechanisms are essential to identify and nurture leadership from within marginalized communities.

Proactive outreach and recruitment of high-potential and socially committed members of marginalized communities (e.g. indigenous, rural, female, ethnic and religious minorities) for quality tertiary study is a promising pathway for social mobility and change in their communities of origin (Clift et al. 2013; Mansukhani and Handa 2013; Martel and Bhandari 2016). The wide exposure to new ideas afforded by an international education may further open this social change pathway as scholars learn and

evaluate the transferability of these ideas to situations back home, in addition to establishing relationships and potential allies for resource mobilization and movement building. The very fact that these individuals are awarded prestigious international scholarships helps to counter systemic discrimination and social exclusion.

1.2.4 The Academic Diversity Pathway

A fourth pathway to social change is the international scholarship programs' potential influence on higher education host institutions. Often programs have minimal influence on the educational institutions that receive their awardees; there is a tacit 'hands off' policy once the scholarship recipients are admitted and enrolled. Some programs, however, have engaged more actively in redefining the relationship between academic institutions, scholarship recipients and funding programs. The IFP, for instance, encouraged participating universities to expand their admissions criteria to accommodate fellows who had been out of school for a long time, had low foreign language skills or were living with disabilities. Developing academic and personal support services for these fellows also enabled these institutions to accommodate other non-traditional students (Zurbuchen and Bigalke 2014). Creating new structures to handle non-traditional access has also been a pervasive concern for refugee population scholarships, such as the United Nation's Albert Einstein Academic Refugee Initiative (DAFI), where verifiable credentials of academic merit may be unavailable. By catalyzing new thinking about access and participation within the higher education sector—and providing funding incentives to make substantive changes—international scholarship programs for non-traditional university cohorts can have tremendous influence on generations that follow along the same, now established, pathways.

1.2.5 The International Understanding Pathway

Finally, we acknowledge the well-travelled but more indirect pathway of creating social change through the exchange of ideas and cross-cultural understanding afforded by international study. Some of the most enduring international scholarship programs—the Fulbright Scholar Program, the Commonwealth Scholarship and Fellowship Plan and the German Academic Exchange Service (DAAD) scholarship programs—have supported exchanges not only to advance research and knowledge but, as importantly,

to further global tolerance, peace and security. The robustness of these outcomes is contested (Wilson 2015), but the rationale has underpinned decades of scholarship programming.

This pathway may become increasingly important if the wave of anti-globalization sentiment continues to rise across Europe, the United States and elsewhere, potentially leading to a hollowing out of some structures that have been major drivers of student mobility and inter-cultural exchange (e.g. the European Union). International student flows are significantly and positively correlated with perceived openness of the host country (Caruso and de Wit 2015); therefore, more strident nationalism and sometimes virulent anti-immigration rhetoric might lead to a hardening of visa policies and reduced international student exchange. Governments may also come under increasing pressure from inward focused ideologies to reduce foreign assistance, including financial support for international scholarships to developing countries. In this context, support for international scholarship programs intended to promote global understanding and foster commitment to interdependent security acquires heightened significance as a bulwark against nationalistic or xenophobic isolationism.

1.3 International Educational Mobility

International student mobility and transfer of human capital across borders have grown remarkably in the twentieth and twenty-first centuries, facilitated by the multi-faceted forces of globalization. The expansion in transportation technology, internet access and mobile technologies has spurred both interconnectivity and mobility worldwide (Collier 2013). These trends have also opened new avenues for accessing tertiary education, including the explosive growth of online and distance learning (Guruz 2008). Countries and communities that were isolated from global educational systems only a few decades ago are now significant contributors to the movement of students and skilled professionals across borders. China is the most prominent example, assuming an increasingly dominant presence as the leading 'sending' country (OECD 2014) and, more recently, as a major destination country for international students (e.g. Haugen 2013). Similar experiences, albeit in smaller numbers and with differing socio-political dynamics, have emerged across every continent throughout most of the last half-century (Altbach et al. 2009).

The number of globally mobile higher education students is now estimated at 4.5 million: over double the equivalent figure at the turn of the

millennium (OECD 2016). Data sources on the composition of this international cohort are not always in agreement, but all indicate that the majority of international students study in Europe (48%)—especially the UK, Germany, and France—or the United States (21%) (Caruso and de Wit 2015). At the same time, new regional hubs have proliferated, particularly in Asia and the Arab states, which in 2014 hosted 7% and 4% of globally mobile students, respectively (UNESCO 2016). The increase in outward-bound students from China has been especially pronounced: in 2014, more than 712,000 Chinese students were studying abroad, nearly four times the number of Indian students, the next most numerous group (UNESCO 2016). All figures point to a compelling trend: global student mobility has been rising continuously over recent decades and is widely expected to continue to do so in the future (Kritz 2015).

Notwithstanding these trends, participation in tertiary education is highly uneven across the globe, with huge disparities between high- and low-income regions, ranging from 74% to 7%, respectively (World Bank 2016). Internationally mobile students represent an even smaller subset of this highly stratified population: in 2014, 6% of students enrolled in tertiary education in OECD countries were international students (OECD 2016). The distribution of 'sending countries' is also skewed toward high-income and emerging economies: of foreign students in the U.S. in 2015, for instance, only one sub-Saharan African country, Nigeria, was listed among the top 25 places of origin (IIE 2016a). Data on the socio-economic profiles of globally mobile students are scarce, although the high percentage of those self-funding is an indication that international mobility, particularly from south to north, is largely restricted to elites (Dassin et al. 2014).

International education is highly lucrative for host countries. Although they constitute a small minority of the tertiary education population overall, international students generate substantial revenue for domestic universities. In the U.S. alone, foreign students generated an estimated USD 30.5 billion in revenue in 2015 (IIE 2016b). Many other large economies (notably the UK, Australia, and Canada) export the equivalent of billions of USD in educational and related services (Caruso and de Wit 2015), and most OECD countries now charge international students higher fees than domestic students to take advantage of new student markets (OECD 2015). Funding for study abroad is more readily available to potential students within higher-income countries and/or within more affluent socio-demographic groups. For this reason, numerous governments and philanthropic organizations have invested heavily in scholarship programs

that aim to expand access to international higher education, both for their own domestic students and for foreign nationals.

1.3.1 The Role of International Scholarship Programs

Funding for international study has a venerable history: philanthropic investment in academic mobility scholarships dates to the colonial period (e.g. Pietsch 2011). Throughout the twentieth century, funding for scholarships became a mainstay of governmental commitments to foreign aid and, in some cases, international relations or public diplomacy. Some of these programs have remarkable longevity and name recognition: the Fulbright Programs, the Rhodes Scholarships, the Colombo Plan Long-Term Scholarships Program and the Commonwealth Scholarship and Fellowship Plan, to highlight a small sample. During the immediate post-World War II and Cold War eras, both Western and Soviet governments supported extensive scholarship programs overtly aligned with their diplomatic and foreign policy goals (Tsvetkova 2008) in critical nation-building fields such as public administration, health and agriculture.

By the latter half of the twentieth century, a new engagement with scholarships as a vehicle for overseas development assistance underpinned widespread investment by governments: for instance, in the Netherlands, Germany, the UK and Australia. Large private foundations, including the Rockefeller Foundation, the Carnegie Corporation of New York and the Ford Foundation, and multilateral bodies, such as the World Bank, the Asian Development Bank and the World Health Organization, also invested heavily in scholarships to promote capacity building in developing countries. At the start of the twenty-first century, scholarships have assumed a much more prominent role in economic development and poverty reduction efforts undertaken by many governments and private philanthropic actors.

Despite this substantial investment, a limited number of globally mobile students are currently funded through scholarship programs, particularly in the world's poorest countries. A recent report found that in 2014/2015, only 5% of internationally mobile students from developing countries received scholarship awards (excluding those granted by host universities), while only 1% received funding directly from foreign or domestic governments (IIE 2016). Additionally, the proliferation of scholarship investments has yielded a diverse and uncoordinated funding landscape. By the end of the

2000s, for instance, Fiji was in receipt of scholarships from the governments of Australia, New Zealand, China, India, Japan, Korea, Cuba, Morocco and the UK, in addition to multiple private sources (AusAID 2011).

Figures on funding share understate the importance of scholarship programs in addressing global inequality and specific development challenges. The United Nation's 2015 Sustainable Development Goals (SDGs) include, for the first time in such an agenda, an affirmation of scholarships as a prime instrument of sustainable development, as made explicit in Goal 4b:

> 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 vocations training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries. (United Nations 2015, p. 21)

In approving Goal 4b as part of the set of 17 Global Goals and 169 associated targets that comprise the SDGs (UN 2015), the UN General Assembly indicated its willingness to encourage scholarship investment despite criticisms leveled at such programs in the past. UNESCO, through their Education for All Global Monitoring Report (2014), has been highly skeptical of scholarship programs as a form of educational aid, particularly when imputed student costs (e.g. waived tuition fees) are included within the envelope of aid-spending by governments. Additionally, the regions targeted by Goal 4b suffer most acutely from 'brain drain', both through general outward migration of the tertiary-educated population (Capuano and Marfouk 2013) and through non-return of internationally educated citizens (Kim et al. 2011).

A further complication is the lack of reliable data on scholarship programs. Basic information on programs' start dates, annual funding levels and numbers of applicants is often unavailable or incomplete (Perna et al. 2014). When available, this information rarely includes disaggregated data on the socio-economic characteristics of recipients (IIE 2016d), important for establishing whether scholarships widen access to international education or perpetuate the advantages of elites. Even establishing a definition for the 'scholarships' being advocated under SDG target 4b is far from straightforward, as papers commissioned by UNESCO (e.g. Balfour 2016) have demonstrated.

Many of the critical questions raised about scholarship programs are exactly those with which we are concerned in the present book: are scholarship programs being designed in optimal ways to capitalize on their potential, particularly their potential to reduce unequal access to higher education? Are scholarships synergistic and complementary with other initiatives designed to build technical capacity and knowledge geared toward development? Is physical return still an essential indicator of success? Exploring these issues allows us to bring a wide array of national and programmatic experience to bear on our key question: in what ways, and to what extent, do international scholarship programs create pathways to positive social change in developing countries? Answers to this question by our contributing authors form the core of this book.

1.4 Scope and Organization of the Book

Accordingly, the book is structured around thematic chapters and case studies that explore facets of the relationship between scholarships and positive social change. Thematic chapters focus on a single topic that cuts across international scholarship programs, including funding trends, scholarships for capacity building in development-related fields and programmatic features such as selection criteria and the role played by host institutions. We highlight the complex dynamics of return in the post-scholarship period, often seen as the crux of international scholarship outcomes (Volkman, et al. 2009; Capuano and Marfouk 2013). Finally, we explore the state of understanding on scholarship outcomes, focusing on the research and evaluation literature, critiquing existing approaches and proposing alternatives.

The case studies, in contrast, examine a specific scholarship program or group of related programs in much greater detail. Three primary factors inform our selection of cases. First, despite a common commitment to the value of higher education, scholarship programs vary substantially in their fundamental design. We have attempted to capture this variation in our case studies and have thus included schemes that fund various degree levels (e.g. undergraduate, masters, doctorate) and those that mix full degree mobility with credit mobility (e.g. studying abroad for part of a degree). We have also included cases with differing sender-host relationships. Second, a recent study identified scholarship programs of different types in nearly 200 countries (Perna et al. 2014). We have been mindful of this global scope in our selection of case studies from different world regions and policymaking

contexts. Finally, we have selected case studies that illustrate some of the most salient issues in designing, operating and researching scholarship programs.

Inevitably, there are some omissions. We have not, for instance, included a dedicated case study of several of the highest profile scholarship schemes, such as the Fulbright Programs, Erasmus and Erasmus+ Programs, or the Ford Foundation International Fellowships Program (IFP). These (and others) are referred to within some of the thematic chapters as illustrative of larger, crosscutting topics. We have also chosen not to focus on scholarships from large corporate entities because they tend to have much narrower aims linked closely to the sponsors' commercial interests.

1.4.1 Overview of the Sections

The flow of sections in the book advances in chronological relationship to the scholarship experience. We move from broad trends, to design issues, to the dynamics of the immediate post-scholarship period and finally to assessing program outcomes.

The first section—'The Landscape'—describes trends in funder commitments to scholarship programs from broader political and economic perspectives. Anna Kent reviews contemporary trends in support and funding for international scholarship programs, examining the intersections between development priorities, funding and politics in understanding the ebb and flow of support for particular programs. Ad Boeren examines the relationship between international scholarships and other higher education-focused programs within the ambit of capacity building initiatives, reflecting on the level of complementarity and synergy among differing interventions with similar aims. Finally, Yolande Zahler and Frederico Menino assess the political context, foreign policy goals, and preliminary impacts of Brazil's flagship 'Science without Borders' program (Ciências sem Fronteiras: CSF).

The second section—'Investing in Individuals'—examines the programmatic and institutional facets of the scholarship experience. Everlyn Anyal investigates the complexities of identifying, recruiting and selecting scholarship recipients with the leadership qualities likely to shape social change, using the Ford Foundation's IFP as her primary model. Aryn Baxter discusses the aspects of scholarship program design and international university

study that enhance recipients' capabilities and commitment to influence social change, arguing for greater collaboration between host academic institutions and scholarship programs. Zoe Brogden and John Kirkland present detailed case studies of the Open Society Foundations and Commonwealth Scholarship and Fellowship Plan, respectively. Both are long-running scholarship programs with differing geopolitical contexts and outlooks on program design but share a common objective of empowering internationally trained change agents.

In the third section, we turn attention to 'The Dynamics of Return'. Anne Campbell analyzes how decisions about post-scholarship trajectories may be shaped by the balance between individual agency and scholarship conditionality. Martha Loerke approaches the return question from the perspective of scholarship program design, asking what programming can be adopted to encourage outcomes that support individual accomplishment and freedom, as well as social change and innovation in sending countries. Robin Marsh and Ruth Uwaifo Oyelere situate these analyses within the larger frame of the increasing global movement of labor and talent and the associated benefits and costs of 'brain drain', 'gain', and 'circulation'. Finally, the case study by Qiang Zha and Dongfang Wang on the Chinese Government Scholarship Program illustrates the arc of 'brain drain' to 'brain gain' in China and how economic conditions and specific policies—together with strong state backing—have influenced return decisions by skilled emigrants and graduates of international universities.

The fourth section—'Understanding Outcomes'—examines the methodological and conceptual difficulties of measuring the long-term impacts of scholarship programs. Matt Mawer reviews what is known from research on the outcomes of scholarship programs, focusing on the strengths and limitations of supporting evidence for some of the more common claims about scholarship impacts. Mirka Martel further develops this theme in her examination of research approaches to understanding the outcomes of scholarship programs, critically assessing the merits and drawbacks of widely used techniques and proposing alternative methodologies. Joan Dassin and David Navarrete draw our attention back to a more fundamental question: how shall we conceptualize 'social impacts' and how should this understanding shape our approach to analyzing the role of international scholarships in promoting social change? To complete the section, Barry Burciul and Kim Kerr examine the experience of the Mastercard Foundation Scholars Program, which has envisioned a comprehensive evaluation and learning framework since its outset.

1.4.2 *Looking to the Future*

The concluding section of the book unfolds in three chapters. In the first, three prominent African educators reflect on the impact and place of scholarships in the continent's evolving 'ecosystem' of higher education. In the second, an Indian scholarships expert considers the apparent paradox that despite his country's record economic growth and push toward global competitiveness, the government has paid little attention to international education, relying instead on external donors. In the final chapter, the editors revisit the key questions of the book as a whole and reflect on the themes that emerge about the experience and impacts of international scholarships. What specifically have we learned about the individual and collective impacts of scholarships on social change in sending countries? Are there adjustments in design and implementation that will enhance these impacts? What questions should inform a future research agenda, and, finally, what practical steps can be taken to share findings and help build a sustained field of research and practice on international scholarships and social change?

A caveat is in order. There are several questions related to international scholarships that this book does not attempt to answer. We do not compare the value of investing in international scholarships with other investments in higher education or with other types of development initiatives more generally. Governments and private donors will decide which investments are optimal, based on their goals, priorities and funding availabilities. We do argue, however, that continued investment in international scholarships should always be part of the mix of funded activities, particularly for recipients from disadvantaged communities and in the world's least developed countries, as suggested by SDG Target 4b.

While the book summarizes what we know about international scholarship impacts and outcomes, the evidence often proves somewhat insufficient and unsatisfactory. A major conclusion, drawn from both our professional experience and from the process of compiling this text, is that comprehensive data on scholarship recipients and their post-graduation trajectories are frequently unavailable or partial. This finding underpins our strong recommendation for better tracking and tracing of recipients, as well as deeper outcome studies and analysis.

These limitations notwithstanding, we expect this book to mark the emergence of a distinct field of research, policy, and practice dedicated to

international scholarships and positive social change. The volume joins the critical analyses of academic researchers with the practical experience of donors and administrators who are deeply involved in the design and implementation of scholarship programs. Often these two communities overlap, as individuals move between research and administration, and as donors draw upon researchers' expertise to help shape their actual investments in scholarship programs.

As editors, we are convinced of the need for mutually enriching dialogue between academic and policy analysis based on empirical research and the extensive, contextualized experience of practitioners charged with the successful implementation of scholarship programs. The expertise within both of these constituencies resides across the world, as our contributing authors from Africa, Asia, Latin America, the United States, Europe and Australia illustrate. Their inevitably diverse perspectives reflect the wide array of issues related to social change objectives that are raised by the operation and outcomes of scholarship programs. And like the programs themselves, the scope of this text is fundamentally global. Our aspiration is that it will be useful to academics, practitioners and investors interested in higher education and international scholarships for social change around the world.

References

Altbach, P., Reisburg, L. and Rumbley, L. (2009). Trends in Global Higher Education: Tracking an Academic Revolution – A Report Prepared for the UNESCO 2009 World Conference on Higher Education. Paris: UNESCO.

AusAID. (2011). AusAID Fiji ADA/ARDSImpact study 2011. Canberra: AusAID.

Balfour, S. (2016). SDG Target 4b: A global measure of scholarships [ED/GEMR/MRT2016/P1/10]. Paper commissioned for the Global Education Monitoring Report 2016, Education for people and planet: Creating sustainable futures for all. Paris: UNESCO.

British Council. (2014). Postgraduate Student Mobility Trends to 2024. London: British Council.

Campbell, A. (2016). International scholarship graduates influencing social and economic development at home: The role of alumni networks in Georgia and Moldova. Current Issues in Comparative Education, 19(1), pp. 76–91.

Caruso, R., de Wit, H. (2015). Determinants of Mobility of Students in Europe. *Journal of Studies in International Education*, 19(3), pp. 265–282.

Capuano, S., and Marfouk, A. (2013). African Brain Drain and Its Impact on Source Countries: What Do We Know and What Do We Need to Know? *Journal of*

Comparative Policy Analysis: Research and Practice, *15*(4), 297–314. doi: 10.1080/13876988.2013.813122
Clift, R., Dassin, J., and Zurbuchen, M. (2013). Linking higher education and social change: Ford Foundation International Fellowships Program. New York: Ford Foundation International Fellowships Program.
Collier, P. (2013). *Exodus: How migration is changing our world*. New York: Oxford University Press.
Dassin, J., Enders, J. and Kottmann, A. (2014). Social Inclusiveness, Development and Student Mobility in International Higher Education: The Case of the Ford Foundation International Fellowships Program. In Streitwieser, B. (ed.) Internationalization of Higher Education and Global Mobility (pp. 73–86). Didcot: Symposium Books.
Findlay, A., King, R., Smith, F., Geddes, A. and Skeldon, R. (2012). World Class? An investigation of globalization, difference and international student mobility. *Transactions of the Institute of British Geographers, 37 (1)*, 118–131.
Guruz, K. (2008). Higher education and international student mobility in the global knowledge economy. Albany, NY: State University of New York Press.
Haugen, H. Ø. (2013). China's recruitment of African university students: policy efficacy and unintended outcomes. *Globalisation, Societies and Education*, *11*(3), 315–334. doi: 10.1080/14767724.2012.750492
Institute of International Education (IIE). (2016a). Open Doors Data. Fast Facts. [Online] Available at: http://www.iie.org/Research-and-Publications/Open-Doors/Data/Fast-Facts (Accessed 25 Dec 2016).
Institute of International Education (IIE). (2016b). Open Doors Data. Special Reports: Economic Impact of International Students. [Online] Available at: http://www.iie.org/Research-and-Publications/Open-Doors/Data/Economic-Impact-of-International-Students#.WGBhKLGZMdU (Accessed 25 Dec 2016).
Institute of International Education (IIE). (2016c). Project Atlas. [Online] Available at: http://www.iie.org/Research-and-Publications/Project-Atlas#.WGA69rGZN-U (Accessed 25 Dec 2016).
Institute of International Education [IIE]. (2016d). Scholarships for Students from Developing Countries: Establishing a Global Baseline (ED/GEMR/MRT/2016/P1/11 REV). Paper commissioned for the Global Education Monitoring Report 2016, Education for people and planet: Creating sustainable futures for all. Paris: UNESCO.
Kim, D., Bankart, C. and Isdell, L. (2011). International doctorates: trends analysis on their decision to stay in US. *Higher Education*, 62(2), 141–161. doi: 10.1007/s10734-010-9371-1
Kritz, M. (2015). Why do students differ in their rates of outbound student mobility? *Journal of Studies in International Education*, *20*(2), 99–117. doi: 10.1177/1028315315587104

Mansukhani, V. and Handa, N. (2013). *Opening doors: Ten years of the Ford Foundation International Fellowships Program in India*, New Delhi: Ford Foundation International Fellowships Program.

Marsh, R., Baxter, A., Di Genova, L., Jamison, A., and Madden, M. (2016). *Career Choices, Return Paths and Social Contributions: The African Alumni Project, Full Report*, Toronto: The MasterCard Foundation.

Martel, M. and Bhandari, R. (2016). *Social Justice and Sustainable Change: The impacts of higher education*, New York: Institute of International Education.

OECD (2015). *Education at a Glance 2015: OECD Indicators*. OECD Publishing.

Organisation for Economic Co-Operation and Development [OECD]. (2016). Education at a glance 2016. Paris: OECD.

Perna, L., Orosz, K., Gopaul, B., Jumakulov, Z., Ashirbekov, A., and Kishkentayeva, M. (2014). Promoting Human Capital Development: A Typology of International Scholarship Programs in Higher Education. *Educational Researcher*, *43* (2), 63–73. doi: 10.3102/0013189X14521863

Pietsch, T. (2011). Many Rhodes: Travelling scholarships and imperial citizenship in the British academic world, 1880–1940. History of Education: Journal of the History of Education Society, 40(6), 723–729. doi: 10.1080/0046760X.2011.594096

Solimano, A, ed., (2008). The International Mobility of Talent: Types, Causes, and Development Impact. Oxford: Oxford University Press.

Stapleton, A., Mecea, M., and Beqiri, L. (2016). The European Union's contributions to international stability: the role of education and study mobilities. *AI and Society,* 31(3), pp. 401–312.

Spilimbergo, A. (2008). Democracy and foreign education. *The American Economic Review,* 99(1), pp. 528–543.

Tsvetkova, N. (2008). International education during the cold war: Soviet social transformation and American social reproduction. *Comparative Education Review,* 52(2), 199–217.

United Nations Educational, Scientific, and Cultural [UNESCO] Institute for Statistics, 2014. Global Flow of Tertiary-Level Students. [Online]. Available at: http://www.uis.unesco.org/Education/Education/Pages/international-student-flow-viz.aspx (Accessed June, 2016).

United Nations Educational, Scientific, and Cultural Organization [UNESCO]. (2014). EFA Global Monitoring Report 2013/14 – Teaching and learning: Achieving quality for all. Paris: UNESCO.

United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development [A/RES/70/1].[Online]. Available at: https://sustainabledevelopment.un.org/post2015/transformingourworld/publication (Accessed 29 Nov 2016).

Volkman, T., Dassin, J. and Zurbuchen, M. eds. (2009). Origins, Journeys, and Returns: Social justice in international higher education. New York: Social Science Research Council.

Wiers-Jenssen, J. (2008). Does Higher Education Attained Abroad Lead to International Jobs? Journal of Studies in International Education, 12 (2), 101–130. doi:10.1177/1028315307307656

Wilson, I. (2015). Exchanges and Peacemaking: Counterfactuals and Unexplored Possibilities. *All Azimuth,* 4(2), pp. 5–18.

World Bank. (2000). Higher education in developing countries: Peril and promise. Washington, DC: The World Bank.

World Bank Institute. (2010). Joint Japan/World Bank Graduate Scholarship Program. Tracer study VIII. World Bank: Washington, D.C.

World Bank. (2016). *World Development Indicators: Participation in Education.* [Online]. Available at: http://wdi.worldbank.org/table/2.11. (Accessed 25 Dec 2016).

Zurbuchen, M and Bigalke T, ed. (2014). Leadership and Social Inclusion in International Higher Education. New York: Palgrave Macmillan.

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CHAPTER 2

Recent Trends in International Scholarships

Anna Kent

2.1 Introduction

The concept of tertiary scholarships is a simple one; support a student to achieve their full academic potential with funds and other assistance. Adding an international aspect complicates the framework a little, but essentially the model remains the same. Yet behind this simple structure is a complex interplay of motivations, objectives, funding sources and outcomes. Multiple influences are expressed in scholarship programs via the design, implementation, funding and even in the closure of international scholarship programs.

Scholarship apparatus, infrastructure and policies, such as a focus on geographic areas or levels of study, can have a significant impact on gender equity and access and will impact on the outcomes the program can achieve. For example, the living allowance provided to students, and whether dependents are supported, changes the cohort of students who are attracted to the scholarship, and the cohorts and populations targeted may substantially influence final outcomes. In the past, many of these administrative decisions have been made without significant thought to the (perhaps unintended) outcomes they might create. However, as research into, and evaluation of,

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scholarships grows more sophisticated and voluminous, the impact of all policy decisions is being more closely and properly analyzed.

The bulk of international tertiary scholarships support students to study in developed countries—countries that already play host to hundreds of thousands of privately funded international students. However, there are other international scholarship programs supporting students to study in their own region or 'South to South' scholarships for students from developing countries to study in another developing country. These scholarship programs are challenging the asymmetrical flows of students that now dominate and are supporting the development of non-Western tertiary education systems. The development of tertiary systems in the mold set by countries such as the USA, UK, Australia and Canada, in countries like Saudi Arabia, Malaysia and elsewhere, has led to a growing debate around the value of drawing students away from their domestic system and into international study. For smaller nations, such as those in the Pacific, concerns about brain drain are real and tangible. The acceptance of the Western tradition of knowledge dissemination that these new and established higher education systems embody is not a given. Debates about the role of education in other contexts, and the role of economic power in the globalization of education, are also seen across disciplines.

This chapter will address many scholarship programs, but will have a special focus on Australia. The Australian government has funded international scholarships for more than 60 years, and international scholarships played a formative and catalytic role in the development of the international education sector that now rates as one of Australia's most profitable exports. Australia is an important and historically significant case for examining trends in scholarship programs, but not all facets of the Australian experience are archetypal. The landscape of private foundation philanthropic scholarships, for instance, is very different in the USA than it is to Australia: although this may be changing, as will be discussed later in the chapter.

2.2 'State of the Art'

2.2.1 Funders

International scholarships are designed and implemented by a wide variety of governments, semi-state organizations, foundations and philanthropists, multilateral institutions and private companies. They provide a broad range

of awards for study at vocational, undergraduate and postgraduate level, and a small number offer awards for school level (K-12). As with the rest of this volume, this chapter will focus on tertiary-level scholarships.

Both developed and developing countries are investing heavily in scholarship programs. The Australian government has a large program of development and merit scholarships and fellowships, badged under the Australia Awards banner since 2011. While the name Australia Awards is relatively new, the Australian government has provided scholarships since at least the 1940s (Purdey 2014b), with the most historically significant program being the Colombo Plan. The Colombo Plan was a broad, pan-Commonwealth aid program that brought students from Australia's regional neighbors to Australian universities. The Plan is now seen as a pivotal point in Australia's regional history: "Australians grew more aware of and interested in Asia from the 1950s through 1970s by dint of the 20,000 sponsored and many more Asian students studying in Australia during this period" (Lowe 2015, p. 452). This is especially notable given Australia was, at the time, managing immigration through a policy known as the *White Australia Policy*. From the Colombo Plan onwards, there have been a number of iterations of these scholarships, largely focused on bringing Australia's Asia Pacific neighbors to study in Australian universities and technical colleges. The Australia Awards form a large (albeit reducing) proportion of Australia's overseas development assistance budget, with a budgeted figure of AUD360 million for the 2015–16 financial year (2016a). The changing nature of the scholarships within this budget envelope will be discussed later in this chapter.

Scholarships provided by developed nations—such as the Australia Awards or the Commonwealth Scholarship and Fellowship Plan—tend to focus on bringing students from other countries into the host nation for study. In this way, international scholarships become part of the funding for domestic higher education, because fees paid by scholarship funding bodies go directly to the host country institutions where awardees study, providing a source of quasi-government funding. In addition, the living allowances often counted as part of the aid budget are spent in the donor country, on rent, groceries and other amenities. Although this is at times conceptually problematic, the common goals shared by both universities and scholarship donors (especially governments) in relation to internationalizing institutions, both pedagogically and financially, can be met through these programs.

Conversely, scholarships provided by developing or mid-income countries tend to support their own citizens to study abroad. For example, the

Vietnamese Ministry of Education has implemented several ambitious educational projects, including Project 2020 which aims to rapidly increase foreign language capabilities in Vietnam and includes a goal of an additional 20,000 Vietnamese PhD graduates by 2020. This latter target has led to a rapid expansion of government scholarships provided to Vietnamese students to study on doctoral programs overseas. A number of Indonesian scholarship programs, the most common known as the DIKTI scholarships, also aim to increase the number of citizens qualified with a research degree. These programs aim to strengthen domestic higher education systems when returning scholars re-join their institutions now armed with a doctorate and thus to reduce reliance on foreign or underqualified academics. Other programs, such as the King Abdullah Scholarship Program (KASP) and other Saudi Arabian and Middle Eastern scholarship programs, are put in place to develop the skills base of the nation. While highly valued in the destination countries such as Australia, Canada, the UK and the USA, these programs infer a current shortfall in capacity and quality within domestic tertiary systems—often caused by systemic barriers to growth—that is expected to be rectified over time as students return to their home countries as qualified academics. Although very often sponsored directly by government, state-owned corporations sometimes provide targeted scholarships in accord with central government aims. For example, Qatar Petroleum, a large state-owned company in Qatar, supports the government policy of 'Qatarization' of the workforce by sponsoring students to undertake study overseas before returning to technical and managerial roles within the organization.

In one interesting case that does not fit the developing country mold of supporting citizens to study abroad, the government of Cuba has invested significantly in sponsoring students from developing countries, such as Ghana and Timor-Leste, to study in Cuba. Unlike many government scholarships, Cuban scholarships' policy focuses significantly on health, a discipline in which the country has substantial domestic expertise (Lehr 2011). In the case of Timor-Leste, many students were supported to travel to Cuba and study medicine for 5 years, prior to returning to Timor-Leste as qualified doctors. Importantly, those five years were during a period of rapid change and instability in Timor-Leste, as it emerged from its war for independence and a generation of conflict. Scholarship recipients returning to their home country found that, in their absence, decisions about the official languages of the country and significant alteration in the education system and social environment had been made.

Nevertheless, these examples of 'South to South' scholarship programs do provide a counterbalance to issues of culturally or socially inappropriate training. This is particularly important given "the extent to which a degree obtained in a highly industrialized country is relevant to the context of the majority world has been challenged" (Lehr 2008, p. 427). Universities in many international education destination countries are under increasing pressure to ensure that all their students, domestic and international, are graduating with 'job ready' skills and with training that is adaptable to context. But without properly addressing the contexts of students coming from developing countries—for whom 'job ready skills' and adaptable training may differ substantially from peers in high-income, industrialized countries—this can lead to poor outcomes, with inappropriate contextual skills and locally relevant technical knowledge not provided.

Multilateral agencies such as the World Bank and the Asian Development Bank (ADB) are also becoming more involved in funding scholarship programs. The World Bank SPIRIT program was established in the late 2000s to send Indonesian students to top ranked universities for postgraduate studies. Similarly, the ADB/Japan Scholarship Program offers 300 postgraduate scholarships per year to students in developing countries from a region that stretches from Central Asia to the Pacific. These students are able to study in a number of participating institutions in Australia, New Zealand, Pakistan, Hong Kong, Philippines, Singapore, Thailand, Hawaii and, of course, Japan. As with many similar development scholarships, the program is designed to ensure students return to their home country and contribute to its social and economic development.

Another example of a scholarship program with several collaborating funders, like the ADB/Japan Scholarship Program, is the Fulbright Scholarships, funded bilaterally by the USA government and other national governments. The Fulbright Scholarships commenced bringing students to the USA immediately after the Second World War and aims to develop a greater understanding of the USA. Simultaneously, other nations support USA students to study in their own nation, providing a reciprocal program. Other large international scholarship programs are funded by private foundations, such as the Open Society Foundations, the MasterCard Foundation and the Atlantic Philanthropies, several of which are discussed in this volume.

Funding bodies have diverse and often multiple motivations for investing in what are relatively costly interventions. In the case of Australia, while the scholarships are branded as aid funding, Australia's national interest is

arguably well served by having a large cohort of Australian-educated professionals, academics and government operatives in its region. A Senate review into public diplomacy in 2007 asserted that "the network of current and former students provides an enormous pool of people…whom…can and do assist in promoting Australia's reputation" (Payne 2007, p. 83). In addition, the scholarships themselves form the basis of diplomatic 'bargaining'; Australia's temporary seat at the United Nations Security Council was in part secured by a rapid and short-lived expansion of the Australia Awards into Latin America and Africa. A significantly smaller Australia Awards Africa program still exists, but the Latin American Awards program was cut almost as soon as Australia took its seat at the Security Council. Previous research has concluded that because scholarships have been used by the Australian government in this manner, the Australia Awards fit more neatly into the realms of diplomacy rather than development (Kent 2012). With the current (2016) government, this dimension of Australian scholarships is being drawn more obviously, with politicians and bureaucrats now openly discussing the diplomatic role that the scholarships play. This is especially clear in the recently released *Australia Awards Global Strategy*, where investment priorities are to be decided on a number of factors, including the need to "…detail opportunities for Australia Awards to contribute to economic diplomacy and public diplomacy objectives" (DFAT 2016b, p. 10).

Finally, along with developing domestic capability and capacity, such as the awards provided by the Vietnamese, Indonesian and Saudi governments, scholarships can also be used by funding countries to develop their own tertiary education systems. For example, the Victorian Doctoral Scholarships, funded by the Victorian State government in Australia, are in place to attract very high caliber research students to Victoria, in the interests of boosting Victoria's research strength. These scholarships are also used by the Victorian government as part of its 'destination branding' activities.

2.2.2 Design

Given the variety of funding bodies that offer international tertiary scholarships, the design and functioning of the scholarship programs is similarly diverse. The basics are generally the same—students are selected, placed and then supported financially through their studies. But within this basic framework, each element allows for a number of variations which in turn impact on the way in which the scholarships are put into practice.

Selection is a key area of difference between programs. Eligibility for scholarship programs is often determined based on the target institution; for example, only those who would qualify to enter the destination course are eligible for support. In scholarship programs for postgraduate study, this often creates a significant barrier to entry for those who may not have had access to undergraduate study at a reputable institution. In the Australia Awards, for example, selection is made from a pool of already elite candidates: those who are eligible for entry into an Australian university at a Masters level. An internal review commissioned by the Australian government found that "scholarship programs may inadvertently be perpetuating prejudice and inequality through selection criteria. . ." (Gosling 2009, p. 7).

In other scholarship programs, such as the large-scale program implemented by the Ministry of Education in Kuwait, students are supported to gain entry into tertiary-level study: for example, by having scholarships for foundation level programs. Language capability is also a key concern for the design of an international scholarship program, and policy changes on the time allowed for language study prior to commencing degree study can be confusing for institutions and students. Students within the KASP program, for example, have had restrictions placed on the length of time allowed for English language study; a maximum duration of approximately 1 year (50–55 weeks) has been reported informally by staff working with KASP students. This serves as another barrier to entry for many potential awardees.

Reflecting on these barriers, it becomes clear that many international scholarship programs are targeting an already elite cohort of students who are capable of study in a foreign country. This particularly includes new scholarship programs, such as the Schwarzman Scholars program, that will fund an elite cohort of students to study and be mentored by international leaders in business and politics in China for a year. While there are some scholarship programs that work to attract and support those students who are less able to access these existing opportunities, the elite nature of the Western university system creates a significant barrier.

Levels and Topics of Study

Another key element of the design of a scholarship program is the level of study supported. International scholarships deemed to be part of development programs are largely focused on postgraduate study, whereas large-scale scholarship programs from developing nations will typically support study at undergraduate levels. Previous iterations of the Australia Awards

program have also supported study at vocational colleges, particularly for recipients from sending countries where the education system was under-developed and there was a clear vocational skills need. This was the case in a small scholarship program between Australia and Timor-Leste, shortly after the latter achieved independence in 2001. The conflict in Timor-Leste in the preceding years had led to a situation where access to education was difficult or impossible for most Timorese. A scholarships program for this post-conflict society was therefore tailored to function despite lower levels of educational attainment and the difficulty in accessing the required proof of qualifications.

Now, however, the Australia Awards are almost entirely a postgraduate award program, regardless of the recipient country. The candidate pool for the awards is thus restricted, further entrenching the elite nature of the international scholarship program and bringing it more into line with similar programs globally. Nevertheless, this change has allowed the program to target professionals with several years of experience; more mature candidates who are sure of their academic and professional capacity. Tertiary education systems in many developing countries are also now able to teach 'world standard' undergraduate programs, and transnational education (with a developed country university delivering a course in partnership with a university in the developing world) delivery models are common, reducing the need for developed country-sponsored international undergraduate studies. Finally, and not insignificantly, supporting a student for up to 2 years of postgraduate Masters level study is less costly than supporting a student through 4 years of undergraduate study, enabling either more scholarships to be funded or, alternatively, the same number with somewhat lesser investment. This is also reflected in a reduction in the number of PhD scholarships—typically also 4 or more years—awarded through the Australia Award program.

The areas of study on which the scholarship focuses also impacts on the type of student who becomes an awardee. By restricting the area of study at the design stage, funders can more easily track impact on a specific industry or thematic area. However, while it may allow for ease of measuring impact, areas of study within the Australia Awards (which are agreed by the Australian government and the recipient country) often have the effect of constricting the candidate pool. For example, a focus on extractive industries (mining) usually leads to a higher number of male applicants. The science and technology focus of the Brazilian Scientific Mobility Program (BSMP) (see Zahler and Menino in this volume) will provide a useful study

of the impact of such a highly subject-focused program on the diversity of the future science and technology workforce in Brazil. Gender balance is a key concern for many scholarships, but is often complicated by design factors. For example, at the postgraduate level, the provision (or not) of support for accompanying families can impact on applications from female students, who are often the designated caregiver within a family. By not providing such support, the diversity of candidates will reduce; fewer applicants with dependent families apply. But the change in applicant cohort is difficult to track, and thus the outcome from the change in policy is not obvious for the policy maker and funder.

Institutional Design Factors

Decisions around placement strategy among tertiary institutions are of great importance to the design of programs. Many scholarship programs, such as the Indonesian World Bank SPIRIT program, have started out with the goal of only placing students in the top 100 ranked universities in the world. In practice this is difficult to achieve, particularly for large-scale programs with diverse applicants who may not all meet entry requirements for such institutions. Recent reports from Saudi Arabia have claimed that the KASP program will in future only place students in top 50 ranked institutions (Honeywood 2016), but given the size of the program—with more than 6000 students in Australia alone, and many thousands more in North America and other countries—this goal appears almost impossible. The motivations for this decision are not entirely clear, but student feedback about supervisors constantly changing and being otherwise unsupportive has been cited as one reason (Honeywood 2016). The reaction by the Saudi Ministry of Education potentially reflects a perception that such undesirable institutional experiences are less likely at higher-ranked institutions, and that higher-ranked institutions will lead to better outcomes for students and, by extension, Saudi Arabia.

A growing trend in scholarship design, and international education more broadly, is the role of on-award student support. The experience a student enjoys or endures is a key determinant of how they interpret their study throughout their life. It is also now a keenly felt element of the diplomatic aspect of scholarships and international education. Australia, for instance, experienced a series of racially motivated attacks on students, which moved international education to the front pages in both Australia and India (Wesley 2009) and led to questions about the role of international education in bilateral relationships. Interestingly, the establishment of a specific

Victorian Indian Doctoral scholarship was a direct outcome of this period, with the scholarship used to smooth relations with both the Indian community and government.

Increasing focus on student experience has led to the inclusion of on-award support within a number of scholarship programs. Case managers are in place to support Australia Awards students from Papua New Guinea. BSMP students in Australia are also able to seek support and assistance from specially employed staff at the Embassy in Canberra, who have provided advice on matters as diverse as health insurance and where to purchase swimwear. To perhaps underscore the importance of the issue of student experience, it is now a key element of the Australian government's National Strategy for International Education (Department of Education and Training 2016). The recognition of the role of the student experience within influential government strategy demonstrates how important the concept is to the international education sector more broadly, not just in the world of scholarship-funded students.

2.2.3 Aims, Populations and Contexts

The motivations and aims of scholarship programs are myriad, and the cohorts that are eligible for scholarships usually reflect the aims and design of the program. The KASP was put in place, similar to other Middle Eastern scholarship programs, to increase the capability of its citizens and to reduce the reliance on expatriate workers. Research by a KASP awardee, interviewing participants who were sponsored by the Saudi government has concluded that "higher education seems to be the magic wand that Saudi Arabia is using in order to cope with its internal and external challenges" (Hilal 2013, p. 208). The growing domestic higher education system in Saudi Arabia reflects a change in focus for the Kingdom, but the quality of the system will take generations to develop. The BSMP program, on the other hand, seeks to address what are "considered to be among the main constraints to the immediate and future development of the Brazilian society" (Knobel 2012, p. 17). The focus on science, technology and engineering is part of a design created to address a very specific problem. Whether it will meet its goals is yet to be seen, particularly as the program has been scaled back significantly after recent financial turmoil in Brazil (see Zahler and Menino).

A key goal of the Australia Awards, and many similar scholarships funded by developed nations, is the strengthening of institutional capacity abroad. In the Australia Awards, this is addressed by designing the program to work

with so-called targeted organizations, either NGOs or government departments with whom the scholarship administrators work closely. Applicants are often nominated by the organization, and the selection processes are less transparent than those for other 'public' applicants.

Within the goal of institutional development, an important facet of targeting that is at play within the scholarship programs is that of *critical mass*. Critical mass is where the expected impact is linked to the changing culture within organizations that comes with a 'critical mass' of returned scholars. A useful example of how these considerations are built into scholarship programs can be drawn from one of the largest Australia Awards programs: the Australia Awards Indonesia. There are approximately 18,000 former Australian government scholarship recipients in Indonesia (Purdey 2015, p. 111), and the targeting of organizations for selecting awardees has been "with the explicit or implicit intention of influencing workplace cultures through developing a critical mass of awardees that creates an environment open to change" (Lockley et al. 2015, p. 33). This concentration of scholarship alumni has been described as an 'Australian mafia' within the Indonesian bureaucracy: "a network of civil servants and professionals who have a shared experience not only of Australia, but also as beneficiaries of scholarships administered by Australian government agents and agencies" (Purdey 2015, p. 111). A recent Office for Development Effectiveness report has noted that there are a select number of workplaces in which a large concentration of alumni has changed the dynamic: however, they also observe that there are organizations where a critical mass has not catalyzed change, noting "in some of the priority organisations targeted in Jakarta, there are many Australia Awards Scholarship alumni but very few alumnae [female alumni] in leadership positions" (Lockley et al. 2015, p. 34). Other studies point to only 50 percent of awardees being promoted on return (Nugroho and Lietz 2011), calling into question the impact that a critical mass of alumni can and do have on their return.

2.2.4 *Alumni and Impact*

Within the diplomatic space, there is significant value in scholarships from a number of viewpoints. Scholarship programs can, for instance, use development relationships to facilitate diplomatic ends that might otherwise be unavailable. The Chinese Government scholarship program is a development scholarship that has significant diplomatic aspects in a manner similar to the Australia Awards. The Chinese government believes that "cultivating

future leaders of other developing countries would have far-reaching influence on the future of the relationship between China and its aid recipients" (Dong and Chapman 2008). This scholarship brings students from developing countries to China for tertiary study and simultaneously allows the Chinese government to expand its public diplomacy footprint outside of bridges, roads and power plants. But the shifting nature of the role of China in global power structures inevitably changes the way this scholarship has been perceived by students and other nation states.

The advertising of a scholarship program to a population highlights the contribution that the donor country is making and, following their return to their home country, a scholarship recipient is an ambassador with an in-depth understanding of the donor country. For those who end up in positions of influence or responsibility, there is an understanding or expectation that alumni will preference the donor country. The proportion of alumni holding influential positions is thus an often relied upon metric for the outcomes of international scholarships, particularly those funded by governments. The number of government ministers who were educated in in the donor country (e.g. Australia, the UK or the USA) is a matter of pride. Research by the British Council in 2014, for instance, boasted that "analysis suggests that the UK is ten times more likely to produce a world leader than the USA – UK universities produces one world leader per fifty thousand graduates, whereas the US produces one per five hundred thousand" (Sowula 2014, p. 1).

These easily publishable stories of international success breed a sense of pride in a tertiary education system and are likely to ensure a taxpaying citizenry is willing to pay the costs of the scholarship program. They do not, however, measure the impact that period of study had on the life of the subject (world leader or not), nor the impact on the subject's family. Recent research conducted with alumni of Australian government scholarships from Indonesia and Papua New Guinea, conversely, has used in-depth interview methods to understand the impact of the scholarships, taking study in Australia as only a part of an alumnus' whole of life story. The research revealed that many alumni made intellectual breakthroughs during their study, and the impact of their award on their life was enhanced if they could share their experience with their family (Lowe and Purdey 2016). The research offers a detailed insight into the multifaceted impact—including diplomatic impact—that scholarship programs can have. Perhaps most notably, however, the research was commissioned by the Australian Department of Foreign Affairs and Trade (DFAT), the only funder of Australia

Awards, and demonstrates a commitment to understanding the full story of scholarships. The challenge for DFAT, however, is how the research outcomes may be used when designing awards, particularly, as with many government programs, issues of funding are often more pressing than evidence-led design.

2.2.5 Money and Politics

Recent crises—the global financial crisis, the Arab Spring and its aftermath, the Syrian and Iraq wars, and massive falls in the price of oil and other commodities—have all impacted on the size and sustainability of scholarship programs. Following the fall of Libyan leader Muammar Gaddafi in 2011, for instance, students sponsored by the Libyan government were left stranded across the world with no living allowances and tuition fees unpaid. The uncertainty and financial risks that this exposed, both for the students and their host institutions, was an extreme lesson in the impact of geopolitics in the world of international education.

Recent changes in the economic fortunes of funding nations have severely impacted on the size of several large programs, such as those funded by the Brazilian and Saudi Arabian governments. Malaysia, another nation heavily dependent on oil revenues, has significantly scaled back its international tertiary scholarship scheme, focusing more heavily on scholarships for Malaysian students to study in domestic universities. These examples—and the experiences of other, particularly oil-producing, nations (Ortiz 2016)—demonstrate the difficulties of establishing the administrative infrastructure that is needed to support a large scholarship program when faced with a fluctuating and uncertain financial base.

In the case of the Saudi scholarship program, the first step of 'rationalizing' the program has been to restrict new students in the King Abdullah Scholarship Program (KASP) to very highly ranked universities (Honeywood 2016). The steps that have led KASP to this decision are myriad. Firstly, and as noted above, the Saudi Ministry of Education may have become increasingly concerned about quality issues with supervisory relationships among the range of institutional hosts (Honeywood 2016). Secondly, the scale of the program is enormous: "Over 207,000 students and dependents took advantage of the King Abdullah Scholarship Program to go abroad in 2014, at a cost of some 22.5 billion riyals ($6 billion), according to government data" (Paul 2016, p. 1). The number of Saudi students who complete their undergraduate or postgraduate degree

overseas is high, and many spend 5 years overseas to complete both an undergraduate degree and English language training. Students receive very high stipends, and the infrastructure of support services, managed through Saudi Arabian Cultural Missions across the world, is massive and costly.

It may well be that these recent changes signal the natural end of these particular scholarship programs. The domestic higher education system of Malaysia is now much stronger than it was, and Malaysia is now selling itself as a destination country for international students. In Saudi Arabia, there are new universities being built and a tertiary education system developing. Even in the Australian context, budget constraints have severely impacted on the number of long-term Australia Awards being offered. As the funding is spread across a number of recipient countries, and tied up in the Australian overseas development assistance budget, the cuts are uneven. The 2015 budget included a 70 percent cut to aid to Africa and a massive cut to the scale of the Australia Awards Africa program. Even the Australia Awards Indonesia program was cut by up to 40 percent (Nicholson 2015).

Yet while these cuts to budgets led to fewer long-term scholarships being awarded, the political demand for 'numbers' of Australia Award students remains strong. This has led to a rapid growth in short course awards: non-award programs, often only few weeks in length, that focus on specific skill sets, such as leadership training. These changes have caused great disquiet among Australian universities, which have come to rely on the steady stream of quality postgraduate students that the Australia Awards provides, both from a revenue perspective and because these students boost the overall quality of the study body. The program alumni are, of course, also useful from a marketing standpoint. In most recipient countries, the Australia Awards are a prestigious and well-regarded scholarship, and returned alumni play a valuable role in promoting their universities within the community. In addition, the continued connections that are created throughout an awardee's period of study work to support the mission of a university in internationalization and social responsibility.

When it comes to ensuring impact, the change to shorter periods of study for awards is significant. Recent research by Lowe et al. (2015), for instance, has concluded that longer study periods overseas tend to create greater impact on students. Obviously a number of factors are at play in this—including the impact that the particular course of study may have on an individual—but the distinction between short- and long-term engagement is vital. Research with students who have had experience of study abroad (not in a scholarship context) supports this contention. When a cohort of

students were asked to reflect on their experiences while they were studying overseas, they were able to "demonstrate the transformative and enriching potential of sustained intercultural interaction" (Welsh 2015, p. 152).

With the reduction in funding from governments, the role of private philanthropy and foundations in providing international scholarships may play a greater role. In Australia, for instance, there has been a significant change to the philanthropic landscape. The Atlantic Philanthropies funded a scholarship program for Vietnamese students to study in Australia between 2000 and 2006 and have recently announced that they will be supporting a fellowship program that "will build the capability of a new generation of leaders committed to advancing a fairer, healthier, more resilient and inclusive society in Australia, New Zealand and the Pacific" (Scott 2016, p. 1). While this fellowship program will initially target indigenous scholars in Australia, it is expected that it will later also involve scholars from the Pacific. Elsewhere, large private foundations have also been making large investments in scholarship programs: the MasterCard Foundation Scholars Program, discussed later in this volume (see Burciul and Kerr), is a recent example among several.

2.2.6 Institutions Versus Individuals

Students who receive scholarships to undertake tertiary study overseas, regardless of the funding source, are provided with an opportunity for a life-changing experience. Education can catalyze change and development, both for individuals and communities. However, if the best and the brightest of a nation's tertiary system are plucked out, and placed overseas, the quality of that system is reduced. There is also an assumption, especially in those programs with requirements for students to return home to their country to support the development of the economy and society that their experience will be of value to that country.

Many, but not all, international education programs assume positive outcomes without significant evidence to support that assumption (Kent 2012). In the Australian government scholarship program, for students who return to their home country "…it is imagined that the mere presence of these knowledge-enhanced individuals will somehow produce all kinds of benefits, including outcomes such as better governance, more political stability and a superior climate for globally-driven economic investment" (Nilan 2005, p. 161). Investing the funds spent on a scholarship program directly into tertiary systems 'in country' may lead to better educational

outcomes. Nilan has argued that the vast bulk of the funds spent on Australian government scholarships for Indonesian students program should "instead be paid into Indonesian universities through in-country support for education, including internal scholarships" (2005, p. 175).

Investing directly in institutions would not, however, match the myriad other motivations wrapped up in international scholarship programs. By exerting control over the design of scholarship programs, funders can more easily control the outcomes of their investment. And the desired outcomes, as has been discussed in this chapter, are many and varied. Scholarship programs are designed to lead to diplomatic outcomes, to encourage cultural exchange, to reduce the reliance on expatriate workers in a nation, to be part of an effort to grow soft power and are, in many cases, designed to support the educational aspirations of gifted and talented students who would otherwise be unable to progress.

2.3 Conclusion

Recent trends in international tertiary scholarships have shown shifting priorities across a number of large funders. A move to higher-ranked institutions seemingly indicates a growing focus on quality outcomes, but may in fact represent the shrinking funding available to many sponsors. This reduction in funding is also leading to a focus on shorter study programs, in place of long degree programs. However, research on the impact of scholarships and study abroad has suggested that the move to short-term programs is likely to have a deleterious effect on program outcomes. More positively, funders are embracing the concept of on-award support, seeing the value in high-quality study experiences. This development is in line with a broader recognition of the role of a positive student experience in supporting the growth and sustainability of international education. When designing new scholarship programs, design features that embrace principles of access and equity are required to ensure the best outcomes for students, and these principles should be front of mind during the development of scholarship programs.

As the variety of authors contributing to this book clearly demonstrates, scholarship programs sit in an undefined academic space, somewhere between development, education and public diplomacy. They are studied across faculties or by interdisciplinary researchers. It is perhaps this undefined space that has allowed for scholarships to remain relatively

under-researched, although this is changing: international students and the role they play in the world of foreign relations is “not a terrain of neat paths and well-trodden methodologies, but it seems to have dawned as a field of study” (Lowe 2015, p. 449). Setting aside the measurement of the development objectives espoused by many scholarship programs, there is at least a greater need to understand and quantify the soft power outcomes that scholarships can bring (Guang 2016). Nevertheless, there is a growing body of research to support the contention that studying overseas contributes not only to an individual but also to their family and community. An investigation of the outcomes of international education in Australia found that “. . .students who return home have become more complex members of their own society as their reintegration into their home country requires them to integrate the experiences, values and knowledge gained from their overseas study with the experience of being and working at home” (Cuthbert et al. 2008, p. 265). In this complexity there is value.

As global flows of students increase, the role of international scholarships in the broader international education macrocosm may become reduced. In numerical terms, scholarship-funded students are but a drop in an ocean of globally mobile students. But for developing countries, and populations where access to high-quality tertiary education is limited (although that is a highly subjective notion), scholarships are often the only available path to higher education. It is crucial, therefore, for sponsors and funders to be cognizant of how a scholarship program’s design impacts on access to it and also outcomes from it. International development scholarships can, when not appropriately designed, entrench elites within already stratified societies. Scholarship funders are now able to access increasing amounts of research and data about the outcomes of awardees and how policies within a scholarship program affect academic progression or broader societal impact. It is incumbent on these scholarship bodies, particularly governments, to recognize this research and integrate its findings into their program designs.

Recent political and financial crises have highlighted the fragility of some large scholarship programs. The uncertainty caused among student bodies and their host institutions can be detrimental to both individual students’ outcomes and bilateral relationships. There are challenges to be addressed by funders, and the host tertiary education systems, to ensure that learners are not severely impacted when conflict or political turmoil occurs in their home country. As many organizations and governments have discovered, scholarships are neither cheap nor easy to administer, and the return on investment is difficult to measure, yet governments increasingly demand

measurable returns on investments. The mere assumption of positive outcomes from educational programs like scholarships is increasingly difficult to justify. Scholarship outcomes are not immediate, and understanding the impact of scholarships requires maintaining contact with awardees long after their scholarship is completed. Keeping focused on long-term outcomes is difficult for funding organizations, particularly governments, as priorities shift across short electoral and budget cycles.

References

Payne, M [Chair] (2007). Australia's public diplomacy: building our image. In: Senate Standing Committee on Foreign Affairs DaT (ed). Canberra: Australian Parliament.

Sowula, T. (2014). UK alumni leading the world. London: British Council.

Department of Foreign Affairs and Trade. (2016a). Australia Awards. Available at: http://dfat.gov.au/people-to-people/australia-awards/Pages/australia-awards.aspx

Department of Foreign Affairs and Trade. (2016b). Australia Awards Global Strategy: Investing in the next generation of global leaders for development 2016–2018. Canberra: Department of Foreign Affairs and Trade.

Department of Education and Training. (2016). National Strategy for International Education 2025. Canberra: Commonwealth of Australia.

Scott, D. (2016). University of Melbourne to Lead 20 Year Leadership Program to Tackle Social Inequality. Parkville: The University of Melbourne.

Cuthbert, D., Smith, W. and Boey, J. (2008). What Do We Really Know About the Outcomes of Australian International Education? A Critical Review and Prospectus for Future Research. *Journal of Studies in International Education*, 12(3), pp. 255–275.

Dong, L. and Chapman, D.W. (2008).The Chinese Government Scholarship Program: An Effective Form of Foreign Assistance? *International Review of Education*, 54(2), pp. 155–173.

Gosling, M. (2009). Scholarship Effectiveness Review Part 3. Canberra: Commonwealth of Australia.

Guang, AHY. (2016). International scholarships: the case for investment, and how to ensure impact. Wilton Park Reports. United Kingdom: Wilton Park.

Hilal, K.T. (2013). Between the Fears and Hopes for a Different Future for the Nation-states: Scholarship Programs in Saudi Arabia and United Arab Emirates from a Public Policy Standpoint. *International Journal of Higher Education*, 2 (2), pp. 195–210.

Honeywood, P. (2016). New Colombo Plan can benefit from demise of two scholarship schemes. The Australian, [online]. Available at: http://www.theaustralian.com.au/

higher-education/opinion/new-colombo-plan-can-benefit-from-demise-of-two-scholarship-schemes/news-story/ff267d7e8691b3b6c4b4de98b3e60119 (Accessed 30 Nov 2016).

Kent, A. (2012). Australian Development Scholarships and their place within diplomacy, development and education. Masters Thesis. University of Melbourne.

Knobel, M. (2012). Brazil's Student Mobility Initiative: Brazil Seeks Academic Boost by Sending Students Abroad. International Higher Education 66(1), pp. 15–17.

Lehr, S. (2008). Ethical dilemmas in individual and collective rights-based approaches to tertiary education scholarships: the cases of Canada and Cuba. *Comparative Education*, 44(4), pp. 425–444.

Lehr, S. (2011). Cuba's Scholarship Tradition: The Perspective from Ghana. *NORRAG News*, 45(1), pp. 91–93.

Lockley, A., Shah, R. and Ovington, K. (2015). Building Women's Leadership: the Contribution of Australia Awards Scholarships. Canberra: Department of Foreign Affairs and Trade.

Lowe, D. (2015). Australia's Colombo Plans, old and new: international students as foreign relations. *International Journal of Cultural Policy*, 21(4), pp. 448–462.

Lowe, D. and Purdey, J. (2016). Scholarships and connections in public diplomacy, the long view: International students as foreign policy? Paper presented at the IEAA Sponsor Forum. ANU, Canberra: IEAA.

Lowe, D., Ritchie, J. and Purdey, J. (2015). Scholarships and Connections: Australia, Indonesia and Papua New Guinea, 1960–2010 [data collection]. (Accessed 30 Nov 2016). doi: 10.4225/16/5570544408325

Nicholson, J. (2015). Budget 2015: Foreign aid to Africa cut by 70pc; contributions to Indonesia nearly halved. ABC News Online, [online]. Available at: http://www.abc.net.au/news/2015-05-13/foreign-aid-cuts-under-new-budget-africa-indonesia/6465264 (accessed 14 May 2016).

Nilan, P. (2005). The Viability of Aid Scholarship-Funded Study in Australian Universities: The Case of Indonesia. In: P. Ninnes and M. Hellstén, eds. *Internationalizing Higher Education*. Netherlands: Springer., pp. 159–180.

Nugroho, D. and Lietz, P. (2011). Meta-analysis of AusAID surveys of current and former scholarship awardees. Melbourne, Victoria: Australian Council for Educational Research.

Ortiz, A. (2016). How will lower oil prices affect international enrollments from OPEC countries? World Education News and Reviews, [online]. Available at: <http://wenr.wes.org/2016/04/15099> (accessed 20/07/2016).

Paul, K. (2016). Saudi tightens rules for scholarships to study abroad. Reuters Online, [online]. Available at: http://www.reuters.com/article/us-saudi-education-idUSKCN0VA35R (accessed 11/09/2016).

Purdey, J. (2014a). Investing in goodwill and shaping 'good' neighbours: Australia's scholarships programs for Indonesian tertiary students, 1950s-2010. Asian Studies Association of Australia Conference. 8–10 July 2014, Perth, Au.

Purdey, J. (2014b.) Scholarships and Connections: Australia, Indonesia and Papua New Guinea. Alfred Deakin Research Institute Working Paper Series 2, Number 46. Available through: http://catalogue.nla.gov.au/Record/6537002 (Accessed 30 Nov 2016).

Purdey, J. (2015). Investing in good will: Australia's scholarship programs for Indonesian tertiary students, 1950s–2010. In: J. Purdey and A. Missbach, eds. *Linking people: Connections and encounters between Australians and Indonesians.* Berlin: Regiospectra, pp. 111–132.

Welsh, A. (2015). Transforming Australian students' intercultural understanding. In: J. Purdey and A. Missbach, eds. *Linking people: Connections and encounters between Australians and Indonesians.* Berlin: Regiospectra, pp. 151–169.

Wesley, M. (2009). Australia's poisoned alumni: international education and the costs to Australia. Policy Brief. Sydney: Lowy Institute for International Policy.

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Anna continues to work as a practitioner in various areas of international education policy and delivery and international development.

CHAPTER 3

Relationships Between Scholarship Program and Institutional Capacity Development Initiatives

Ad Boeren

3.1 Introduction

This chapter draws together the trends in scholarship programs within the wider context of development programs sharing similar social transformation aims. The chapter will examine the role that international scholarships fulfil in addition, or as an alternative, to other forms of higher education cooperation, such as investment in local universities' research and teaching capacity and academic infrastructure. The place of scholarship programs within a broader international development agenda, such as the sustainable development goals, will also be examined. Although many scholarship programs from different parts of the world are discussed in this chapter, the majority of examples are drawn from Western Europe. European countries have a long history of both providing scholarships to talented candidates and mid-career professionals from developing countries and of funding programs which aim to strengthen the education and training capacity of institutes in developing countries through collaboration with partner institutes in the donor country.

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3.1.1 The Aims of Scholarship Programs

The provision of international scholarships to individuals from developing countries is probably the oldest form of development cooperation in higher education. Over the years, bilateral and multilateral organizations as well as private foundations have funded scholarship programs for candidates from less-developed countries and deprived backgrounds. They have done so for altruistic, diplomatic, academic, and/or economic reasons which are reflected in the objectives and eligibility criteria of the programs. Common objectives of the programs are the following:

(1) To strengthen human resources needed for the development of the countries of the scholarship recipients
(2) To foster diplomatic and economic bonds between countries
(3) To promote and improve the quality and attractiveness of the education (institutions) in the country of bilateral donors

There are very few scholarship programs that focus on only one of these objectives. Most programs combine one or more of them. This may lead to a conflict of interests in some respects, but in most cases a balance is found. The International Course Programme (ICP) of the Flemish University Council, for instance, combines Flemish academic interests with development priorities (VLIR-UOS 2016). Scholarships are provided to programs of academic excellence which have a high relevance for developing countries. In Germany, mobility programs for staff and students put emphasis on academic quality, but longer-term bilateral and diplomatic cooperation is also an important consideration and the bond with alumni is cherished. The Commonwealth Scholarship and Fellowship Plan (CSFP) aims to contribute to the UK's international development aims and wider overseas interests, support excellence in UK higher education, and sustain the principles of the Commonwealth (CSC 2016).

Several bilateral donors have made attempts to also use scholarships for the strengthening of (employing) organizations through special modalities and focused allocation of scholarships. This is practiced in both the Tailor-Made Training modality of the Netherlands Fellowship Programmes and the Danida Capacity Development Support Programme (DCDSP). The purpose of this approach is to increase the impact of scholarships over and above the individual benefits for the recipients (i.e. career opportunities and

increase in income) and to ensure a better link between the outputs of the scholarships and their social and economic impact in the home countries.

If one looks at the spectrum of international scholarship programs and tries to understand why they differ and how they differ, one should start by tracing the prime source of funding and the main interests which the funding agency represents (Boeren 2010). The funding source and interests to be pursued with the scholarships substantially influence the eligibility criteria of the scholarship program, including: the countries, target groups, and themes of the scholarships; which type of organization administers the scholarship program; and how the selection procedures are organized. Programs which focus on human resources development in developing countries (objective 1 above) tend to be financed from development cooperation budgets and are restricted to a limited number of partner countries. In the selection process priority is given to demands from professionals in partners' countries and the administration is done by the funder or an independent organization.

In scholarship programs where economic and diplomatic objectives prevail, the main funders are the ministries of foreign and economic affairs or private companies. In the selection, leadership and business potential of the candidates are important criteria as the alumni may become gatekeepers for establishing deeper economic ties. The administration is done by the funders themselves or delegated to an independent organization. In programs that aim to promote the education system or to improve the quality of the education in the country of the funding agency, the selection procedures are designed to select the best candidates from a broad range of countries. An example of this type of programs is the Norwegian Quota Scheme which has been in existence for decades and has been phased out in 2016. The scheme has been an important instrument in helping to internationalize Norwegian higher education. These programs are usually funded by the education ministry and administered by organizations which represent or are closely affiliated with the higher education sector in the funding country. The host institutes play a determining role in the selection of the candidates.

Scholarship programs, especially those funded by national governments, are seldom 'interest free'. Scholarships are given for a specific purpose and even in the so-called altruistic (development cooperation-oriented) programs the self-interests are to be found nearby. Most development cooperation-oriented scholarship programs funded by national governments can be considered 'tied aid' because they require that scholarship

awardees study in the country of the funding agency. As the bulk of the scholarship expenses are consumed by tuition fees and living expenses, it is fair to say that between 80% and 90% of the scholarships' financial value remains in the funding country (see also Sogge 2015). The effect is mutually beneficial: candidates get the degree and better career opportunities, the institutions and society in the funding countries get the academic and financial benefits, as well as the goodwill and influence of the alumni later in their lives and careers. International Foundations, like the Ford Foundation and MasterCard Foundation, lack this affiliation with national interests and are more likely to grant scholarships for study at a broad range of institutions in different countries. For many countries, diplomatic and economic benefits of the provision of scholarships are an explicit or implicit aim. Almost everywhere, alumni are seen as 'ambassadors' of the country and institutions where they studied. Alumni form a rich network of opportunities for establishing contacts in the country where they reside and some countries have a long and strong history of maintaining ties with alumni. Germany is a case in point: for many years, the German Academic Exchange Service (DAAD) has implemented a focused strategy to keep in touch with the alumni who studied in Germany.

3.2 Scholarships and Capacity Development Approaches

According to the OECD Development Assistance Committee (DAC) definition, 'capacity' is the ability of people, organizations, and society as a whole to manage their affairs successfully (OECD 2006). Capacity development is the process of change whereby people, organizations, and society work to strengthen, create, adapt, unleash, and maintain capacity over time. Capacity includes a wide range of factors, from skills to systems, processes, ability to relate to others, leadership, values, formal and informal norms, loyalties, ambitions, and power.

Capacity development in the context of development cooperation programs can be distinguished at different levels: the training and upgrading of *individuals* in terms of knowledge and competencies; the improvement of the performance of *organizations*, networks, and platforms; and the strengthening of the enabling environment (i.e. *institutions* such as legal frameworks, governance and financing structures, quality assurance systems) which provide the necessary conditions for the proper functioning of the organizations. Since these different levels of capacity development are interdependent, ideally capacity development requires an integrated

approach. No organization can properly function without proper support from well-established institutions, nor can it function well without qualified and competent staff. Staff training and upgrading is therefore one of the cornerstones of any (capacity) development program.

Organizations in developing countries are eagerly looking for well-qualified staff. If these cannot be found in the local labor market, they must look for opportunities to train their staff. Many middle-income countries (e.g. Brazil, South Africa) invest in national scholarship programs to send talented students abroad for a degree or training which is not on offer at home. In countries where training funds are lacking, international scholarships are sometimes a necessary instrument to enable a staff member to take leave and a study abroad.

There are several reasons for employers to allow a member of staff to apply for an international scholarship: it can be seen as a reward for good performance or an incentive to grow in the job and be promoted to higher levels of responsibility—it may also be seen as a way to bring back new know-how and ideas to the organization. Both options may contribute to organizational development, provided the returning members of staff get the chance and the facilities to implement the knowledge and skills which they have acquired, and provided they can be retained by the organization. Organizations can influence the retention of staff through bonding agreements which oblige scholarship holders to return for a number of years to their employer after they have finished their course or training (see Campbell). Bonding a candidate without a proper perspective on how the scholarship will contribute to the human resources development strategies of the organization or the career path of the scholarship holder, however, will lead to frustration. From this perspective, staff training embedded as part of a capacity development project provides better chances for an efficient utilization of the results of the education or training for the organization and the retention of the trained staff.

From an organizational perspective, one single scholarship will not make a substantial difference for strengthening the organization, unless the trained member of staff returns to a strategic position and has enough power to initiate change. Organizations tend to benefit more from developing a critical mass of qualified people in the organization or staff training that is embedded in networks or capacity development projects. Hence, to enhance the chances of organizational development through scholarships, a more ‘orchestrated’ approach needs to be adopted. The current

international scholarship programs implemented by the various agencies offer an interesting range of options, as the next sections explore.

3.2.1 *Investing in Change Agents*

To make sure that individuals will most probably become a change agent—a future leader or a decision maker within an organization or movement—a rigorous selection of candidates with certain characteristics and/or in influential positions is essential. The International Fellowships Programme (IFP) of the Ford Foundation (2001–2013) gave candidates from underprivileged backgrounds and communities the chance to pursue academic studies with the expectation that they would return to their community and use what they had learned and gained to stimulate and facilitate socio-economic changes. Much effort was made to select candidates with the best potential for success. The completion and return rates of the IFP scholarship holders were very high (Martel and Bhandari 2016). The success of the program depended on the careful selection of the candidates on the basis of their talents, relation to the community, and motivation.

Another approach is to select candidates in a (potential) leadership position and give them management and leadership training, with the expectation that they will improve the management of institutions/organizations. An example of such an approach is the Dialogue on Innovative Higher Education Strategies (DIES) program, a joint program of the German Academic Exchange Service (DAAD) and the German Rectors' Conference (HRK). It organizes praxis-oriented training courses on higher education management issues for senior faculty in developing country institutions, such as the 'International Deans Course' (DAAD 2016). DIES also offers training courses, dialogue events, projects, and partnerships to higher education institutions in developing countries in adjusting their courses of study to meet international standards of quality, expanding their research capacity, and making their organizational structures more competitive.

3.2.2 *Building a Critical Mass*

Within the Netherlands Fellowship Programmes (NFP) two approaches have been developed to provide 'packages' of fellowships which address capacity gaps in an organization. Both approaches use the demand for training within an organization as the starting point for the identification

of a study program and the candidates who will receive a fellowship. The first approach is a 'Multi-Year Agreement' signed with an organization and was implemented in NFP from 2003 to 2009. Based on an analysis of capacity gaps, an organization could request a package of fellowships (for short courses as well as degree programs) to be used within a period of 3 years. Ideally this offered a substantial and demand-driven contribution to the human resource development plans of the partner organizations. In this sense, the Multi-Year Agreement resembled an interesting blend between individual scholarship provision and capacity development of an organization in a project-type modality.

The other approach, very much in demand, is called 'Tailor-Made Training' (EP-Nuffic 2016) and caters for short-term training on a specific topic for a selected group of employees from an organization. The total duration of Tailor-Made Training is usually two to three weeks (depending on the budget needed for the training) and can be organized on location, rather than in the Netherlands. The topics of the training vary from port management to livestock breeding, from research proposal writing to news reporting. The strength of this modality is the combination of short-term, practical training for a substantial number of staff based on a specific capacity need from the employing organization. In this modality, the relationship between scholarship provision and organizational development is usually immediate and direct. The Danida Capacity Development Support Programme (DFC 2016a) has similar characteristics, targeting groups of individuals, units, sections, or departments in partner institutions—or groups of individuals from different institutions—who share similar and comparable needs and readiness for capacity development. Like the NFP Tailor-Made Training, a key criterion for the selection of participants is the relevance of the participants' job role to an organizational development process.

3.2.3 Embedded Scholarships

Many staff development activities are embedded in broader cooperation projects and programs. Although they may not always be called as such, in reality these activities are quite similar to scholarships. Individuals get the opportunity to follow a study program with the aim to obtain a relevant certificate, diploma, or degree. These 'scholarships'—which come in various forms—are often key elements in projects/programs which aim to strengthen education or research institutions, organizations, or networks.

Scholarships Embedded in Multi-faceted Mobility Programs
One incarnation of embedded scholarships is their place in broader, multi-faceted mobility programs. The Erasmus+ program of the European Union, for example, is a mobility program which both gives people the chance to study, train, undertake work experience and volunteer abroad, and supports transnational partnerships among education and training organizations. Organizations wanting to participate in Erasmus+ may engage in several development and networking activities: strategic improvement of the professional skills of their staff; organizational capacity development; and creating transnational cooperative partnerships with organizations from other countries to produce innovative outputs or exchange best practices. Within the Erasmus+ program Key Action 2 (innovation and good practices), there is a funding window called 'capacity development in the field of higher education' (European Commission 2016). The capacity development projects funded through this program typically focus on one of three main activities: curriculum development; modernization of governance and management of higher education institutions and systems; and strengthening of relations between higher education and the wider economic and social environment. Individual and organizational capacity development are closely interlinked in this setup, with individual study mobility frequently part of projects focused on organizational development. The Erasmus+ program is a very useful instrument for institutions who would like to set up international joint or double degree programs and create international academic and scientific networks.

Scholarships Embedded in Cooperation Programs Between Institutions
Many donors fund programs which aim to strengthen the education and/or research capacity in developing countries' institutions through direct cooperation programs with institutions from the donor country. Some of these programs aim to establish long-lasting partnerships between the collaborating institutions, in addition to serving specific national development needs. Apart from improving the education offer and research culture or facilities at the partner institutions in developing countries, the core of the programs consists of strengthening teaching and research capacities of individual staff members through education, training, and exposure.

Examples of cooperation programs that focus on research capacity development are the Sida Research Cooperation program (Sida 2016), the Danish Development Stronger Universities program (DFC 2016b), and

the Swiss program for Research on Global Issues for Development (SNF 2016). The Sida program aims to strengthen research capacity at the national, institutional, and individual levels. The objective is that partner countries should be able to independently identify research problems of relevance for development, prioritize areas for research, carry out research, and secure the necessary financial resources and human capacity to enable the research system to deliver. The Danish program aims at generating new knowledge and strengthening research capacity in the priority countries to promote the overall objective of the Danish development cooperation: to reduce poverty and support sustainable development. Individual PhD or Post Doc grants are included in either a South-driven or a North-driven research project. The Swiss program is aimed at researchers in Switzerland and in developing and emerging countries who wish to execute a joint research project on global issues, on reducing poverty and protecting public goods in developing countries.

Examples of programs which focus on the strengthening of education institutions in developing countries are more numerous and are now mainly funded by European donor countries. Non-European examples include the USAID-funded Higher Education for Development (HED), an organization that, until 2015, supported the engagement of higher education in development issues worldwide. In the 1990s USAID also funded the Tertiary Education Linkages Project, a bilateral grant agreement with the Department of Education in South Africa. Canada also had two programs for cooperation in higher education that have recently been wound up: the University Partnerships in Cooperation and Development Program (2009–2014) and the Canadian College Partnership Program 2001–2012).

International Foundations (largely North America-based) have also been active in funding university partnerships. Jointly they implemented the Partnership for Higher Education in Africa (PHEA) in which Carnegie Corporation of New York, The Ford Foundation, the John D. and Catherine T. MacArthur Foundation, the Rockefeller Foundation, the William and Flora Hewlett Foundation, the Andrew W. Mellon Foundation, and the Kresge Foundation participated (Lewis et al. 2010; Parker 2010). The program lasted for 10 years from 2001 to 2010. While maintaining each foundation's unique strategic focus, the foundations agreed to work together toward accelerating the processes of comprehensive modernization and strengthening of universities in selected countries. To ensure that Partnership interventions addressed and responded to the priorities identified by leaders of higher education in Africa, the foundations

adopted a multi-layered strategy. First, they selected a few countries that accentuated trends of democratization, public policy reform, participation of civil society organizations, priority to higher education, and creative and innovative university leadership. Second, the Partnership consulted with university leaders through mediums such as workshops organized to develop country and university studies of their higher education systems (PHEA).

Within Europe, numerous collaborative programs to strengthen education institutions in developing countries are being implemented today. Some examples include:

- The Netherlands Initiative for Capacity development in Higher Education (NICHE);
- The Norwegian Programme for Capacity Development in Higher Education and Research for Development (NORHED);
- The Austrian Partnership Programme in Higher Education & Research for Development (APPEAR);
- The Flemish Institutional University Cooperation program (IUC) and the ARES l'Appui institutionnel program;
- UK's Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR), a follow-up to the Development Partnerships in Higher Education (DelPHE; 2006–2013);
- The EDULINK II program of the EU.

The collaboration in these programs usually comprises of a set of support instruments, such as curriculum development, research policy development, quality assurance strategies, staff training, improvement of facilities (library, laboratories, ICT), or strengthening of administration and management. By embedding individual staff development trajectories in broader and integrated capacity development of the department or organization, the chances for utilization of the know-how and competencies increase considerably. Collaboration with international partner universities has the added advantage that individuals and their organizations become members of international academic and scientific networks.

Scholarships Embedded in Bilateral Cooperation Projects and Programs

The Danida Capacity Development Support Programme (DCDSP) supports capacity development in developing countries, primarily, but not

solely, in Danida's priority countries (Ministry of Foreign Affairs of Denmark 2016). It organizes and/or implements capacity development support in terms of courses, studies, research, study tours, seminars, and so on in Denmark as well as in developing countries—both nationally and regionally. The fellowships are funded via both a central grant and program and projects grants. The central funds support training activities of a political, strategic, technical, or innovative nature for participants from programs, projects, and the private sector in the Danida priority countries.

As a rule, decentralized capacity development must be carried out within the framework of national sector plans laid down by the developing countries. Projects, including Danish-supported NGOs, must plan and fund fellowships themselves and, since projects are the allocating authorities, fellowships are being granted by the projects. As such they are directly aligned with the objectives and priorities of the Danish-supported projects and programs. Like Denmark, most bilateral donors adopt lists of priority countries in which capacity scholarship and institutional capacity development programs can be implemented (eligibility for participation in the program). The composition of the priority list, in most cases, is decided by the donor government.

3.2.4 Summing Up the Modalities

Capacity development is a multi-faceted and complex process which is implemented at various levels: individuals, organizations, and institutions. Scholarships are primarily being used for the capacity development of individuals while cooperation projects and programs are the more relevant approach for strengthening organizations and institutions. Embedding scholarships *within* institutional strengthening projects increases the chances of realizing changes in organizations and subsequently generating long-term socio-economic impact.

Many countries—both developed and developing—fund scholarship programs, but most international cooperation programs in higher education are funded by European donor countries. This is partly explained by the long history of development cooperation policies in Europe, combined with the ambition of European governments to make their own education programs more international and attractive for foreign students.

3.3 Complementarity of Scholarship and Institutional Capacity Development Programs

Even when an international scholarship program has organizational strengthening as one of its objectives, this does not automatically mean that it will be complementary to institutional capacity development programs. In practice, there are a several hurdles which can prevent this:

Misaligned Administrative Timetables Program cycles vary among scholarship and institutional capacity development programs and they seldom are synchronized. Scholarship programs usually have annual or bi-annual application and selection rounds, whereas institutional capacity strengthening programs make use of regular calls for submitting project proposals: often at the beginning of a new program phase or per theme or regional focus. The NICHE program (noted above in Sect. 2.3.2), for example, makes use of a continuous national tender procedure for the selecting of proposals, depending on the availability of program funds and policy priorities. Additionally, identification, formulation and selection of project proposals may take a substantial time, such that matching individual scholarships with institutional capacity development programs becomes quite a puzzle.

Differing Priorities Between Funded Programs Policy priorities, guiding principles, and eligible countries may differ between scholarship programs and institutional capacity development programs, even if they are funded by the same donor. A useful illustration is provided by the Dutch NICHE and NFP programs. These programs share the same overall aim, thematic priority areas, and focus on economic collaboration and trade. However, NFP is a 'global' program in which candidates from 51 countries can compete for a scholarship, while NICHE projects are identified and formulated in only 15 countries based on priorities in the Dutch bilateral aid program in those countries. Both NICHE projects and NFP scholarships are expected to train and educate individuals who will benefit their employing organizations, find their way in the labor market, and potentially contribute to 'economic diplomacy' and forging good relations between Dutch and local entrepreneurs/companies. Similarly, Dutch embassies play a role assessing the relevance of project applications to achieving the objectives of the bilateral aid program. Although in theory one could think of complementary use of NFP scholarships and NICHE projects in NICHE countries, it rarely happens in

practice for several reasons. Apart from differences in countries, program cycles, and guiding principles, NICHE and NFP are administered by two separate departments which hinder attempts to achieve more synergy. At Dutch embassies, there is also little desire to steer for more synergy between the programs, which is further explained below.

Political Preferences Embassies tend to prefer scholarships, rather than institutional capacity development projects, because of their diplomatic profile. Scholarships are more visible to embassies than projects, mainly because in most bilateral scholarship programs embassies are directly or indirectly involved in the screening and selection of candidates. Institutional capacity development programs, conversely, usually adopt a central selection process where embassies may or may not have an advisory role. Once the selection has been concluded and the project is being implemented, the embassies may not be informed regularly about their performance, since they do not have an active role in the monitoring of these projects. Another drawback from the perspective of embassies is that projects last longer and their effects are often more difficult to capture in concrete indicators of success: effects often only show in the long term. 'Scoring' diplomatic successes with scholarships is therefore easier and more visible than is the case with centrally managed projects. For embassies (and heads of states and ministers), scholarships can be lubrication in establishing and maintaining good diplomatic and economic relations and, consequently, linking scholarships to much more rigid projects does not often command their support.

Conflation of Priorities Within Northern Partners Education institutions in the North are often reluctant to mix scholarships with institutional capacity development cooperation activities, because the former is often one of their core businesses, whereas the latter is seen as a 'service'. Scholarships are an important revenue source for academic institutions, and a stimulus for, and contribution to, improving the quality of their education offer. In the selection of candidates for scholarship programs, academic institutions can usually select the best-qualified candidates, while in institutional capacity development projects they often must select from among the candidates proposed by a project partner in the South. The first scenario tallies with the ambition of academic institutions to reach for educational excellence and attract the best brains, while the second is about rendering a 'service'—for which they are paid a fee—to less-developed countries. The two interests are clearly distinguished and difficult to combine.

Bureaucratic Control and Reporting Structures Budget holders of capacity development programs sometimes fear that more synergy between programs will lead to confusion about control over budgets and attribution of program results. Programs are evaluated based on the extent to which they have been successful in achieving their objectives, but by combining funds from different sources an attribution problem arises: how can the outputs or effects be traced back to the various funding sources? Program administrators must account both for how money is spent and for what results have been achieved, but this is complicated in instances of combined funding and mixed-modalities. There is also the issue of keeping a clear demarcation between the objectives of both types of programs. Institutional capacity development programs routinely have funds for 'scholarships' and training (see above) and so, in theory, should not require scholarships from a scholarship program to achieve the project objectives.

3.3.1 Approaches to Complementarity

Despite these hurdles, complementarity between scholarship and institutional capacity development programs is possible. Synergy can be achieved via two main routes: 'top-down' and 'bottom-up' approaches.

The Paris Declaration and the Accra Agenda for Action (OECD 2005–2008) have inspired many donors to look critically at their development programs. Key areas for examination have included overall aid effectiveness, the extent to which program support is demand-driven, ownership of projects, harmonization of procedures, and synergy between programs. Many donors have subsequently sought to employ a 'top-down' approach to better align their capacity development programs with their bilateral development priorities in partner countries, including trying to merge some of their existing capacity development programs.

The latter has been an attempt to stop the proliferation of capacity development programs, each with specific objectives and target groups. In the Netherlands, for example, the Ministry for Development Cooperation funded seven capacity development programs, four scholarship programs, and three institutional capacity strengthening programs in higher education in the late 1990s. Dutch academic institutions considered themselves the 'owners' of these programs as they could count on a fixed quota of scholarships per year, select the candidates for the scholarships, and also recommended the developing country partners in the institutional capacity development programs. The Ministry itself decided only the scholarship

quota and eligible countries for these programs. In 2002, the Minister took a radical decision to phase out all existing programs and replace them with one scholarship program and one institutional capacity strengthening program. The new programs were designed to be driven by demands from the South and administered by an intermediary organization independent from the Dutch education institutions. In the scholarship program, Dutch institutions could no longer count on a fixed annual quota of scholarships, but would now receive grants for scholarships distributed across courses in proportion to demand for those courses. The institutional capacity development projects were identified based on an analysis of capacity needs in sectors that had priority in the Dutch bilateral aid programs in partner countries. The overhaul reduced the role and influence of the Dutch higher education institutions in these programs, with a consequent reduction in their interest to participate in development cooperation activities. The overhaul did not address organizing synergy between the scholarship program and the institutional capacity strengthening program: they remained implemented separately, as explained above. A new phase of the Dutch capacity building programmes is being launched in the second halve of 2017. In this phase the scholarships, group training and institutional cooperation projects will be integrated in one programme.

Other donors have been more successful in creating synergy between the two types of programs. In 2012, the Norwegian Programme for Development, Research and Education (NUFU), funded by the Ministry of Foreign Affairs, and Norad's Programme for Master Studies (NOMA) were merged into a single new program called the Norwegian Programme for Capacity Development in Higher Education and Research for Development (NORHED). The overall goal of NORHED is to build higher education and research capacities in low- and middle-income countries. The program is organized in sub-programs with specific thematic and/or geographic foci, and supports education at bachelor's, master's, and PhD levels, as well as joint research. Similarly, in 2011 the Belgium government demanded that the Flemish Interuniversity Council—University Development Cooperation (VLIR-UOS) and Académie de Recherche et d'Enseignement Supérieur (ARES), who administer the Belgian university capacity development programs, ensure that cooperation projects were aligned with demand in partner countries, Belgian bilateral aid priorities, and the interests and expertise of Belgian universities. This was a departure from the old setup in which Belgian universities nominated eligible partners in the South and VLIR-UOS or ARES organized a qualification and selection process.

The Dutch, Norwegian, and Belgian policy changes illustrate a top-down process of trying to better align higher education capacity development programs with national priorities and bilateral aid programs and to improve coordination and synergy with various other donors' similar programs.

Complementary use of scholarship and institutional capacity development programs can be stimulated by donors in the way they design their programs, but institutions and individuals can also actively try and match opportunities which different programs offer to realize their plans and ambitions. Unlike the direct development of programs by government, the activity of institutions and individuals is more of a 'bottom-up' approach to complementarity.

Academics and institutions in the North and the South are looking for funds to do research, to attract talented PhD candidates, to set up joint education programs, to conduct joint research with partners elsewhere in the South or the North, and to organize exchanges between staff and students. These academics and institutions can supplement what they receive from their own government (e.g. through education budgets) with program funds made available by bilateral and multilateral development funding agencies and private foundations (see Beerens 2004). Although these programs and schemes do have their own objectives and eligibility criteria, with some creativity and patience they can be combined to realize longer-term and broader education and research ambitions. The book *Synergy in Action* (Boeren 2013) gives several examples of how universities try to combine various opportunities offered by donors to achieve a synergistic outcome at their institution.

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.

Overall, achieving synergy and complementarity between scholarship and institutional strengthening programs requires coherent policies to govern these programs and a coordinated and creative use of opportunities from the bottom (i.e. users of these programs). The first should be directed by international agreements between donors and (in country) Ministries and the second by institutions and individuals who can make complementary use of the various funding opportunities. Implementation of the

emerging Sustainable Development Goal agenda (see below) will face a similar challenge: how to agree on the most effective ways of realizing capacity development in support of achieving the Goals on the one hand and, how to ensure that the available resources for capacity building are being used in the most efficient way. Much will depend on governments and funders to agree on ways and means to achieve this synergy.

3.4 Concluding Remarks

While the strengthening of organizations and institutions is usually confined to development cooperation objectives and longer-term academic collaboration, scholarship programs tend to cover a wider range of policy objectives and represent a wider field of stakeholder interests. For that reason, one could argue that scholarship programs are an excellent vehicle for pursuing the aims of the 2030 Agenda for Sustainable Development (United Nations 2016). Although higher education is not featuring prominently in the agenda—of the 17 goals formulated, only Sustainable Development Goal (SDG) 4 explicitly talks about education—it is obvious that none of the SDGs can be realized without the necessary human capital, know-how, and research outputs. Capacity development, education, and research are conditional for the success of the SDGs and therefore will continue to receive support in the policies of governments and bilateral and multilateral organizations. International scholarships will continue to play a significant role as they are an effective, flexible and popular intervention, appreciated by governments, educational institutions, employing organizations, and national embassies. In this respect, the versatility of individual scholarships is advantageous over cooperation projects aimed at institutional strengthening, which usually requires a long lead-time and can take many years before the first results are shown.

Although the 'plausible' impact of scholarships on social change and development is easily explained, measuring their quantitative outcomes is still a great challenge. Tracer studies of scholarship programs seem to corroborate the positive impression, but most of them suffer from methodological shortcomings. Impact studies of institutional strengthening projects in which scholarships are embedded may provide better opportunities to capture longer-term outcomes via the (reconstruction) of baselines and comparison with counterfactual evidence from comparable cases. Even in these cases, however, the complexities are considerable, not least because institutional strengthening is a long-term process and outcomes are influenced by many intervening variables.

Nevertheless, experience throughout the sector is that scholarships not only build individual capacity and strengthen organizations but also lead to socio-economic change, forge relationships across nations and cultures, and expose individuals to new perspectives on life, society, and work. Not surprisingly, many donor countries regard the alumni of their scholarship program as ambassadors of their country and their education institutions and are keen to harness their potential as brokers and bridgeheads for entering longer-term academic and economic relationships.

Fundamentally, international scholarships provide value for money. Since most scholarship programs funded by bilateral donors prescribe that the scholarship recipients study in the donor country, the bulk of the scholarship is spent in the donor country through tuition fees and living costs. This is important revenue for the education institutions and contributes to its attractiveness as destination for study or training. It brings talented individuals into the country who may decide (and be allowed) to stay on for work after they graduate. This is profitable for the donor country's economy and, through remittances, also for the economy of graduate's home country. Used well, it is evident that scholarships can be a very useful instrument to support the Agenda for Sustainable Development: they can play a direct or indirect role in realizing the transformative shifts of the agenda. Scholarships can lead to economic opportunities and more diversified economies of the countries of the alumni. They can also lead to better international relations, cross-cultural understanding, and the preservation of peace. And finally, they can also lead to more cooperation, partnerships, and solidarity.

The opportunities that scholarships offer could be even better used if their benefits were more widely known by other stakeholders: not only the direct beneficiaries of the scholarships (individuals and employing organizations) but also the broader private sector, government agencies, research and academic institutions, NGOs, and so on. Alumni of scholarship programs are an enormous reservoir of knowledge and networks which are there to be tapped for national and international economic and social development purposes. When strategically deployed, scholarships can be the start or the core of institutional capacity building initiatives. The integration of scholarships in these projects or programs helps to ensure that scholarships will contribute to sustainable human resources development of organizations and institutions.

References

Beerens, S.J.J. (2004). From Building capacity to Building on capacity: towards an international network for capacity building in geo – information science and earth observation. In: *ISPRS 2004: proceedings of the XXth ISPRS congress: Geo-imagery bridging continents, 12–23 July 2004, Istanbul, Turkey*. Vol. XXXV, part B. TC WG VI/3. 6 p.

Boeren, A. (2010). Scylla and Charybdis – navigating between internationalization and development cooperation in higher education. *Internationalisation of Higher Education Handbook*. Available at: http://www.handbook-internationalisation.com/index.php?option=com_docman&task=doc_details&gid=120

Boeren, A. (ed.) (2013). Synergy in action: coordination of international capacity development programmes in higher education and research. The Hague: Nuffic.

Commonwealth Scholarship Commission of the UK [CSC]. (2016). *Commonwealth Scholarships*. [Online] Available at: http://www.cscuk.dfid.gov.uk

Danida Fellowship Centre. [DFC]. (2016a). *The Danida Capacity Development Support Programme (DCDSP)*. [Online] Available at: http://dfcentre.com/about-us/the-fellowship-programme/ (Accessed 3 September 2016).

Danida Fellowship Centre. [DFC]. (2016b). *Building Stronger Universities (BSU)*. [Online] Available at: http://dfcentre.com/research/development-stronger-universities-bsu/ (Accessed 3 September 2016).

Deutscher Akademischer Austachsdienst. Hochschulmanagement. (DAAD, 2016). [Online] Available at: https://www.daad.de/hochschulen/programme-weltweit/hochschulpartnerschaften/dies/de/. (Accessed 3 September 2016).

EP-Nuffic. (2016). *NFP TMT (Tailor-Made Training) programme*. [Online] Available at: https://www.epnuffic.nl/en/capacity-building/nfp-tmt-tailor-made-training-programme/nfp-tmt-tailor-made-training-programme (Accessed 3 September 2016).

European Commission. (2016). Erasmus+ – *Opportunities for organisations*. [Online] Available at: https://ec.europa.eu/programmes/erasmus-plus/organisations_en (Accessed 3 September 2016).

Lewis, S., Friedman, J. and Schoneboom, J. (2010). *Accomplishments of the Partnership for Higher Education in Africa, 2000–2010*. New York, NY: Partnership for Higher Education in Africa.

Martel, M. and Bhandari, R. (2016). *Social Justice and Sustainable Change: The impacts of higher education*, New York: Institute of International Education.

Ministry of Foreign Affairs of Denmark. (2016). *Capacity Development and Support Programme*. [Online] Available at: http://amg.um.dk/en/policies-and-strategies/policy-for-danida-capacity-development-and-support-programme (Accessed 3 September 2016).

Organisation for Economic Co-operation and Development [OECD]. (2005–2008). *Paris Declaration and Accra Agenda for Action*. [Online] Available at: http://www.oecd.org/dac/effectiveness/34428351.pdf (Accessed 3 September 2016).

Organisation for Economic Co-operation and Development [OECD]. (2006). *The Challenge of Capacity Development. Working towards good practice*. Paris: OECD.

Parker, S. (2010). *Lessons from a Ten-Year Funder Collaborative*. New York, NY: Partnership for Higher Education in Africa.

Sida. (2016). *About Sida's Research Cooperation*. [Online] Available at: http://www.sida.se/English/partners/our-partners/research-cooperation/about-sida-research-cooperation/ (Accessed 3 September 2016).

Sogge, D. (2015). Donors Helping Themselves. In: B. Mak Arvin and Byron Lew (eds.), *Handbook on the Economics of Foreign Aid*, Cheltenham: Edward Elgar Publishing.

Swiss National Science Foundation [SNF]. (2016). *Swiss Programme for Research on Global Issues for Development (r4d programme)*. [Online] Available at: http://www.snf.ch/en/funding/programmes/r4d-programme/Pages/default.aspx (Accessed 3 September 2016).

United Nations. (2016). The Sustainable Development Agenda. [Online] Available at: http://www.un.org/sustainabledevelopment/development-agenda/ (Accessed 3 September 2016).

VLIR-UOS. (2016). International Courses Programme (ICP). [Online] Available at: http://www.vliruos.be/en/project-funding/programdetail/international-courses-programme-icp_3957/ (Accessed 3 September 2016).

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CHAPTER 4

Case Study: Brazilian Scientific Mobility Program (*Programa Ciência sem Fronteiras, Brazil*)

Yolande Zahler and Frederico Menino

4.1 Introduction

No other initiative is more emblematic of a new era in the internationalization of Brazilian higher education than the Brazilian Scientific Mobility Program (BSMP). Launched by President Dilma Rousseff at the end of 2011, "Science without Borders"—a literal translation of the program's original name in Portuguese, "*Ciência sem Fronteiras*"—has since then become one of the largest government-sponsored academic mobility programs in the world (Luna and Sehnem 2013). Immediately after its inauguration, BSMP gained international recognition and put Brazil, for the first time, on the map of global higher education (Coudaha and Kono 2012; Monks 2012).

The main target of the program was rather ambitious: to send 101,000 fully funded students to study and research in top universities in North America, Europe, Asia and Oceania.[1] The program was designed

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around individual scholarships awarded by mainly two federal agencies—Coordination for Improvement of Higher Education Personnel (CAPES) and National Council for Scientific and Technological Development (CNPq)—to students in STEM disciplines. Most of the students were undergraduates in their second to fourth year of studies in Brazil, sent abroad for non-degree programs and, in some cases, for an additional period of foreign language instruction. Most participants had no previous international educational experience.

Individual candidates applied directly to open application calls, and those selected were placed at institutions in different host countries through contracts signed by the Brazilian Government with experienced partner organizations, such as the Institute of International Education (IIE), Campus France, Universities UK, and the German Academic Exchange Services (DAAD). Those foreign partners also provided entry visas and monitored the students' academic progress. Meanwhile, universities and other sending institutions in Brazil were usually minimally involved in the selection, placement and monitoring of students abroad, although they committed to evaluate international transcripts upon students' return, for equivalency purposes as well as to meet graduation requirements.

Perhaps more impressive than the program's original goals was the fact that they were virtually accomplished by the end of its first phase, in 2015, at an estimated cost of USD 3.8 billion in Federal Government spending.[2] As we shall see, because of its unprecedented magnitude and ambitious design, Ciência sem Fronteiras impacted various areas of educational policy-making and reshaped the debate around international education in Brazil.

This case study is an attempt to contribute to a broader understanding of the original motivations, controversies and multiple outcomes—attested or expected—of BSMP. The following section begins by recollecting the historic precedents of Ciência sem Fronteiras and the increasing relevance of internationalization in the Brazilian higher educational agenda for the twenty-first century. Later, we present and analyze some of the most updated data available on the program, and reflect on the larger scope of social transformations set forth by Ciência sem Fronteiras; transformations that will certainly continue to unfold in the years to come.

4.2 BSMP: Historical and Contextual Premises

Similar to other complex governmental initiatives, the story of Ciência sem Fronteiras cannot be adequately captured by a simplistic narrative. Rather than having a single origin, this pioneering program is the culmination of a series of historical circumstances. In an attempt to organize the story of BSMP in a comprehensive manner, the following paragraphs classify part of those contextual factors into four complementary domains: *historical*, *economic*, *demographic* and *political*.

From a *historical* perspective, Brazilian higher education has always been influenced by and geared towards foreign references. Since their inception in the nineteenth century and later consolidation in the 1900s, Brazilian universities were designed to mirror the centers of excellence from Europe (Schwartzman 2014). As noted by Luiz Cunha, rather than conflicting with the post-colonial mission of building a truly *national* higher education system, the promotion of ties with institutions and individuals from abroad was traditionally seen as a major component of this mission (Cunha 2007). In a broader sense, "nationalism" and "internationalization", at least in regard to higher education policy, have never been in conflict, and institutional efforts to promote internationalization have been—more or less successfully—undertaken throughout the (short) history of Brazilian higher education.

Perhaps the most concrete example of such efforts was the simultaneous creation of two federal agencies, in 1951: CAPES and CNPq (now subordinated to the Ministry of Science, Technology and Innovation[3]). Via these two agencies, the Federal Government funded regular cohorts of Brazilian students and scientists abroad. Both agencies have also facilitated hundreds of international cooperation agreements and directly sponsored thousands of foreign scholars in Brazil since the 1960s. In effect, the establishment of CAPES and CNPq—and the subsequent creation of other state level agencies—provided the foundational framework for sustained public investments in national science and international academic mobility. Over the decades, those institutions consolidated their position as strategic policymakers in the areas of higher education and science, and were crucial in transforming Brazil into the leading nation in scientific development in Latin America (Balán 2013).

CAPES, CNPq and many other state bodies endured severe budgetary constraints in the 1980s and 1990s. During this period, government investments in international scholarships declined and a new emphasis was placed

on reverting "brain drain", repatriating Brazilian scholars and developing the domestic graduate programs. By the turn of the millennium, however, as the country regained its economic vitality, the existing institutional apparatus would prove to be a valuable asset for a new phase in the internationalization of Brazilian higher education. Alongside the restructuring of international relations departments at CAPES and CNPq, direct federal investments in internationalization were propelled to a new level (Vaz and Inoue 2007).

Evidence of the increasing relevance attributed to internationalization was the proliferation of multiple agreements, such as the "China Brazil Earth Resources Satellite Program (CBERS)", the "Inter-American Collaboration in Materials (CIAM)" and multiple student exchange initiatives with institutions such as the German "DAAD" and the British "Universities UK". In the wake of CAPES and CNPq's expansion, universities—mainly the large public research ones, but also prestigious private institutions—multiplied their own independent ties with foreign institutions with the establishment of new dual-degree programs, multinational research groups and the creation of their own international offices. This process was facilitated by the empowerment of organizations such as the Brazilian Association for International Education (FAUBAI), the Council of Brazilian University Rectors (CRUB) and also by the inauguration of Brazilian branches of foreign universities, like Harvard and Columbia, since the 2000s.

In addition to these historical factors, Ciência sem Fronteiras was also inspired by more immediate *economic* concerns. As the country regained its economic dynamism, it became increasingly evident to businessmen, state officials and observers in general that Brazil needed to invest heavily and urgently in the capacitation of its workforce if it intended to compete in the global knowledge economy. By 2010, multiple analyses suggested that Brazil's labor market lacked an estimated 40,000 engineers and thousands more highly skilled and trained professionals in order to improve productivity levels and sustain healthy margins of growth (Salerno et al. 2013). Insufficient levels of professional or academic experience abroad and the low levels of foreign language proficiency among the Brazilian workforce were also factors that concerned government authorities.

Moreover, the economic preoccupations with international competition, human capital formation and skills-driven education were commonly used by the Government to justify the need for a program of the magnitude of Ciência sem Fronteiras and its exclusive emphasis on the STEM fields. The

widely advertised success of multilateral academic agreements in other parts of the world—the Bologna Process, in particular—also served as compelling evidence that the intensification of international academic mobility had not only become an irreversible process in the twenty-first century but could also yield gratifying economic rewards to the nations that are better positioned in the international higher education market (Unterhalter and Carpentier 2010). In this sense, participating in the "global circulation of knowledge"—even if initially as an exporter of students rather than a top destination—became an economic imperative for developing nations like Brazil.

A third set of factors that influenced the creation of Ciência sem Fronteiras refers to the broad domain of *social* and demographic transformations taking place in Brazil in the last couple of decades—and in particular how these transformations impacted higher education policies during the period. Since the 1990s, Brazil has experienced an unprecedented rise in the levels of secondary education enrollment and attainment (Pedrosa et al. 2014). Furthermore, political, social and macroeconomic conditions enabled over 30 million Brazilians to rise out of poverty, thus participating more actively in consumer markets and enjoying relatively higher standards of living (Pochman 2014). These factors—added to a proportional expansion of the university-age population, a historically suppressed offer of tertiary school placements and the increased economic payoffs of a university degree in the job market—were ingredients that combined to form an explosive popular demand for higher education by the mid-1990s (Carnoy et al. 2013). As consequence, the Brazilian higher education sector had nowhere to go but to grow.

The numbers indicate this unprecedented expansion: in 1990 Brazil had a total of 1.5 million students matriculated in undergraduate and graduate programs. Twenty-five years later, this population had risen to more than 7.2 million.[4] In the same period, the total number of higher education institutions in the country went from 874 to 2391[5]; the number of graduate programs alone grew from less than 1000 to 5200.[6] This expansion was propelled by a disproportionate growth of the private sector, which today accounts for 90% of the higher education institutions in Brazil and over 70% of enrollments (Sampaio 2012).

Despite the savviness of entrepreneurs in the for-profit and non-profit education sectors, the massive expansion of the last 20 years was only possible due to a series of government incentives to democratize access to universities. Since 2004, through policies such as Reuni (National Program for Restructuring and Expanding Federal Universities), the Federal

Government created new public universities, expanded existing ones and amplified the availability of online courses, adult learning programs and professional training (Schwartzman et al. 2015). The government also stimulated enrollments in public (tuition free) and mainly private universities via broad financing programs targeted at low-income students. The largest and most widely commented among these programs was Prouni, which distributed almost 3 million scholarships and cost approximately 4.7 billion *reais* in its first decade of existence.[7] Lastly, following a heated national debate, Congress approved, in 2012, new affirmative action legislation granting university admission rights to students from underprivileged educational, income and ethnic backgrounds (Guimarães 2016).

Overall, the consensus among analysts is that those initiatives—although recent—have indeed contributed to a greater socioeconomic diversification of the Brazilian university population, which is now less elitist than ever before (Barreyro and Costa 2015). It is unclear how this recent democratization of Brazilian higher education has influenced the promulgation of new internationalization policies such as Ciência sem Fronteiras. Yet it would be fair to say that the widening access to universities and the popularization of tertiary degrees have at least contributed to form a favorable atmosphere for the adoption of expansive governmental policies. Historically in Brazil, studying abroad has always been a privilege of the few. In this sense, expanding the opportunities for academic mobility among underprivileged groups was in line with the *social-developmentalist* orientation that has characterized many of the Federal Government's initiatives since 2002 (Morais and Saad-Filho 2012).

The fourth decisive domain of transformations leading to the creation of Ciência sem Fronteiras was *political*. According to government officials and educational authorities who were directly involved in the planning and implementation phases of the program, BSMP would not have gained enough momentum if not for a combination of geopolitical intentions and the particular character of the Federal Government around the time of the program's announcement.[8]

On the one hand, beginning in the 1990s and increasingly in the 2000s, the Federal Government has engaged systematically in the pursuit of new educational cooperation agreements both regionally and globally. At the regional level, through Mercosur, Unasur and other platforms of multilateral negotiations, ministers of education from Brazil and the other member states signed a number of agreements designed to facilitate educational cooperation and the mobility of highly qualified human resources in the

region (Gomes et al. 2014). The Brazilian Government also inaugurated, from 2009 to 2012, four new federal universities with explicit internationalization mandates, an action that signaled the consolidation of academic and diplomatic ties with other countries from the "Global South" (Sá et al. 2015). Together, the formalization of new educational agreements and the rehabilitation of existing institutions like CAPES and CNPq sparked a significant increase in the mobility of Brazilian scholars to nations in South America and Africa and, to a lesser extent, to new emerging partners in Asia (De Brito Cruz and Chaimovich 2010).

Beyond the immediate geographic borders in South America and "cultural frontiers" in Portuguese-speaking Africa, educational diplomacy also became an increasingly salient theme in the delineation of Brazil's relations with traditional allies in Western Europe and North America. In an era when the focus of Brazilian foreign and trade policy was shifting towards the "Global South", higher education and scientific exchange represented strategic areas through which the country could maintain its indispensable ties with the North (Spears 2012). The Government understood, moreover, that in order to consolidate the international projection of Brazil as an emerging global power, it would be crucial for the country to participate more effectively in the increasingly interconnected production and circulation of knowledge worldwide. In this regard, the evidence that the number of Brazilian students in US or European universities was much lower than that of students from other emerging economies propelled the Government to take action (Monks 2012).

In sum, a certain nationalistic impetus to promote Brazilian science, technology and recent economic achievements worldwide was at least in part responsible for the creation of such an ambitious program as Ciência sem Fronteiras. The sense of urgency provided by this impetus may also help to explain why the program was designed and administered in a rather centralized fashion by the Presidency. In effect, from its inception, BSMP relied on minimal consultation with higher education institutions, scientific associations, student unions or other civil society organizations. Whereas some interpret this political orientation as an excessive centralization of the program's administration, others believe that BSMP would never have been possible without the direct involvement of the Presidential Cabinet in the program.

4.3 Outcomes and Impacts: A Tentative Analysis of BSMP

It is still early to analyze the long-term outcomes of Ciência sem Fronteiras on Brazilian higher education, economy and society at large. The program was launched in 2011, and the first cohorts of international students only started to return to Brazil in 2013. Therefore, comprehensive data about the initiative are not yet widely available.

In order to engage in a more thorough analysis of Ciência sem Fronteiras and its social impacts, it is important to describe what is already known about the program.

4.3.1 Existing Data and Preliminary Observations

According to the most recent data provided by CAPES and CNPq, the co-administrators of BSMP, a total of 92,862 scholarships had been granted by 2016.[9] The inauguration of BSMP created an immediate impact on the overall number of Brazilian students and scholars sponsored by Federal Government scholarships overseas. In less than 2 years, from 2011 to 2013, the number of Brazilian students abroad more than quadrupled. In the United States—historically the most important partner of Brazil in the areas of educational and scientific cooperation and arguably the most prominent nation in the global landscape of international education—BSMP had a particularly remarkable impact. From 2009 to 2015, according to the International Trade Administration, Brazil went from 14th to 6th place in the ranking of leading nationalities of foreign students in US higher education institutions.[10]

Of the total number of BSMP students worldwide, approximately 39% began their studies abroad in 2014, a year before the last open call for scholarship applications.[11] The charts below show the distribution of implemented scholarships by starting year (Figs. 4.1 and 4.2), by host countries (Fig. 4.3) and by fields of study (Fig. 4.4).

Among the most distinguishing features of Ciência sem Fronteiras is its emphasis on college-level students. In this respect, it is important to highlight that 79% of all BSMP scholarships distributed during the first phase of the program (2011–2015) benefited undergraduate students who were already regularly matriculated in post-secondary programs in Brazil. Those students—usually in their second or third year of studies in one of the "priority areas" of BSMP,[12] and also with a demonstrated record of high

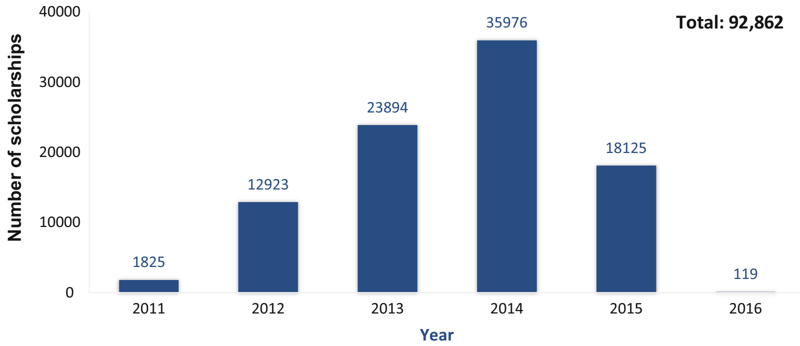

Fig. 4.1 BSMP scholarships by year of implementation (Source: CAPES/CNPq. Last update: April 14, 2016)

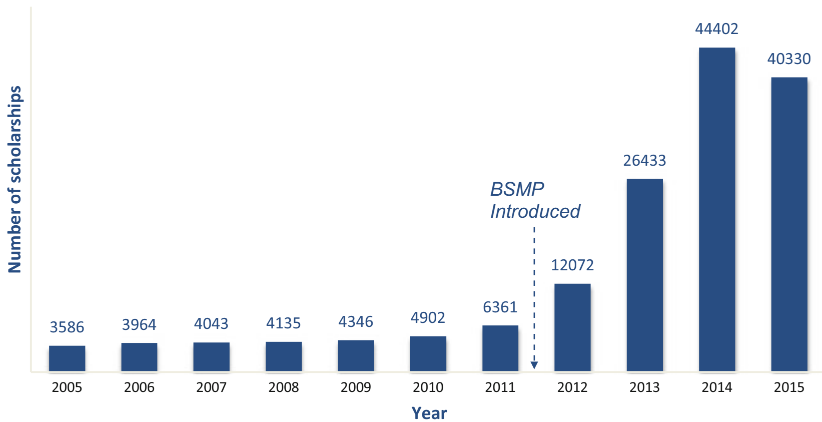

Fig. 4.2 Total number of federal government scholarships overseas per year (not only BSMP) (Source: DRI/CAPES)

academic performance—were enrolled as non-degree seekers abroad for 1 academic year or up to 18 months in the case of those needing prior training in a foreign language.[13] Undergraduate BSMP students were also encouraged to engage in internships and other academic training activities before their return to Brazil.

BSMP's focus on undergraduates should not be underestimated. By targeting younger scholars and by offering an unprecedented number of

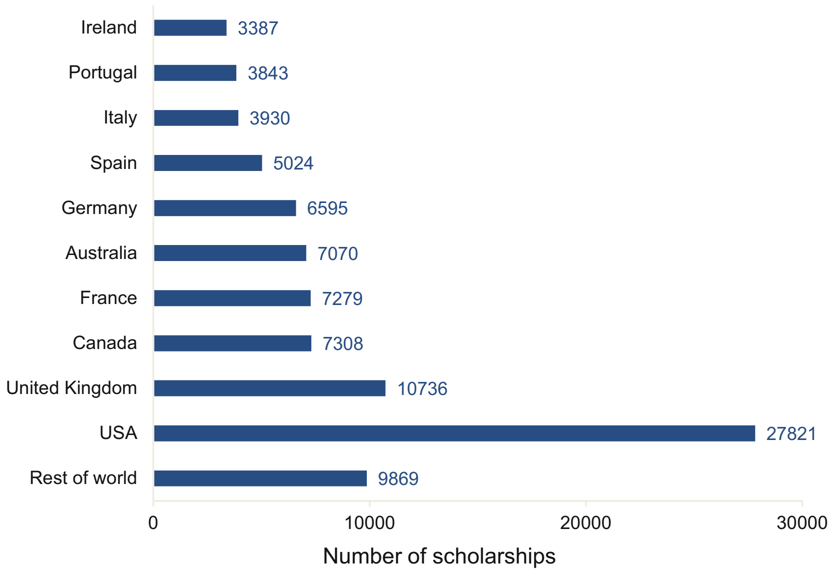

Fig. 4.3 Distribution of BSMP scholarships according to host countries (2011–2016) (Source: DRI/CAPES)

fully funded scholarships, Ciência sem Fronteiras was designed to expand and democratize the opportunities for international education to groups of students who would otherwise never have a real chance to study, work or even travel abroad. In this sense—although this has never been explicitly stated in official communications about the program—the aim of BSMP was not simply to train highly qualified scientists and already established mid-career scholars. More than that, the program had the potential to cause a deep impact on the Brazilian higher education system—usually criticized for being overly hierarchical, bureaucratic and lacking in innovation. By funding young talents directly—regardless of departmental affiliations, family background, university of origin or level income—BSMP can thus be seen as an attempt to "shake things up", and contribute to a bottom-up infusion of entrepreneurship and meritocracy into Brazilian higher education.

Moreover, the emphasis on undergraduates suggests a more comprehensive conception about the social, cultural and political meanings of international education. Understood as more than a strictly economic investment

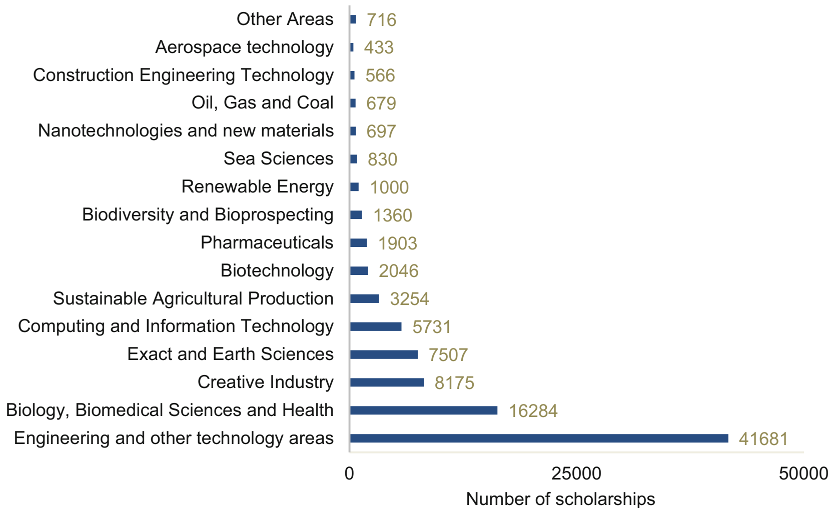

Fig. 4.4 BSMP scholarships by fields of study (Source: DRI/CAPES)

in the nation's scientific capability, Ciência sem Fronteiras was devised as an investment in the *lives* of a potentially transformative generation of young Brazilians. Studying and researching abroad were then arguably thought of as meaningful *life experiences*, and not only *educational* ones. Investing in young students—at least in hypothetical terms—was understood as an investment in broader social change, and not simply in human capital formation or scientific development.

As for the geographic and disciplinary distribution of scholarships, the graphics above indicate other noticeable patterns. English-speaking countries (Canada included) concentrated around 60% of all BSMP fellows, with the United States disproportionally leading the pack. Discipline-wise, engineering-related fields predominated and accounted for over 45% of scholarships, followed by 17% in biomedical sciences. These numbers reflect the atmosphere of urgency originally created by the government and the business sector around the need to train engineers and English proficient professionals for the Brazilian labor market.

Also worth mentioning, BSMP scholarship recipients were recruited from all regions of Brazil and from a wide variety of higher education institutions. In absolute terms, students from São Paulo and Minas Gerais represented 38% of the scholarship recipients. Both states, however, are the

most populated in Brazil and disproportionally concentrate the existing higher education institutions in the country. When controlled by overall university population per State, numbers show that BSMP scholarships were evenly distributed throughout all regions of Brazil.[14] This suggests that talented students, regardless of their region of origin, indeed had a fair chance to be funded to study abroad.

Gender equality was also broadly observed, with women representing 45% of BSMP scholarship holders.[15] Therefore, although Ciência sem Fronteiras did not prescribe any form of affirmative action or quota system during its selection process, it is possible to say that the impacts of the program were widespread. It is true that selected students came mostly from the top universities in the country and had to demonstrate a good record of academic performance in order to be eligible for a rather competitive scholarship. In this regard, BSMP was inevitably an elitist policy, which benefited only the very high stratum of the Brazilian academic population (today with over 7 million undergraduate and graduate students). Nonetheless, although difficult to measure with precision, it is also beyond doubt that a large portion of the 90,000-plus students who benefitted from Ciência sem Fronteiras would otherwise never have had the chance to study abroad. This fact, in itself, represents an indisputable social impact.

4.3.2 *Social Impacts—Preliminary Evidence*

Multiple efforts are currently being undertaken in order to map, understand and better evaluate BSMP.[16] Although results from a proliferation of new studies are still inconclusive, it is worth mentioning at least part of their preliminary evidence.

In 2016, staff members of CAPES began to conduct an exploratory study[17] targeted at the first cohorts of Ciência sem Fronteiras fellows who returned to Brazil since 2013. The study aimed at measuring the insertion of former BSMP students into the labor market and their impact on post-graduate studies. The analysis revealed that 28% of former BSMP undergraduates had enrolled in masters and doctoral programs at Brazilian universities after their return. As a comparison, the rate of enrollment in graduate school is only 7% among Brazilian undergraduates who did not have the chance to study abroad. More importantly, of the total number of former BSMP students who enrolled in graduate studies upon their return to Brazil, approximately 23% entered the highest-rated graduate programs in the country. These programs admit less than 10% of graduate students

annually, which indicates that BSMP alumni who decided to pursue an academic career in Brazil are doing so in the best and most competitive universities in the country.

If the experience of Ciência sem Fronteiras may be interpreted as a passport to a successful academic career, the same cannot be concretely affirmed in the case of the insertion of BSMP alumni in the labor market. CAPES's study has crossed data obtained from multiple governmental databases. However, because specific information about the socioeconomic and ethnic background of BSMP participants was not collected before 2012, longitudinal studies about the impacts of BSMP on individuals' income, labor situation and general welfare are not yet available. In addition, any substantial analysis about the professional performance of returned BSMP students would need to account for the economic crisis, one of the most severe in the country's history, that has worsened since 2015.

Another widely advertised—but also inconclusive—study was produced by the Office of Transparency of the Brazilian Senate.[18] Published in October 2015, the study consisted of a survey sent out to 82,000 BSMP participants and alumni. The results of the inquiry—to which only 18.3% of the students in the sample responded—contained important revelations. First, more than half of the respondents reported family earnings inferior to 10 minimum salaries (approximately USD 30,000 annually), which may confirm that BSMP in fact benefited individuals who would not have been able to pursue international education without governmental help.

The Senate's survey also indicated that 92% of BSMP participants were happy or very happy with the program; 97% declared that studying abroad was an "excellent" or "good" experience, which contributed decisively to "deepening knowledge in one's area of study", "gaining fluency in another language" and "establishing academic contacts overseas". Perhaps even more revealing was the fact that twice as many respondents (53% vs. 24%) said they would prefer to pursue careers in Brazil rather than abroad.

The results of the survey, although very preliminary, were important to debunk claims that BSMP would only serve to stimulate brain drain of Brazilian scholars and young talents to universities and research institutes in Europe and North America. The overall academic and language-learning performance of BSMP students abroad, their remarkable satisfaction with the experience overseas and their declared commitment to "give back to Brazil" were also signs that the unprecedented investments in a program like Ciência sem Fronteiras were not totally unjustified.

4.4 Moving Forward: A Few (In)Conclusive Remarks

By all measures, Ciência sem Fronteiras was an unprecedented initiative in the landscape of higher education policy in Brazil. From an institutional perspective, the program has been pivotal to revive an old and yet usually dispersed debate around the "need to internationalize" Brazilian universities, curricula, science and academic activity in general. In only half a decade of existence, it is fair to say that BSMP pushed agencies such as CAPES and CNPq, for instance, to work together as never before, and quickly adapt their 65-year-old bureaucracies to the needs of internationalization in the twenty-first century.

The implementation of BSMP also opened new avenues for Brazilian international relations. Since the establishment of the program, the Brazilian Ministry of Foreign Affairs inaugurated new educational offices in many of its embassies and consulates around the world. These new offices are concrete examples of the new emphasis placed by the Government on educational diplomacy. Most importantly, the unprecedented flow of Brazilian students to university campuses and research institutes across the world, the direct involvement of international educational institutions in the management of BSMP overseas and the increasing number of international academic missions to and from Brazil have all contributed to profound transformations in the ways Brazilian higher education is perceived internationally.

BSMP served, moreover, as a focal point for several initiatives of Brazilian international student engagement worldwide. As the annual number of Brazilian students abroad quadrupled by 2013, local Brazilian student associations were revitalized and new networks of academic expatriates flourished—Rede CsF, PUB-Boston and BRASA, to name only a few. Spontaneous initiatives, these networks operate in the interface between Brazil and the broader world and have sparked renewed interest in the community of Brazilian students and scholars scattered around the world—also known as the "Brazilian Scientific Diaspora".

Whereas on the global stage Brazilian higher education was in many ways (re)discovered by foreigners, inside Brazil BSMP was an emergency call for university administrators, public officials and academics in general to invest in their international portfolio. With the establishment of Ciência sem Fronteiras, at least one thing became certain: internationalization could no longer be ignored. Although difficult to affirm with accuracy, Ciência sem Fronteiras may have influenced a noticeable increase in the

participation of Brazilian scholars and universities in international academic publications in recent years.[19] Above all, BSMP contributed to reshape the relationships between the Federal Government and the very heterogeneous universe of higher education institutions in Brazil—a universe that, as we saw, has almost tripled in size in the last couple of decades.

It is true that the program's design—centered on individual scholarships—as well as its administrative centralization around the Presidency generated initial resentment among many stakeholders. Representatives of the large, historically autonomous and research-based public universities felt particularly left out of the planning, operationalization and potential benefits of BSMP. Sectors of the media and parts of the Brazilian scientific establishment also repeatedly questioned why large amounts of public resources were being invested in an initiative that did not seem to have clearly defined evaluation criteria or expected outcomes from its outset (Castro et al. 2012). In addition, BSMP was criticized for disproportionally benefiting undergraduate students—many of them with insufficient knowledge of a foreign language—instead of supporting mid-career scholars, post-graduates or even infrastructural improvements in the country's crumbling public universities.[20] The program's restrictive focus on the STEM fields irritated academics in the arts and humanities, as well.[21]

Motivated in part by these multiple critiques, an animated debate arose recently around how to build from the legacy of BSMP's initial phase. The widespread consensus today is that Ciência sem Fronteiras must be seriously reformed and improved, but not ended. In 2014, amidst a very contentious presidential campaign and despite generalized skepticism about the financial sustainability of the program, President Rousseff announced a second phase of BSMP, promising that by 2019 another 100,000 scholarships would be awarded.[22] The downfall of Brazilian economy since then forced the program to be "frozen" in September of 2015, after which no new undergraduate scholarships were offered. A couple of months later, however, in an opposite direction to the austerity measures implemented by the government, a bill was submitted to the National Congress proposing that BSMP become institutionalized as a permanent state policy.[23] An attempt to make Ciência sem Fronteiras immune to partisan disputes and sporadic budgetary constraints, the bill was proof that Ciência sem Fronteiras still had a broad base of support.

In 2016, the Ministry of Education requested that the Senate remove the bill from Congress' agenda so that it could be revised before it was put into vote. A number of institutions are currently being consulted with the

intent to re-cast Ciência sem Fronteiras as the centerpiece of a long-term, integrated national plan for the internationalization of Brazilian higher education. The plan should be anchored in at least three pillars: (a) active participation of Brazilian universities in the selection, monitoring and placement of students abroad; (b) governmental support for foreign language proficiency programs in Brazilian universities (targeted at both students and faculty); and (c) better incentives for foreign scholars and students to participate in Brazilian academia (including infrastructure investments to make Brazilian universities more attractive to foreigners, expansion of programs offered in English and a new legal framework for dual-degree programs and the accreditation of international diplomas).

To conclude, although the long-term social outcomes of Ciência sem Fronteiras are still impossible to measure, the debates and transformations it has already sparked in its very few years of existence allow us to foresee lasting impacts of the program in the years to come. In particular, the numerous, diverse and young "BSMP generation" will hopefully be a decisive force for continuous innovation in Brazilian economy, politics and society at large. As they return from transformative experiences abroad to a country in social, political and economic turmoil, this unprecedented generation of alumni is expected to contribute to changes in curricular practices and in the expansion of international cooperation. These BSMP alumni may also help to shake up the structures of the typically hierarchical, exclusionary and excessively bureaucratic academic sector in Brazil. Time will tell us how and when these transformations will take place.

Notes

1. http://www.cienciasemfronteiras.gov.br/web/csf-eng/
2. Originally, 25% of BSMP's budget would come from the private sector. This goal has not been maintained, and the Federal Government ended up covering 93% of the program's total expenses. (Source: MEC; Federal Budget—CGU, 2015).
3. The Ministry of Science, Technology and Innovation was incorporated into the Ministry of Communications in 2016, after the ministerial reform conducted by President Michel Temer.
4. MEC. Secretaria de Educação Superior.
5. Mapa da Educação Superior, 2015.
6. Diretoria de Avaliação (CAPES).
7. MEC. Receita Federal.

8. Interviews with civil servants and former state officials from CAPES, Embrapii, CNPq and FAUBAI—April and May 2016.
9. CAPES/MEC presentation, Washington, DC, May 2016.
10. ITA (2016).
11. The last round of BSMP scholarship application and selection process was concluded in September 2015. The first phase of the program, initiated in 2011, officially ended in 2016, when the last cohort of scholarship holders began to return to Brazil. Since then, a combination of financial constraints and political turmoil has forced the Federal Government to announce a temporary halt in the program.
12. The priority areas of the program are mainly the ones listed on Figure 4.
13. As an example: 58% of the undergraduates who came to the United States undertook a period of intensive English language training prior to beginning their academic programs (IIE Fast Facts Overview, June 2016).
14. Presentation Capes (September 2015—New York).
15. Painel de Controle: www.cienciasemfronteiras.gov.br
16. Among the growing academic production about BSMP, at least two recent studies are worth mentioning: Chaves (2015) and Grieco (2015).
17. Unpublished study (Adi Balbinot Jr.; "Plataforma Sucupira").
18. DataSenado, October 2015.
19. CAPES: Scopus/Elsevier DataBase.
20. http://opiniao.estadao.com.br/noticias/geral,ciencia-sem-verba-imp-,1615482
21. http://posgraduando.com/por-que-o-ciencia-sem-fronteiras-exclui-as-ciencias-humanas/
22. http://www.brasil.gov.br/educacao/2014/06/dilma-rousseff-lanca-segunda-etapa-do-ciencia-sem-fronteiras
23. Projeto de Lei do Senado n° 798 de 2015.

References

Balán, J. (2013). Latin American Higher Education Systems in a Historical Perspective, In: Balán, J. (ed). *Latin America's new knowledge economy.* New York: Institute of International Education.

Barreyro, G.B. and Costa, F.L.O. (2015). Las Políticas de Educación Superior en Brasil en la Primera Década del Siglo XXI: Algunas evidencias sobre impactos en la equidad, *RMIE*, 20(64), pp. 17–46.

Carnoy, M., Loyalka, P., Dobryakova, M., Dosani, R., Froumin, I., Kuhns, K., Tilak, J., Wang, R. (2013). *University Expansion in a changing Global Economy – Triumph of the BRICs?,* Stanford: Stanford University Press.

Castro, C.M., Barros, H., Ito-Adler, J., Schwartzman, S. (2012). Cem Mil Bolsas no Exterior, *Interesse Nacional – abr./jun.*

Chaves, G.M.N., (2015). *As bolsas de Graduação-Sanduíche do Programa Ciência sem Fronteiras: uma análise se suas implicações educaconais*. Unpublished dissertation. Catholic University of Brasília.

Coudaha, R. and Kono, Y., Eds. (2012). *Beyond More of the Same: The Top Four Emerging Markets for International Student Recruitment*. New York: WES Research and Advisory Services.

Cunha, L.A. (2007). *A Universidade Temporã: o Ensino Superior, da Colônia à Era Vargas*. São Paulo, editora Unesp (3a edição, revista).

De Brito Cruz, C.H. and Chaimovich, H. (2010). Brazil, In: S. Schneegans (Ed.) *UNESCO Science Report 2010* (pp. 103–121). Paris: UNESCO.

Gomes, A.M., Robertson, S.L., Dale, R. (2014). Globalizing and Regionalizing Higher Education in Latin America: Locating Brazil in Multiscalar Projects and Politics, In: D. Araya and P. Marber. (Eds) *Higher Education in the Global Age: Policy, Practice and Promise in Emerging Societies*. New York: Routledge.

Grieco, J.A. (2015). *Fostering Cross-Border Learning and Engagement through Study Abroad Scholarships: Lessons from Brazil's Science without Borders Program*. Unpublished dissertation. University of Toronto.

Guimarães, A.S.A. (2016). As quotas nas universidades públicas 20 anos depois, Lemann Institute for Brazilian Studies, University of Illinois. Paper presented at BRASA Conference, Providence, RI, 31 Mar – 2 Apr, 2016.

International Trade Administration [ITA]. (2016). *2016 Top Markets Report Education: A Market Assessment Tool for U.S. Exporters*. U.S. Department of Commerce, International Trade Administration, Industry and Analysis (IandA).

Luna, J.M.F. de, Sehnem, P.R. (2013). Erasmus e Ciência sem Fronteiras: considerações iniciais sobre mobilidade estudantil e política linguística, *RBPAE*, 29(3), pp. 445–462.

Monks, E. (2012). *The Brazil Scientific Mobility Undergraduate Program in the United States: A New Phase in U.S.-Brazil Educational Exchange*. New York: Institute of International Education.

Morais, L. and Saad-Filho, A. (2012). Neo-Developmentalism and the Challenges of Economic Policy-Making under Dilma Rousseff. *Critical Sociology*, 38(6), pp. 789–798.

Pedrosa, R.H. L., Simões, T.P., Carneiro, A.M., Andrade, C.Y., Sampaio, H., Knobel, M. (2014). Access to higher education in Brazil. *Widening Participation and Lifelong Learning*, 16(1), pp. 5–23.

Pochman, M. (2014). *O mito da grande classe média: capitalismo e estrutura social*. São Paulo: Boitempo Editorial.

Sá, C., Kretz, A., and Sigurdson, K. (2015). Research and the 'Third Mission' in Light of Global Events, In: S. Schwartzman, P. Pillay, R. Pinheiro. (eds.). *Higher Education in the BRICS Countries: Investigating the Pact Between Higher Education and Society*. New York: Springer Science+Business Media Dordrecht.

Salerno, M. S., Lins, L.M., Araújo, B.C.P.O., Gomes, L.A.V., Toledo, D., Nascimento, P.A.M.M. (2013). Uma proposta de sistematização do debate sobre falta de engenheiros no Brasil – EngenhariaData, *Observatório da Inovação e Competitividade*, USP, IPEA, ABDI.

Sampaio, H. (2012). O setor privado de ensino superior no Brasil: continuidades e transformações, *Ensino Superior. Unicamp, Campinas*, 2(4), pp. 28–43.

Schwartzman, S. (2014). *Science and Culture in Brazilian Society, Instituto de Estudos do Trabalho e Sociedade (IETS)*. Berlin: Berlin-Brandenburg Academy of Science.

Schwartzman, S., Pinheiro, R., Pundy, P., eds. (2015). *Higher Education in the BRICS Countries: Investigating the Pact Between Higher Education and Society*. New York: Springer Science+Business Media Dordrecht.

Spears, E. (2012). The Value of an Intercâmbio: Brazilian student mobility, bilateralism and international education. *Revista Eletrônica de Educação*, 8(1), pp. 11–21.

Unterhalter, E., and Carpentier, V. (2010). *Global Inequalities and Higher Education: Whose interests are we serving?* New York: Palgrave Macmillan.

Vaz, A.C. and Inoue, C.Y.A. (2007). *Emerging Donors in International Development Assistance: The Brazil Case*. Ottawa, Ca: International Development Research Centre (IDRC).

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PART II

Investing in Individuals

CHAPTER 5

Selecting Social Change Leaders

Everlyn Anyal Musa-Oito

5.1 Introduction

Organizations have funded scholarships for many decades, all with varying objectives. The majority of these programs aim at rewarding "superior standards of intellectual ability", "exceptional ability", "exceptional promise", "academic performance", and the like (Lamont 2004, p. 109). Several, such as the Ford Foundation International Fellowships Program (IFP), the Gates Millennium Scholars (GMS) Program, and the African Leadership Academy (ALA), combine standards of academic excellence with other qualities pertaining to leadership, character, and commitment to social change and public service. For others still, acquiring critical skills, redirecting career objectives, furthering international mobility, and developing global or national perspectives form their priorities.

A scholarship program's choice to focus on a particular subject, geographical area, professional field, or a specific target group is informed by a combination of many factors. First, historical milestones can inform an organization's goals, for example, the Rhodes Scholarship sought to stop the repeat of war after the two world wars, a similar interest the Open Society Foundations (OSF) scholarships addressed in the former Yugoslavia. Second, global development trends like the Millennium Development Goals

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(MDGs), the 2015 Sustainable Development Goals (SDGs), and some national and regional strategies like Vision 2030 (Kenya) and Agenda 2063 (African Union) have strongly determined scholarship program priorities.

Third, major donors, including governments and international development partners, have their own priorities that inform where and how they structure their scholarship funding. For example, OSF supported study at the EARTH University in Costa Rica for Haitian agronomists to strengthen their agricultural and rural development entrepreneurship training, especially after the earthquake of 2010. This initiative was intended to encourage the scholarship beneficiaries to return home and revitalize their local communities, a priority area in the OSF mission. The UK government has used the Commonwealth Scholarships to advance both its foreign policy and development agendas since World War II. Leading global development partners like the World Bank have also played an important role in influencing the direction of scholarship funding.

While acknowledging the multitude of scholarship program priorities, the focus of this chapter is on scholarship programs that seek to develop social change leaders. These may be international, regional, or domestic, as our examples illustrate. First, the chapter looks at the qualities and skills that make certain individuals suitable for assuming leadership roles. Secondly, it examines the strategies programs have employed to effectively reach, inform, and attract their target groups. Finally, the chapter looks at the selection processes of a few illustrative scholarship programs in order to understand the best practices these organizations have engaged to select beneficiaries who will effectively lead social change in their societies.

5.2 Background

5.2.1 Leadership

Northouse (2004) defines leadership as a process whereby an individual influences others to achieve a common goal. Some noted thinkers believe there are common denominators that define leaders, for instance, vision, passion, integrity, curiosity, and daring (Bennis 2009). The changing types and roles of leaders over time have influenced and shaped the development and progression of leadership theory. Rondinelli and Heffron (2009) acknowledge the growing pressures that globalization has placed on leaders in every community. The changed nature of communications,

transportation, trade, and increasing global interdependency has resulted in increased demands on leaders. As drivers of political and social processes at all levels, today's leaders require higher education to give them the confidence, flexibility, and breadth of knowledge and technical skills needed to effectively address the economic, political, and social needs of their countries today and in the future.

5.2.2 *Social Change Leadership*

Social justice is the promotion of equal rights and dignity for all; it encompasses a vision of a more inclusive society in which the basic needs of all people are met and everyone enjoys an equitable distribution of power and opportunity (Smith 2008). Social change leaders facilitate stakeholders coming together to understand their roles in an unjust social system and how they can address their common issues. Leaders for positive social change have self-awareness, accountability, and a strong sense of purpose. They are capable of dealing with complexity and are willing to transform themselves and others by unleashing the power of collective wisdom and collaborative solutions. Today's leaders for social change have the ability to learn and be humble, and are knowledgeable, creative, and resilient. To ensure intergenerational sustainability, these leaders also bring out the leadership qualities in youth with high potential.

Social change leadership can be fostered by social change philanthropies. Shaw (2002) notes that the primary difference between social change and traditional philanthropies is that while the latter avoids making radical challenges to existing wealth and power structures, social change philanthropy is based on the principles of social, economic, and political justice. This philosophy can be traced across diverse scholarship programs working to strengthen the capacities of social change makers through higher education around the world, including those supported by the Ford Foundation, the Bill and Melinda Gates Foundation, the Open Society Foundations, the MasterCard Foundation, and the Rhodes Trust, among others.

5.3 Scholarships for Social Change Leaders

5.3.1 Goals, Targeting, and Recruitment

To achieve clarity of purpose and focus, organizations benefit from setting their vision and goals at the beginning of program implementation. This helps to avoid unclear and contradictory objectives, poorly communicated goals, and strategic drift. The vision, objectives, and goals should be identifiable and well communicated because they determine the program's identity, policies and practices, resource allocation, target group, management, networks, and impact evaluation. Successful recruiting and selecting qualified beneficiaries starts with the organization's ability to identify its target group, reach out to potential candidates, and attract their participation. A sizeable pool of qualified applicants is required to provide a range of candidates from which qualified awardees can be selected.

Each scholarship program identifies its target group depending on its core mandate. Although the scholarship programs discussed here share the common purpose of developing leaders for social change, their target populations vary according to socioeconomic factors. All organizations engage diverse outreach strategies to reach and attract the attention and interest of scholarship applicants who meet their set criteria. This is particularly important for programs that operate in dispersed geographical areas and target individuals from marginalized communities. This type of aggressive outreach requires close attention to issues of language, technology, and access to effectively reach these groups. Some of the methods scholarship programs rely on to achieve the desired outreach are social networks, program alumni, institutional contacts, physical visits, social and conventional media, and word of mouth.

The Ford Foundation International Fellowships Program (IFP) is a case in point. Operating from 2001 to 2013, IFP sought to support a unique and diverse global community of future leaders who shared a commitment to academic excellence and community service. IFP's overarching goal was clear and evident in the program's funding decisions and activities. Conceptualized as a social justice program, IFP's commitment to social change leadership was synonymous with the program and well displayed, communicated, and embraced in the program's identity. A global program, IFP focused on expanding higher education opportunities for marginalized individuals in Russia and 21 other countries in Africa, the Middle East, Asia, and Latin America. Through its provision of more than 4300

international scholarships over 10 years of competitions, IFP set out to strengthen the academic, social commitment and leadership capacities of its recipients. Its “theory of change” was that these exceptional individuals would use their education to become leaders in their respective fields, thereby furthering development in their own countries and communities. Since the program operated at a global scale, the combined effect would lead to greater economic and social justice worldwide (Dassin 2009).

To broaden the talent pools from which future leaders would be drawn, IFP targeted candidates from social groups and communities that lacked systematic access to higher education, thereby facilitating social mobility for these groups. In this way, the program itself became a force for social change. IFP’s target groups varied among countries and were defined by an array of marginalization factors based on gender; racial, ethnic, and religious discrimination; remote geographical locations economic, social, and political marginalization; physical disabilities; and age, as appropriate for each context and setting where the program operated. Appreciating this diversity, IFP consciously formulated the objective of “reaching the marginalized” in neutral terms. It recognized the connotations of certain terms—for example, “affirmative action”—in different societies (Dassin 2009). This provided flexibility for each country to focus on factors relevant to their local needs. IFP consulted widely with independent researchers, local selection committees, and program partners to identify the target groups based on levels and patterns of socioeconomic marginalization in individual countries. This enabled the program to establish various metrics for defining marginalization and target educational opportunities to the most vulnerable groups that had been excluded fromhigher education and leadership positions in their own countries. In Kenya, for example, priority was given to potential leaders from remote rural communities, who were often the first in their families and entire communities to completeundergraduate studies, not to mention undertake advanced degrees abroad.

The Gates Millennium Scholarships (GMS) was established in 1999 and has been funded exclusively by the Bill and Melinda Gates Foundation. It has a bold vision to include into America’s leadership 20,000 individuals, all people of color, with the promise to make a significant impact on the nation’s future direction. Though coming from some of the country’s most financially marginalized backgrounds, these students have managed to gain entry into the best colleges and universities in the United States. As future leaders from diverse racial and ethnic backgrounds, they represent

the extraordinary promise inherent among all highly academically capable individuals:

> The planners envisioned that the researched experiences of the students' matriculation and retention, the fact of these individuals' extraordinary successes in attaining college degrees, and the testimony of their voices, would spark conversation, and perhaps debate, leading to public policies and added philanthropic contributions in support of similarly able but financially challenged young people. (UNCF 2017)

The goal of the GMS Program—the website taglines are "We Are Learners; We Give Back: We are Leaders for America's Future" (GMS 2017)—is to promote academic excellence and to provide an opportunity for outstanding minority students with significant financial need to reach their highest potential as leaders in strategic fields. These students, consisting of American Indian/Alaska Native, Asian Pacific Islander American, African American, and Hispanic American students with high academic and leadership promise, would otherwise not gain entry into computer science, education, engineering, library science, mathematics, public health, and the sciences—disciplines targeted by the scholarships. Recognizing the highly diversified nature of American society and its need to sustain and advance itself as a global competitive democracy in the new millennium, GMS strategically targeted and reached a diverse population within the United States. It has achieved this outreach by partnering with organizations dedicated to promoting minorities—the United Negro College Fund (UNCF) that administers the Gates Millennium Scholars Program, the American Indian Graduate Center Scholars (AIGCS), the Asian & Pacific Islander American Scholarship Fund (APIASF), and the Hispanic Scholarship Fund.

Another example of scholarships for leadership development is provided by the African Leadership Academy (ALA), whose mission is to transform Africa by developing and supporting a powerful network of future African leaders who will work together to achieve extraordinary social impact and accelerate the continent's growth trajectory. The program is looking for young people who are smart and excel in the academic environment and also have the potential to lead and impact the world around them through their courage, initiative, and innovation, with a particular focus on social entrepreneurship. ALA brings together 16- to 19-year-olds from all 54 African nations for a

two-year, pre-university program at its campus in South Africa designed to prepare each student for a lifetime of leadership on the continent. In the words of Fred Swaniker, Founder and Chairman of the ALA:

> When our students join us they have already demonstrated potential, but we believe you only become a great leader through practice! What they bring with them is just the foundation. When they come here we build on that foundation by giving them hands-on practice, as well as ongoing mentorship and inspiration. (Leroy 2013, p. 23)

The program goes a step higher to build networks and relationships among the scholars and with governments, corporations, and nonprofit organizations that are looking for this talent and provides leadership mentorship. Although not an international scholarship program, its focus on training "leaders for tomorrow" is worth examining. Weber (1996) observes that most of our leadership successors are already among us but are still in formation. The question is how to find and grow them. In its work, the ALA draws on a new approach to youth issues. For many years, youth have been considered as a set of special problems that need to be addressed rather than a resource to be harnessed. In the last two decades, this has changed and the focus is now on developing young people as change agents, problem solvers, and valuable resources for development. This trend has generated a fresh interest in youth leadership and how it can be nurtured and harnessed for the good, not only of the youth themselves but also the whole society. Research has shown that young leaders tend to be open-minded, energized, enthusiastic, and able to make reasoned decisions (Zeldin et al. 2000).

ALA's commitment to the future success of its students is evident in the very close guidance and counseling it provides to them during the university application process at the end of the two-year preuniversity program. Its services include advice on the choice of university programs, preparing for exams and interviews, scholarship information and applications, and test examination—all meant to give ALA graduates a competitive edge.

The three scholarship programs discussed here have many similarities due to their focus on training leaders for social change. Proven leadership and leadership potential and a demonstrated social commitment to the candidate's home community are prioritized as selection criteria, along with more traditional academic performance. To a greater or lesser extent, the target groups would not be able to access the educational opportunities provided

by these programs without their assistance. For beneficiaries of all three programs, reinforced commitment to serving one's community and beyond is a key scholarship outcome, along with attainment in higher education.

With the clear target groups outlined above, we look at how these three scholarship programs have succeeded in reaching and selecting individuals with skills, experiences, qualities, and attitudes that will enable them to succeed in higher education and become effective leaders and social change agents.

5.4 Outreach

An effective outreach strategy reinforces a program's reputation and legitimacy. It creates interest and reassures the applicants about the program's credibility. Understanding who the target group(s) are, where they are located, and their social networks is important in determining the best form and medium for outreach. An effective outreach strategy requires financial and staff resources and good programmatic planning. Continuous monitoring and evaluation is necessary to establish the match between the program goals, the recruitment processes, and the target group(s) in complex and at times rapidly changing environments.

Outreach forms the foundation for the selection process. If the target is missed at this initial stage, the subsequent processes will also be misaligned, compromising the program's final results. Organizational networks and partners, publicity materials, alumni, fellows, print and electronic media, physical visits, word of mouth, websites, and social media, especially among the youth, are all effective means for outreach. Outreach strategies achieve better results when they go beyond the role of reaching prospective applicants to create ample and accessible opportunities for information exchange. It is particularly important that outreach should reduce self-exclusion, allow for a sufficient response period, and speak to the unique social or cultural characteristics of the target group(s) in ways that encourage them to apply. Application forms should be easily accessible and understood. Sensitivity to geographical locations, language, access to technology, and sociocultural factors, among others, should be taken into account in developing outreach plans.

5.4.1 Program Alumni and Fellows

A program's fellows and alumni can play a pivotal role in reaching, encouraging, and acting as role models in the recruitment of scholarship applicants (Knepshield 2009). The author of this chapter, a student advisor herself, notes that while student advisors can provide all the necessary information, they are no match to the power of a role model. For example, IFP alumni participated in outreach and recruitment to reassure potential candidates, especially those who wouldn't have applied, that they could be competitive. The alumni served as living examples that it was possible for candidates from geographically or socioeconomically marginalized groups to go abroad, study in prestigious universities, successfully complete their degrees, and come back to serve their communities. The program alumni distributed publicity materials during outreach and organized visits to remote areas. Their presence reaffirmed potential applicants' confidence in the integrity of the program and helped to dispel the belief that scholarships are only for the affluent, for high academic performers from prestigious schools, or for those with social connections.

GMS, for its part, targets communities where economic circumstances and other pressing needs combine to make higher education out of reach for many people. The most effective GMS strategy to target and reach prospective applicants is the Ambassadors Program, which is a dynamic, nationwide community of recognized program scholars. The growing GMS network has allowed each Ambassador to directly impact the pipeline of academically outstanding applicants and scholars. The Ambassadors serve as role models and offer testimonies about the program. They conduct presentations in schools to generate interest and emphasize that the scholarship is not just about funding but also about gaining a network of thousands of other Gates Scholars and leaders.

5.4.2 Physical Visits

While IFP program staff physically visited and made presentations and distributed program information materials in targeted areas, ALA uses a multipronged approach to identify potential applicants. These include individual country visits where a student recruitment team conducts presentations of ALA to prospective students, parents, and the media. ALA also works with "feeder schools" in each country to help identify

students who meet ALA's criteria. In addition, ALA has created partnerships with NGOs, education ministries, and the UN High Commissioner for Refugees to identify promising yet economically disadvantaged students from its focus countries across the continent. The Academy's recruitment and partnerships office staff travel widely to conduct recruitment drives, where they visit refugee camps, talk to community workers and church and school leaders, and are interviewed on national radio. Similarly, the GMS Scholars reach out to potential applicants in their communities, schools, and families and serve as role models for successive generations of prospective scholars.

5.4.3 Partnerships and Networks

IFP collaborated with partners in the education sector with established networks in the target communities. Universities, academic programs and departments, individual professors, as well as church, NGO, and public sector networks reinforced the outreach process. In Kenya, the local program staff, based at the Forum for African Women Educationalists (FAWE), a regional organization based in Nairobi, collaborated with the American Embassy, which administers the Fulbright and Hubert Humphrey scholarships. The collaboration allowed all three scholarship programs to reach broader pools of candidates. Networks have also played a key role in spreading the word about the GMS in the candidates' communities. These networks focus on attracting applicants in places where going to college is not a priority and chances to attend are very limited. To appreciate the effectiveness of the program's outreach strategy, in 2016, GMS received a total of 57,846 applicants for 1000 available positions. ALA partners with youth and other organizations to host leadership outreach programs for selected schools. During outreach activities, the concept of leadership is introduced to the participants. In South Africa, ALA works with Credit Suisse EMEA Foundation for leadership mentoring conducted by the Foundation's advisors. The Foundation has also supported ALA to establish and develop a leadership center and a leadership curriculum. The partner organizations also help to identify youth who have demonstrated leadership qualities in their societies. In most counties, ALA has country representatives to help identify potential applicants. Apart from the Ambassadors program, GMS collaborates with partners who conduct outreach visits to schools, and with educators, parents, community leaders, and students to reach many potential applicants.

5.4.4 The Media and Materials

IFP used both electronic and print media for publicity. Other strategies employed to achieve effective information dissemination included use of websites and social media, national and local language newspapers, loose newspaper inserts, posters, national and vernacular radio and TV broadcasts and media articles and interviews with country staff. Traditionally, scholarships are not publicized but are advertised in exclusive places out of reach of most ordinary people, thereby creating exclusion. To reverse these trends, IFP's elaborate outreach program not only disseminated information but also consciously portrayed the program as impartial and transparent to reassure candidates of fairness in the application process. To respond to the needs and changes in the environment, annual outreach activities addressed various concerns, including geographical coverage, diverse development sectors, priority professional areas, and how to reach marginalized ethnic groups in rural areas as well as residents in urban slums. In addition to country-specific materials, IFP's head office in New York provided resources for the local partners in all 22 countries where the program operated. These included brochures, policy guidelines, handbooks, and application materials that were translated and customized in each country to suit local needs. To build cohesion at the global level, IFP allowed each of its 22 sites to use the standard IFP logo and advertise on the program's central website.

GMS acknowledges that early outreach is a critical component for recruitment success. It extensively employs social media that today reach many young people and their networks of friends and family members. Using platforms like Facebook and Twitter, GMS generates wide discussions among the targeted groups to share experiences as a strategy to increase awareness and attract a wide pool of prospective applicants. ALA conducts a targeted media campaign throughout the African continent to expose ALA opportunities to prospective students from all walks of life.

5.5 Selection

5.5.1 General Characteristics

Selection is the key to achieving the objectives and goals of any scholarship program, including those focused on identifying and nurturing social change leaders. Based on articulated criteria and guidelines, the selection process helps to maintain program consistency. The most important factor

to establish consistency and stability is selection criteria that reflect the vision and mandate of the particular program (Dassin 2009).

A number of factors should be considered in designing selections. First, as Stanley Higginbotham writes, validity and reliability are central in allowing programs *"to measure what they are interested in"* (2004, p. 65). He underscores the importance of identifying and rewarding distinctive qualities and characteristics of candidates that align with program goals. How these are identified and evaluated determine the success of a program in meeting its objectives.

Second, the characteristics and composition of the selectors are important. The selection committee should be trained, have relevant knowledge and skills in the areas under evaluation, understand the environment where it is operating, and take responsibility for its decisions.

Third, effective selections require standardized evaluation tools to analyze and evaluate all selection information, including the candidates' responses, documentation presented, and observations made by the committee. Selection enables the assessment of an individual candidate's suitability against set criteria that meet the program's objectives, and therefore programs should "forge and maintain strong selection criteria chains" (Higginbotham 2004, p. 64). These should be free from ambiguity, clearly communicate program goals to the candidates, and be measureable with accuracy and reliability by the selection committee. They should be applied consistently throughout the selection process.

Fourth, selection decisions are made by relying upon a range of data generated from different sources, including application forms, academic documents, letters of referees, applicants' statements, and face-to-face interviews. To identify those best qualified from a group of able competitors, typically semifinalists, a mandatory personal interview plays a decisive role and helps to verify the information presented, confirm the facts, and probe the candidates on their presentations. In this setting, committee members have the opportunity to gain a fuller measure of the relative strengths of applicants than the written record alone can usually supply. At the same time, the interview presents applicants with the opportunity to display their strengths to their best advantage.

5.5.2 *Selection Processes in Practice*

IFP provides a good example of these principles. The program developed a four-phase selection process starting with a "pre-screening" phase that ran parallel to the receiving period for applications. At the initial level, IFP assessed candidates on general basic qualifications including possession of a first degree, adequate work experience, and timeliness and completeness of the required documentation.

At the second or "screening" phase, applicants were evaluated on the stated criteria of being a member of the target group. Applicants had to meet individual or group exclusion and marginalization criteria. Eligibility was measured on various factors including disability, gender, and whether candidates had suffered from religious and cultural biases or from ethnic, political, or economic discrimination. Another criterion was whether they came from marginalized geographical locations such as slum and informal settlements, where information access is a challenge and security may be threatened on a regular basis.

Once a candidate was verified as being a member of an appropriate target group, the application was reviewed along three key dimensions: academic achievement and potential; demonstrated social commitment; and proven leadership potential. A candidate had to be highly competent in all three key areas in order to be successful, as suggested in the following diagram (Fig. 5.1).

Academic Achievement and Potential

IFP candidates were required to possess an appropriate academic background with a good first (undergraduate) degree evaluated on the grades attained. Also considered were future study objectives, evidence of improvement, especially in the last two years of undergraduate study, a candidate's academic record in the field of specialization, publications and related academic activities, as well as clarity of his or her academic goals and research focus, especially for doctoral candidates. Applicants' past academic accomplishments, how those connected to their area of work, proposed field of study, and ties to future professional plans were assessed to eliminate applicants who aimed at taking the scholarship opportunity to simply advance or change their careers without any social change purpose. Letters of academic referees and transcripts provided further evidence of the candidates' academic ability.

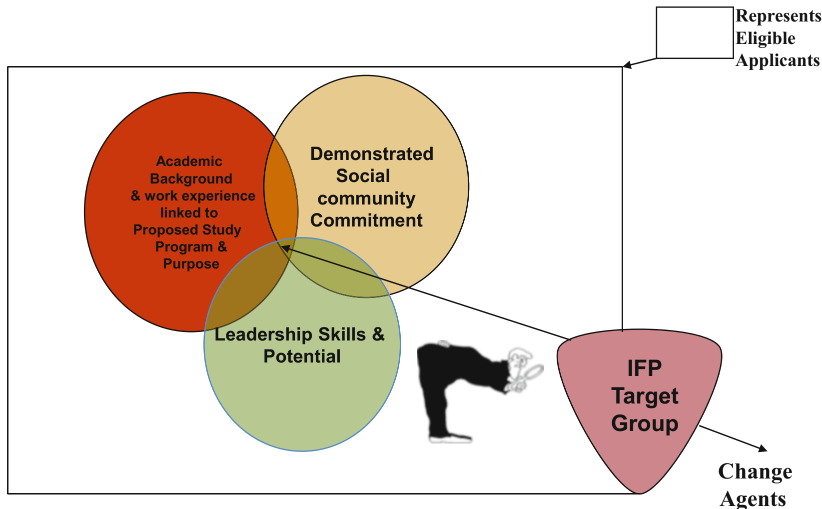

Fig. 5.1 The IFP candidate review process

To reflect the rigor of their course work, commitment, and determination to succeed academically, GMS applicants must have a high school GPA of 3.3 or higher and must be enrolled for a degree program on a full-time basis at an accredited college or university in the United States. They must be nominated by someone familiar with their academic records and be prepared to write a number of essays on various topics. As a program that uses a challenging curriculum, ALA evaluates applicants' academic achievement to demonstrate their intellectual capability, closely reviewing scores from national examinations and the marks and comments on each applicant's school reports. Finalists are required to write an entrance examination and an essay as final evaluating criteria. Referees' letters are also considered in making selection decisions.

Social Commitment/Community Service
IFP favored individuals who presented unwavering commitment to their social responsibilities, demonstrating a strong inclination to return home after graduation to continue with their community roles, share the benefits of the scholarship, and reduce brain drain. To demonstrate social

commitment, applicants' employment history, volunteerism, receipt of community awards, recognition for community service, clarity and practicality of social goals, and membership in voluntary, civic, service or development-oriented, or professional organizations were all taken into account.

Similarly, in the GMS Program, community service and leadership potential are assessed through extracurricular involvement and positions held in the community, school, family, and other associations. ALA evaluates their candidates on their passion for uplifting their communities, which is determined by the candidates' presentation of their view of a world where all people are able to realize their dreams. They are asked how they have demonstrated this passion at school or in their communities as well as their plan for giving back to the society. Proof of entrepreneurial spirit, dedication to public service, and commitment to Africa are of key importance and are determined by applicants' keenness to join a community of individuals from a wide range of cultural, ethnic, socioeconomic, and religious backgrounds from across the continent. Activities involving leadership roles, community service, sports, athletics, or music help determine applicants' character and attitude (ALA 2017).

Proven Leadership Potential and Skills

IFP considered the positions that individual candidates held, for example, as an officer or founder of a community-based organization or a leadership position in school or in professional, religious, or civic organizations and NGOs. Other evidence included: serving in coordinator roles or as project heads; receipt of recognition and awards for leadership from peers, community, and the workplace; and school, provincial, national, or international awards or engagement in pioneering activities such as being a first-generation learner beyond the secondary level. A candidate's ability to nurture and support others was highly rated as well as leadership characteristics of vision, integrity, risk taking, passion, innovation, commitment, consistency, and service, among other qualities. Because some of these qualities are non-tangible and challenging to evaluate, proof was sought through documents, consistency, focus, and measurable achievements.

Similarly, ALA candidates' leadership potential to transform Africa and the world is determined by the activities they have participated in and the leadership roles they play at home, in their schools, or in their communities. These are roles among their peers and within their home, school, and community environments where their leadership skills start to manifest,

despite their young age. This participation is evaluated alongside the candidates' understanding of "leadership" and entrepreneurial spirit, as determined by their ability to identify the needs in the world around them and the actions they have taken to address those needs, including, for instance, participating in business start-ups, health clinics, and youth organizations.

5.6 Conclusion

Scholarships focused on developing social change leaders have common goals, though they employ different strategies to attain these goals. The success of the selection processes depends on the degree to which local partners are engaged in co-design and implementation, since local participation is indispensable in identifying what leadership for social change means in particular contexts and settings.

Widespread social injustice leads to a generalized lack of trust among individuals, communities, and institutions, as well as exclusion of marginalized people from social mobility opportunities. For scholarship programs focusing on social change, such situations call for approaches aimed at attracting interest, participation, and reassurance of the targeted groups. Apart from strengthening individual beneficiaries' capacities, creating networks and support systems for these social change leaders ensures that they will encounter a more powerful platform from which to effect positive systemic change once they have completed their studies.

Appropriate selection is the foundation of leadership strengthening programs upon which other future stages are built. It starts with a clear, well-communicated mission statement and identification of specific target groups that must be effectively reached and encouraged to participate. The scholarship opportunity should be well publicized and matched with a strategic outreach program in order to attract a robust pool of qualified candidates. Transparency and objectivity in the selection process work together to create confidence in the program and attract strong, qualified applicants. Selection tools should be consistently applied and be able to capture and analyze all the individual and contextual factors under review, while the selection committee must be broadly seen as credible, well qualified, and independent. This includes independence from both home and donor governments, as well as from the implementing organizations who only play observer roles in the selection process.

Finally, what have the scholarship programs discussed above achieved in terms of social change leadership? Have leaders of social change emerged

after their study periods? Generally speaking these programs have structured their social change objectives broadly in order to be inclusive and effective both for their beneficiaries and home societies. With this end in view, the programs have in fact produced positively influential leaders in all sectors and levels of society ranging from educators, doctors, community leaders, presidents, ministers, administrators, diplomats, and others representative of the breadth and width of societal structures.

References

African Leadership Academy [ALA]. (2017). Home – African Leadership Academy. [Online]. Available at: http://www.africanleadershipacademy.org (Accessed 24 January 2017).

Bennis, W.G. (2009). *On Becoming a Leader*. New York: Basic Books.

Dassin, J. (2009). Origins: Defining "Disadvantage". In: T. Volkman, J. Dassin, and M. Zurbuchen (eds.). *Origins, Journeys and Returns: Social justice in international higher education*. New York: Social Science Research Council, pp. 29–31.

Gates Millennium Scholars [GMS]. (2017). GMS – The Gates Millennium Scholars. [Online]. Available at: http://www.gmsp.org (Accessed 24 January 2017).

Higginbotham, S.J (2004). Art and Science in Strengthening Scholarship Selection, In A.S. Ilchman., W.F. Ilchman. and M. Tolar. (Eds.) The Lucky Few and the Worthy Many: Scholarship Competitions and the World's Future Leaders. Bloomington, In: Indiana University Press, pp 64

Knepshield, L.J. (2009). Encouraged to apply: Diversity and the scholarship process. In: S. McCray (Ed.). *Leading The Way: Student Engagement and Nationally Competitive Awards*. Fayetteville, USA: The University of Arkansas Press. pp. 67–74.

Lamont, M. (2004). The Evaluation of Scholarship Programs, In A.S. Ilchman., W.F. Ilchman. and M. Tolar. (Eds.) *The Lucky Few and the Worthy Many: Scholarship Competitions and the World's Future Leaders*. Bloomington, In: Indiana University Press, pp. 104–126.

Leroy, X. (2013). Interview with Fred Swaniker. *The Focus*, (17), pp. 18–25.

Northouse, P. G. (2004). *Leadership: Theory and practice* (3rd ed.). London: Sage.

Rondinelli, D. A. and Heffron, J. (2009). *A Leadership for Development: What Globalization Demands for Leaders Fighting for Change*. Sterling, VA: Kumarian Press.

Shaw, A. (2002). *Social Change Philanthropy: An Overview*. Unpublished report. Synergos Institute.

Smith, B. (2008). Leadership for social justice: A Dialogue. Paper presented at the Community Foundations of Canada Conference, 7-9 November, Montreal.

United Negro College Fund [UNCF] (2017). Gates Millennium Scholars Program 2016. [Online]. Available at: https://scholarships.gmsp.org/Program/Details/7123dfc6-da55-44b7-a900-0c08ba1ac35c (Accessed 26 January 2017).

Weber, G.B (1996). Growing Tomorrow's Leaders, In F. Hesselbein., M. Goldsmith. and R. Beckhard. (Eds.) Leader of the Future. San Francisco, Jossey-Bass Publishers, pp 304

Zeldin, S., McDaniel, A, K., Topitzes, D. and Calvert, M. (2000). *Youth in Decision Making: A Study on the Impacts of Youth on Adults and Organizations.* Madison, WI: University of Wisconsin Madison.

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CHAPTER 6

The Benefits and Challenges of International Education: Maximizing Learning for Social Change

Aryn Baxter

6.1 Introduction

International scholarship programs are a longstanding approach to enhancing technical skills and leadership capacity in contexts with limited local higher education opportunities. In many ways, student mobility patterns between countries in the Global South and higher education institutions in the Global North continue to resemble those forged through colonial efforts to develop a local elite and cultivate support for their interests by sending students to study at leading institutions in Europe and the USA (Rizvi 2010).[1] In African contexts in particular, efforts by national governments and international funding organizations to support study at higher education institutions in the Global North through international scholarships have persisted throughout the decades following independence. At the same time, higher education institutions in both the Global North and the Global South have undergone significant changes. In light of these changes as well as existing research on the individual-, institutional-, and societal-level outcomes of international learning experiences, this chapter reviews the extant literature examining international scholarship programs and

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learning abroad outcomes and reflects on how the role of international university experiences might be re-envisioned to challenge problematic assumptions, enhance learning outcomes, and advance social change.

The chapter begins with an overview of the rationales that have long undergirded support for international scholarship programs, particularly in sub-Saharan African contexts, and introduces several changes in the global higher education landscape that raise important and timely questions regarding the role of international learning opportunities in advancing social change. It then reviews evidence from studies of international scholarship programs, which give limited attention to student experiences during their studies, and broader research examining the learning outcomes of international university experiences to illuminate both the benefits and limitations of international scholarship programs. In light of these findings, it considers whether to prioritize international immersion experiences or efforts to strengthen and expand access to local higher education institutions as pathways to social change in the Global South. The chapter concludes by discussing the implications of these findings for international scholarship program design and future research.

6.2 International Scholarship Program Rationales

As demonstrated by the case studies included throughout this book, diverse understandings of the link between international study and social change have motivated a wide variety of actors to fund international scholarships. Despite considerable variation in program design and sponsor motivations, most international scholarship programs for students in the Global South share an overarching intent to create and sustain the intellectual capacity needed to support development (Pires et al. 1999). Even for programs such as Fulbright exchanges that emphasize the cultivation of cross-cultural relationships and understanding, contributing to the development of countries in the Global South remains a primary goal. While the specific emphasis of particular programs varies, this broad aim positions international scholarship recipients as a key link between international study and social change.

This chapter examines research that illuminates the individual-, institutional-, and societal-level impacts of learning abroad as it relates to three distinct yet interrelated objectives that are prominent in the international scholarship program literature: transferring technical skills, developing leadership, and strengthening commitments to civic engagement and public service. These three rationales are associated with scholarship program

models that emphasize the role of individuals in advancing social change. These scholarship program models are grounded in the theory of change—explicitly or implicitly—that empowering individuals with knowledge to implement change in the academic, industrial, and civic sectors will reap benefits for their organizations, communities, and countries (Mawer and Day 2015). For such programs, international study is understood to play a pivotal role in developing technical skills, leadership competencies, and capabilities for public service.

While the presence of these distinct yet overlapping rationales is largely consistent across international scholarship programs, applications vary and the focus on particular priorities has shifted over time (see Loerke, Chap. 10 for further discussion). For example, programs that emphasize the transfer of technical skills exemplify diverse approaches to achieving this objective. They range from doctoral-level scholarships that cultivate high-level academic skills and build disciplines that are crucial for understanding and addressing pressing societal challenges to more vocationally oriented undergraduate, master's level, and short-term training designed to address needs in sectors critical to social and economic development.

The AFGRAD/ATLAS program, USAID's flagship effort to address human resource development needs in Africa, provides a specific example of a particular program's focus changing over time as its emphasis shifted away from its initial focus on transferring technical skills when it began in 1963. Grounded in the notion that a lack of technical skills and human resources prevents African institutions from achieving growth in particular sectors, the program was initially oriented toward assisting newly independent African nations to acquire trained "manpower" in sectors related to national development (Aguirre International 2004). Graduates of the program often returned to replace expatriates in key institutions. Over time, AFGRAD expanded its focus and began to incorporate leadership into the design and name of the program, which changed to ATLAS—Advanced Training for Leadership and Skills—in 1991 (Aguirre International 2004). Leadership development was a core focus of the training by the time the program ended in 1996.

Leadership development is an increasingly widespread and explicit priority for many international scholarship programs (The Mastercard Foundation 2016; Dant 2010). Program approaches to achieving this objective range from offering the scholarship and encouraging students to independently seek out leadership development opportunities to designing specialized—and sometimes required—leadership development programming within

and across participating host institutions. USAID's ATLAS/AFGRAD program, which included no centralized effort to provide supplementary leadership development curriculum, is an example of the former, while the Mastercard Foundation's emphasis on transformative leadership provides an example of the latter (see Burciul and Kerr in this volume for additional details). As with programs focused on the development of technical skills, leadership-oriented international scholarship programs associate international study with a unique opportunity to gain leadership competencies through exposure to diverse people, perspectives and ideas at universities abroad that will equip program participants to address challenges in their home contexts.

Closely related to leadership development is the rationale of enhancing capabilities for and commitments to public service. Whereas leadership training often seeks to equip international scholarship program participants to lead change within their fields of study and the organizations in which they are employed, civic engagement focuses more explicitly on efforts to improve life in a community through political and non-political processes (Ehrlich 2000). Higher education—particularly in Western contexts—has long been associated with cultivating a sense of civic responsibility and equipping students with the knowledge and skills to effectively engage in civic life (Boyte 2015; Nussbaum 2012).[2] The Humphrey Program, one of the US Fulbright Program's international education exchange initiatives, is an example of a leadership-oriented program with a focus on equipping participants for public service and leadership in a global society through custom-designed leadership programming.

Despite considerable variation in the particular technical and leadership skills that international scholarship programs seek to cultivate, these rationales reveal widespread consensus that learning abroad continues to offer benefits to individual learners that cannot be acquired to the same extent locally. While there is general agreement that intercultural exchange contributes to international goodwill and mutual understanding, programs are increasingly expected to document their impact, as indicated by the recent proliferation of efforts to assess student learning outcomes (Sutton and Rubin 2010). The challenges of measuring returns on investment in international study along with changes in the global higher education landscape raise questions regarding the nature and depth of individual-level learning outcomes and their relationship to institutional and societal change. Phenomena such as the globalization of higher education, renewed support for universities in the Global South as key institutions in the global knowledge

economy, and new modes of education delivery made possible through technological innovation expand access to tertiary education and have significant implications for the future of scholarship program design.

6.3 A Changing Global Higher Education Landscape

Organizations that fund international scholarship programs do so in a dynamic global higher education environment. It is within this changing landscape that challenging decisions regarding how best to target funding with an aim of maximizing contributions to social change are made. Although a comprehensive review of changes that have occurred in the global higher education landscape over the past decades is beyond the scope of this chapter and indeed this book, several changes in particular suggest the importance of reconsidering the role that scholarships for international study might play in advancing social change. One prominent change, as noted in the introductory chapter, is that international student mobility has expanded considerably over the past decades. In the USA alone, international student enrollment increased by 73% from 2005 to 2015 (Institute of International Education 2015). This suggests that international learning opportunities are more widely accessible. It is important to note, however, that this access is unevenly distributed and many countries and communities remain on the margins. While many of these internationally mobile students return to their countries of origin upon completion of their studies, it is increasingly common for alumni of international universities to remain abroad and pursue transnational opportunities to advance their careers (Marsh et al. 2016).

Another significant change has to do with the content of degree programs and university curricula. Across the higher education landscape, the value of liberal arts education in equipping citizens for their multiple roles in society is increasingly overshadowed by a growing emphasis on the importance of aligning university education with labor market demand. In the face of economic anxieties, vocationally oriented degree programs are gaining popularity at many institutions, while support for the humanities is dwindling (Nussbaum 2012). At the same time, there is also an expanded emphasis on the role of higher education in cultivating the capacity for innovative and entrepreneurial thinking at institutions around the globe. Universities increasingly encourage students to be job creators rather than

job seekers, and to identify innovative ways of addressing pressing social challenges and practicing social responsibility.

Changes in higher education demand, opportunities, and mobility patterns in the Global South—in contexts such as sub-Saharan Africa—are also apparent. While institutions in the Global North have long been viewed as making important contributions to the social good and serving as primary hubs of innovation and critical thought, the quality of higher education institutions in the developing world is undergoing significant change. Following decades of neglect throughout the 1980s and 1990s, higher education institutions in the Global South have experienced renewed financial support as the "knowledge economy" has reestablished higher education as a top development priority (Dassin 2009). At the same time, expanded access to education at the primary and secondary levels has contributed to a dramatic increase in demand for university education. While many challenges persist, impacts of this renewed support to African higher education are also apparent. For example, in response to the expansion of domestic higher education opportunities, within the sub-Saharan African region between 2003 and 2013, outbound student mobility dropped from 6% to 4% (UNESCO 2016).

Contributing to efforts to meet this growing demand for quality higher education opportunities in contexts throughout the Global South are new modes of delivery such as distance learning programs, branch campuses, and the proliferation of new university models, to mention just a few. In sub-Saharan Africa, for example, initiatives such as the African Virtual University, a Pan African Intergovernmental Organization that uses e-learning to deliver degree programs and training, and the more recently established African Leadership University, which describes itself as a pioneer institution seeking to reimagine what higher education and leadership development might look like in the twenty-first century, are among the new forms of cross-border collaborations that are significantly expanding post-secondary offerings through innovative approaches and applications of information communication technologies (Sakamoto and Chapman 2011).

These changes both support the need for further transformation within the higher education sector and expand opportunities for students to develop technical and leadership skills much closer to home. Moreover, increased international student mobility within the African continent opens possibilities for disrupting traditional mobility patterns from contexts in the Global South to institutions in the Global North and re-envisioning the role of learning abroad in the twenty-first century. The implications of these

changes for the design of scholarship programs and future research are discussed below following a review of key findings from studies of international scholarship programs and learning abroad research.

6.4 The Limitations of Measuring Learning Outcomes

Trends toward increased accountability in both higher education and international development have contributed to an expansion of efforts to assess and document both the student learning outcomes and broader impacts of international study (Dant 2010; Sutton and Rubin 2010). While these efforts offer important insights, research in this domain is fraught with challenges. First, international education is a broad category that encompasses a wide variety of learning abroad programs and opportunities. While the outcomes of participation in particular kinds of international education programs such as study abroad have been the subject of increasingly rigorous study, this literature focuses largely on student populations from countries in the Global North and examines topics that have received little attention in international education research focused on other internationally mobile student populations. Much of the research on international scholarship programs, for example, has focused on quantifiable outputs, such as rates of completion, return, and employment rather than learning outcomes or societal contributions. While there is a growing body of research focusing on long-term impact such as the influence of scholarship alumni on changes in institutions and home communities, much of this work remains dependent on self-reported data (see Mawer, in this volume, for more discussion).

The empirical difficulty of measuring outcomes, limitations of standardized assessment measures, and the variety of levels at which outcomes might be examined also raise concerns. Levels of analysis include the individual, institutional, national/societal, and global/supranational, each of which poses its own methodological challenges (Hudzik 2014; Potts 2016). Many of these outcomes—particularly at the societal level—are long term and therefore logistically and methodologically difficult to assess. While research that extends over a longer period of time has the potential to examine impacts of international study on employment, further study, and other professional and community outcomes, it necessitates tracking down participants and accounting for an array of intervening factors in the analysis. Methodological challenges also include the difficulty of attributing changes to particular programmatic or contextual experiences and factors

given the wide variety of influences on learning during periods of international study and the university experience more broadly (Pascarella and Terenzini 2005). These challenges are further elaborated by Mirka Martel in this volume.

6.5 The Benefits of an International Education

Despite these challenges, several key findings from existing research offer important insights for considering the role that international learning opportunities might play in enhancing the contributions of scholarship program alumni to social change. The remainder of this section focuses first on key findings concerning what and how students learn through their experiences abroad, followed by a discussion of findings that challenge common assumptions and further illuminate the link between international learning and social change.

Intercultural competence, defined as "the ability to develop targeted knowledge, skills and attitudes that lead to visible behavior and communication that are both effective and appropriate in intercultural interactions," is the most widely researched learning outcome associated with international education experiences (Deardorff 2006). Efforts to assess intercultural competence have proliferated since the mid-1990s, with over 80 instruments currently in existence (Bennett 2010; Fantini 2006). Studies employing these measures generally concur that learning abroad has a significant and positive effect on the development of intercultural competence (Vande Berg et al. 2012).

In addition to intercultural competence, global citizenship—a broader construct which can include intercultural competence, social responsibility, global awareness, and global civic engagement—has emerged more recently as an important area for measuring student-level impact (Potts 2016). These efforts to quantitatively assess the development of global citizenship are accompanied by qualitative studies that demonstrate how student identities are reshaped and expanded as they are exposed to diverse perspectives and make meaning of their experiences abroad (Dolby 2004; Rizvi 2009). Studies carried out in a variety of higher education contexts have also found that experiences with diversity contribute to the development of attributes associated with civic engagement, such as an appreciation for diversity within communities and cultures and the ability to work effectively in international and multi-cultural contexts (Denson and Zhang 2010; Marsh et al. 2016). As students deepen their sense of self- and global

awareness, they are better equipped to work toward change on a local and global scale.

These individual-level outcomes that equip alumni of international education programs to contribute to social change are linked to a variety of non-curricular and curricular experiences. Study abroad literature emphasizes that the development of intercultural competency is not an automatic product of traveling and learning abroad but requires intentional cultivation (Deardorff 2006; Vande Berg et al. 2012). Similarly, research confirms that exposure to diversity alone is often inadequate for deepening understanding and suggests that institutions have a critical role to play in fostering meaningful interactions among students (Denson and Zhang 2010). There is substantial evidence suggesting programs designed to facilitate not just cross-cultural encounters but engagement across difference and that provide space and skilled facilitators to process and make meaning from these experiences deepen intercultural learning (Deardorff 2015; Vande Berg et al. 2012). In particular, Vande Berg and colleagues point to the key role of regularly occurring reflection to facilitate intercultural learning by experienced and interculturally competent mentors.

> Most students learn to learn effectively abroad only when an educator intervenes, strategically and intentionally. Educators who intervene in student learning and development in these ways need to be trained to do so effectively. (Vande Berg et al. 2012, p. 19)

This emphasis on the importance of programming designed to create space for reflection and facilitate student learning is also present in relation to cultivating civic engagement. Specific experiences and programmatic features associated with developing commitments to public engagement and capacities for civic leadership include exposure to “democratic” forms of governance, political processes, and philanthropy cultures as well as participation in activities such as non-violent protests, volunteerism, and service-learning, which refers to the pedagogical practice of integrating community service with instruction and reflection to enrich learning, foster civic responsibility, and strengthen communities (Eyler et al. 1997). The influence of such activities is reflected in several studies of international scholarship recipients that include qualitative interviews with program alumni. For example, alumni of the Humphrey Fellowship program highlight ways in which their observation and participation in highly developed civil society and grassroots citizen movements in the USA inspired them to

take additional leadership initiatives once back home (Dant 2010). Similarly, participants in the African Alumni Study describe the important role that social and political engagement with local and global causes during their period of study abroad through volunteer work and advocacy organizations contributed to their understandings of injustice and their social and civic engagement upon graduation. Some note how these experiences abroad strengthened commitments and values that were formed during childhood and primary and secondary education in their home contexts (Marsh et al. 2016).

These findings from international scholarship program research confirm the important role that experiential learning and particularly service-learning opportunities in which community service is accompanied with reflective practices can play in developing commitments to civic engagement. As Pascarella and Terenzini conclude:

> The evidence is clear…service learning courses (those in which the service performed is integrally related to course content) have statistically significant and positive independent effects on students' commitment to social activism and to changing the political system, their perceptions of social and economic inequities, their inclinations to attribute those inequities to the system rather than to individuals, and their sense of social responsibility. (2005, p. 338)

More broadly, the high-impact nature of learning abroad is reinforced across a wide range of outcomes that cut across interpersonal, intrapersonal, and cognitive development domains. This deep learning is associated with the significant dissonance that results from immersing oneself in a new living and learning environment. This dissonance serves as a powerful trigger for development, which occurs through the process of reconciling new experiences with prior understandings and knowledge structures (Baxter Magolda and King 2004). Major findings include gains in ability to understand complex moral and ethical issues and an increased capacity for integrative and reflective learning (Potts 2016).

In addition to the powerful learning that immersion in a new culture stimulates, exposure to new academic cultures and pedagogical practices is also influential. Within the classroom, alumni point to learner-centered and problem-based teaching methodologies that foster engaged learning and critical thinking, applied rather than purely theoretical learning, and state-of-the-art facilities that are not available at home as making an impactful contribution to their learning (Baxter 2014; Marsh et al. 2016).

Such pedagogical approaches are widespread at—although not limited to—higher education institutions in the Global North.

The relationship between international study and career and employment outcomes is of considerable interest in the realm of impact research, which seeks to examine the relationship between international study and subsequent life and career choices. While existing studies suggest that learning abroad is highly valued by employers and offers many benefits for obtaining a job upon graduation and advancing one's career, such findings must be considered in light of labor market conditions in the national or regional context and timeframe of the study (Potts 2016). It is unclear whether it is predominantly the prestige of the international credential or particular skills and experiences acquired that enable career mobility. Nevertheless, research generally supports the positive impact of learning abroad on career and employment outcomes (Marsh et al. 2016; Potts 2016).

While learning abroad outcomes such as intercultural competency, global citizenship, cognitive development, and employment advantages have been more extensively examined in the context of students from North America—and particularly the USA—several recent studies of international scholarship program alumni demonstrate that many of the benefits identified in studies involving mobile students from the Global North also pertain to students from the Global South. For example, alumni of the Ford Foundation's International Fellows Program, which ran from 2001 to 2013, 79% of alumni hold senior leadership roles in their organizations: a number that continues to increase as alumni advance in their careers. The authors note some variation across location, region, and gender: those who are male, return to their home country, and come from Africa or the Middle East are more likely to hold leadership positions than scholarship recipients who are female, remain abroad, and come from other geographic locations. Similarly, a recent study of African alumni of international universities from the 1960s through 2014 found that a high percentage of respondents (86%) have held leadership roles (Marsh et al. 2016).

Over 900 IFP alumni reported that they have started new social justice-oriented programs and organizations, speaking to the program's impact in empowering alumni to make creative and innovative contributions in their home communities (Martel and Bhandari 2016). Over 60% of participants in the African Alumni Study identified strategy development, determining policies, and establishing ethical values for their organizations as roles they play that contribute to social change. A smaller percentage noted their contributions to leading political change through coalition-building,

lobbying, and drafting laws (Marsh et al. 2016). The study of the AFGRAD/ATLAS program alumni also elaborates on the importance of international experiences in cultivating many of the "soft" skills they associate with their ability to lead change upon returning to their home contexts, such as critical thinking, intercultural communication, research techniques, changed attitudes toward work, and managerial skills.

In addition to technical and non-technical skills, alumni also highlighted the importance of relationships and networks formed through international study in achieving impact in their communities. Several participants in the African alumni study cite specific examples of leveraging their international networks to advance partnerships and initiatives with African institutions and provide a lifeline of support during challenging periods of economic downturn and political instability (Marsh et al. 2016). Further elaborating on the key role that social networks play in shaping career trajectories, Martel and Bhandari (2016) report that alumni who remain in communication with other IFP alumni are more aware of social and cultural diversity issues and report fewer problems in finding work. The expansion of social networks and their role in facilitating social change is an understudied contribution of international education that merits further attention.

6.6 The Challenges of an International Education

In addition to the ample evidence that students incur significant benefits through studying abroad, research also highlights numerous challenges. These challenges cluster around two sets of assumptions:

- *The skills-transfer assumption:* The first cluster of challenges problematizes the assumption that students sponsored to study abroad will return home with relevant skills that could not be acquired locally. In light of this assumption, it is important to consider the extent to which research suggests that skills gained abroad are locally relevant and useful as well as the options available for obtaining such skills at local institutions.
- *The guaranteed learning assumption:* The second cluster of challenges problematizes the assumption that students sponsored to study abroad will maximize the potential of this learning experience without intentional support to do so. It is important to explore what research suggests as effective practices for designing impactful learning environments and experiences.

Problematizing both of these assumptions opens possibilities for re-envisioning the design of international scholarship programs.

One of the most frequently referenced challenges in relation to international scholarship programs for students from contexts in the Global South is that of "brain drain." This highlights the extent to which the success of scholarships designed for the purpose of skills-transfer hinges on the return decisions of program participants upon graduation and the relevance and transferability of skills acquired abroad (see Campbell, Chap. 9 on return decisions and Marsh and Oyelere, Chap. 11 on brain drain). Several studies of international scholarship program alumni confirm that many alumni do indeed choose to return home (Aguirre International 2004; Martel and Bhandari 2016; Marsh et al. 2016). They also suggest that many of those who remain abroad make significant contributions to their families and communities of origin that include but are not limited to remittances. Widespread expectations to return, however, can pose difficult dilemmas for scholarship recipients. This is particularly the case for those from contexts where conditions are not conducive to return and/or families who encourage them to pursue career opportunities abroad upon graduation, sometimes in sharp contrast with the expectations of program funders.

Scholarship recipients also face the significant challenges of navigating the high expectations that those in their home communities associate with international credentials and translating their skills gained abroad into drastically different contexts. For example, undergraduate students from Rwanda studying in the USA through an international scholarship program widely expressed concern with the discrepancy between the limited skills and resources acquired abroad and the exceedingly high expectations of employers and community members at home (Baxter 2014). Students emphasized that they would need further training or professional experience upon completing their bachelor's degree before they would be adequately prepared to return home and contribute. Moreover, the home country context—with varying government, labor market, and societal conditions—also factors in to the ways international alumni may be able to contribute (Campbell 2016).

Along with the mismatch between skills and expectations, those pursuing degrees in more technically oriented fields such as engineering expressed the difficultly of translating the skills acquired abroad in state-of-the-art facilities to contexts with less advanced infrastructure and under-resourced laboratories. In a study of leadership perceptions and practices among alumni of the Humphrey Fellows program, Dant (2010) similarly found that students

struggled to apply their US-based leadership training upon returning to their home contexts. He points out a variety of problematic assumptions in predominant leadership theories and argues that leadership trainings must be informed by the diverse cultural and political spaces in which participants operate. Moreover, the challenge of applying leadership and other skills in home country "operating spaces" can be particularly challenging for women returning to contexts where gender inequality is prominent (Wild and Scheyvens 2012). Exposure to more horizontal social structures and egalitarian gender norms on university campuses, while enlightening, lack applicability back home within strongly hierarchical and patriarchal societies.

Although pursuing higher education closer to home might minimize such challenges, programs grounded in the skills-transfer model assume that the benefits of studying internationally outweigh those that might be incurred through study at a local institution. Yet it is important to consider the contributions—and even advantages—of study at national or regional institutions. While studying internationally may provide novel perspectives on one's own institutions and political processes, it also may distance program participants and make it difficult for them to engage in systems and processes that in many cases change or grow less familiar while they are away. This is a particular concern for students at the undergraduate level who travel abroad with limited familiarity and experience engaging with these systems.

While alumni of international scholarship programs may attribute their civic engagement to aspects of their international education, several recent studies carried out by the Higher Education Research and Advocacy Network in Africa (HERANA) demonstrate how higher education institutions in Africa are also contributing to civic engagement and suggest that similar outcomes may be achieved or even enhanced through study at institutions within one's home country or region. The HERANA Phase I studies, which examined civic engagement among alumni of four African flagship universities (Botswana, Cape Town, Dar es Salaam, and Nairobi), show that university-educated political leaders and citizens play key roles in the state and civil society institutions that characterize modern democracy in Africa (Mattes and Mozaffar 2011). They also reveal that students in African flagship universities practice high levels of political engagement and are highly critical of the quality of democracy in their countries (Luescher-Mamashela et al. 2015). These studies suggest that African universities are "political hothouses" with considerable potential to serve as effective training grounds for citizenship competencies.

The goal of the second phase of the HERANA studies was to examine the role of student engagement in equipping students for public service in order to enhance citizenship and equip the next generation of democratic leaders in Africa (Luescher-Mamashela et al. 2015). Student engagement surveys brought to light in the first phase of studies were used to further illuminate how students' experiences contribute to the development of citizenship competencies. Findings confirm many well-established relationships such as the importance of active and collaborative learning for student retention and success, as well as critical and creative thinking, experiences with diversity, and inclusive campus climates (Denson and Zhang 2010; Winchester-Seeto et al. 2012). The HERANA Citizenship Module, designed to study and improve the student experience related to citizenship in Africa, provides a useful tool for addressing questions regarding the advantages and disadvantages of cultivating civic capacities locally versus abroad.

The assumption that international study inevitably contributes to the competencies associated with leading social change is challenged by research on study abroad and service-learning. As previously discussed, maximizing the learning from study abroad typically requires skilled facilitators who intentionally create spaces for reflection, especially among undergraduates. Nevertheless, although the benefits are clear, *mandating* participation in both reflection and service activities has the potential to reduce the benefits. Research suggests that voluntary engagement in which students exercise their own agency to participate is associated with the greatest learning gains (Pascarella and Terenzini 2005). Studies also suggest that students in certain fields of study—particularly in the STEM fields common among international scholarship recipients—are less likely to engage in community service and civic engagement than others (Pascarella and Terenzini 2005). This finding has fueled efforts at many institutions to design targeted service-learning opportunities for students in fields such as engineering with traditionally lower levels of engagement.

Another challenge is sustaining the impact of learning experiences beyond program completion. Even when students benefit from the profound learning experiences that international study and service-learning can offer, they often struggle to maintain newfound commitments and practices upon returning to their familiar routines and home contexts. In a longitudinal case study of how US students participating in an international service-learning program in Nicaragua experienced "perspective transformation," Kieley (2004) found that the long-term impact of these perspective

transformations on lifestyle habits and engagement in social action was ambiguous and problematic. Students reported difficulty with reintegrating, applying their emerging global consciousness, and communicating about their experiences when challenging dominant US cultural norms, beliefs, and practices such as consumerism. These struggles to translate critical awareness into meaningful action upon program completion points to a challenge that is similarly faced by international scholarship recipients as they return to contexts that hinder their capacity to work toward change.

Kieley suggests that social networks can play a role in helping program alumni sustain their social vision and avoid struggling in isolation. Research on social networks similarly suggests that maintaining connections with program alumni is an effective strategy for encouraging alumni to remain civically engaged (Farrow and Yuan 2011). Although social networks have not been an explicit focus of international scholarship program research to date, frequent references in existing scholarship program research to the important role of alumni networks indicate that this may be a particularly fruitful area for future research and program intervention.

6.7 Implications for Scholarship Program Design

In summary, research on international scholarship programs and learning abroad affirm that international study is a powerful learning modality that contributes to the development of intercultural competency, global citizenship, and the ability to interact respectfully and productively across differences—outcomes that program alumni associate with their institutional and societal contributions. At the same time, it is clear that some of the core rationales and assumptions that undergird support for international scholarship programs are challenged by existing research findings as well as major recent changes in global higher education.

First and foremost, designing international scholarship programs to challenge the deficit view of universities in the Global South has the potential to enhance their contributions to social change. The outward mobility of students from the Global South continues to privilege institutions in the Global North and reinforce their position as centers of knowledge production and innovation in ways that are problematic. While higher education institutions in the Global South continue to face complex challenges and international education offers unique benefits, scholarship programs can be designed to strengthen capacity at local institutions and enhance their potential to equip students as agents of social change.

Instead of replicating traditional mobility patterns, international scholarship programs have the potential to transform them by incorporating the advantages of international study while also drawing on the strengths and enhancing the capacity of local higher education institutions. This approach is exemplified by programs such as the Ford International Fellows Program and the Mastercard Foundation Scholars Program that have supported students to pursue international study not only at top institutions in the Global North but also at institutions that are emerging as centers of higher education excellence within the Global South.

Traditional mobility patterns are also challenged by university collaborations that draw on the strengths of both local and international institutions through innovative program designs. For example, the Mastercard Foundation recently funded two such collaborative initiatives through the second phase of their Scholars Program, currently the largest scholarship opportunity available to African students. The partnership between Arizona State University in the USA and Kwame Nkrumah University of Science and Technology in Ghana is designed to lower barriers and expand access to graduate education by providing students who have completed their first 3 years of undergraduate study in their home country with an opportunity to pursue an accelerated master's degree abroad.[3] It also includes faculty exchange to foster mutual learning and supports students as they prepare to travel abroad and transition to opportunities in Ghana upon program completion. Similarly, the Commonwealth Scholarships include split-site initiatives that involve students studying for 3 years at their home institution plus an additional year in the United Kingdom (see Kirkland in this volume for further details). Both of these initiatives leverage and enhance the strengths of North American and African universities while expanding access to quality higher education opportunities.

An additional design imperative is for international—and domestic—scholarship programs to include signature programming that aligns with program objectives and provides the structure and support to ensure that student learning related to intercultural competency and global citizenship is maximized. While host universities offer a vast array of opportunities to develop intercultural and leadership skills, the benefits of structured learning are clear and it cannot be assumed that all scholarship recipients will acquire such benefits through a hands-off approach. Programs can be designed to realize the full potential of international immersion experiences and advance social change objectives by providing adequate support for advisors with relevant intercultural skills to maximize learning and reflection.

This is particularly important given that university curricula are increasingly oriented toward equipping students for the needs of local and global labor markets and less focused on civic education. It is also crucial to support educational opportunities at universities that maintain a strong commitment to contributing to the public good and preparing thoughtful, active citizens.

6.8 Implications for Future Research

Research also has a role to play in further illuminating the potential pathways to social change through international higher education. The challenges examined in this chapter highlight several themes that merit further research. These include the role of context in shaping how students from diverse backgrounds make meaning of their international learning experiences, the role of signature programming at both the program-wide and host-university levels in enhancing learning outcomes, and the role of social relationships and networks in supporting successful transitions, sustaining commitments, and working toward social change.

Existing research demonstrates that the context in which students study as well as where they come from and move to upon program completion influences what students learn and how they apply their knowledge upon program completion. Still, the role of intersecting identities and socioeconomic background of individual program participants in shaping how students interpret and make sense of their learning abroad experiences remains largely under-researched (Baxter 2014; Dolby 2004; Gargano 2009). Students' culturally conditioned ways of being and knowing have significant bearing on the things they learn abroad. In addition to the interaction with factors such as age, gender, prior intercultural experience, and language proficiency, cultural influences matter:

> Each of us learns through transactions between ourselves and the environment; what we bring to the environment—that is, our genetic makeup, our cultural makeup, and the ways that these have equipped and conditioned us to learn and to know—is ultimately more important than the environment in determining how we will experience it, and what we will learn from it. (Vande Berg et al. 2012, p. 20)

The ways in which students' experiences are mediated through their cultural background and worldview merit further consideration. Future studies might explore how international scholarship recipients make

meaning from their encounters with difference and critical learning experiences abroad.

Evidence also suggests that the degree of disjuncture between one's home context and the context in which they study is related to the difficulty of a student's transition and learning experience abroad. In other words, drastic differences can make for difficult transitions as students begin and complete their studies. In light of the interest of many scholarship programs in targeting support to students from highly disadvantaged backgrounds, future research might examine the transition experiences of scholarship recipients from such backgrounds as compared with students experiencing less disjuncture. For example, a comparison of the experiences of Ghanaian students from economically disadvantaged backgrounds studying at public and private institutions in Ghana, in South Africa, and in the USA would illuminate the extent to which the challenges associated with cultural adjustment and applying technical, leadership, and civic engagement skills upon program completion vary across a range of university experiences. Similarly, comparative study of intercultural development across a variety of institutional contexts among domestic and international scholarship recipients would yield valuable insights.

It is clear that programming designed to facilitate reflection on cross-cultural interactions, observations, and engagement through service-learning has the potential to enhance what students learn through international education. Despite this evidence, research that illuminates the effectiveness of different learning activities and environments is particularly limited. The focus of international scholarship program and study abroad research on quantitative studies and program evaluations leaves a "black box" as to the details of how learning occurs. Further illumination is needed through the use of mixed and qualitative research methods (Dant 2010).

Opportunities for researchers include comparing distinct scholarship programs operating within a similar context and engaging in qualitative research to examine in greater depth how signature programming and different aspects of the international university experience facilitate learning. We need qualitative studies that elaborate on how students derive meaning from various aspects of their international learning experiences and how their understandings of concepts such as leadership, civic engagement, and innovation and associated competencies change over time and are shaped by their international study. As Dant's (2010) study demonstrates, grounded theory methodology can offer an effective means for getting a deeper contextual understanding of complex and dynamic situations. Its ability to

allow for flexibility, and to capture evolving contexts as they unfold, offers a high degree of interpretative power and an avenue for developing useful and predictive theoretical constructs concerning the role of program design and context.

A final domain for further research is on the role that international university experiences play in developing social networks and social capital as well as the ways in which this dimension of international education shapes alumni trajectories. Evidence reviewed in this chapter points to the profound ways in which relationships matter across all domains of learning and impact. In addition to the role of relationships with faculty members, mentors, and peers in influencing the student learning experience, social networks formed during the program and maintained post-graduation play an important role in helping alumni access career opportunities and pursue their goals upon program completion. These studies show that it is not only the acquisition of skills and credentials but also the development of personal relationships and social networks that is critical in opening doors for program alumni. In many cases, those who study abroad gain access to influential professional and social networks that confer social and occupational status (Dant 2010). Further exploration of how networks are formed and leveraged by international scholarship recipients would inform future efforts to support the creation and maintenance of strong alumni networks.

6.9 Conclusion

This chapter has argued that international education offers important benefits to enhance learning in key domains that contribute to social change, yet needs to be re-envisioned to challenge problematic assumptions, disrupt traditional mobility patterns, and maximize learning. It has demonstrated that immersion in an unfamiliar academic and social context holds great potential for impactful learning that can be maximized through structured reflection, while at the same time acknowledging that higher education institutions in the Global South are increasingly well poised to provide technical skills and leadership development opportunities that are contextually relevant and closer to home. The benefits and challenges of international study revealed by existing research, in conjunction with higher education changes in both the Global North and the Global South, call for innovative program designs on the part of both scholarship programs and host universities, and further research to enhance international immersion experiences as a pathway to social change. In an interconnected world

where misunderstanding and fear of difference have significant consequences, researching and designing transformative international learning experiences that are responsive to the needs of all learners remains a pressing priority.

Notes

1. Throughout this article, the terms Global North and Global South are used to distinguish between resource rich countries, the majority of which are located in the northern hemisphere, and low-income countries largely located in the southern hemisphere. This is done with recognition that these terms are problematic generalizations for which there is no suitable alternative. The terms are used with the intent of drawing attention to historic disparities of power, based largely on availability of resources, that continue to exist and perpetuate historical structures of inequality (Altbach 2007; Teferra 2008).
2. The Association of American Colleges and Universities defines civic engagement as "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes." (excerpted from Civic Responsibility and Higher Education, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi). They have developed a civic engagement value rubric to provide a framework for evaluating learning outcomes associated with civic engagement. These include diversity of communities and cultures, analysis of knowledge, civic identity and commitment, civic communication, civic action and reflection, and civic contexts/structures.
3. As Director of the MasterCard Foundation Scholars Program at Arizona State University, the author was directly involved in the design and ongoing implementation of the *Strengthening Institutional Linkages* initiative referenced here.

References

Aguirre International. (2004). Generations of quiet progress: The development impact of U.S. long-term university training on Africa from 1963 to 2003. Washington, D.C.: USAID. Available from: http://pdf.usaid.gov/pdf_docs/Pnadb130.pdf (Accessed 12 November 2016).

Altbach, P. G. (2007). Globalization and the university: Realities in an unequal world. In: J.J.F. Forest and P.G. Altbach. (eds). *International Handbook of Higher Education, 1st ed*. Dordrecht, The Netherlands: Springer, pp. 121–139.

Baxter, A. (2014). The Burden of Privilege: Navigating Transnational Space and Migration Dilemmas among Rwandan Scholarship Students in the US (Doctoral Dissertation). University of Minnesota.

Baxter Magolda, M. B., and King, P. M. (2004). Learning partnerships: Theory and models of practice to educate for self-authorship. Sterling, VA: Stylus.

Bennett, M.J. (2010). A short conceptual history of intercultural learning in study abroad. *A history of U.S. study abroad: 1965-present. Special publication of Frontiers: The Interdisciplinary Journal of Study Abroad*, pp. 419–449.

Boyte, H. C. (2015). Democracy's Education: Public Work, Citizenship, and the Future of Colleges and Universities. Nashville: Vanderbilt University Press.

Campbell, A. (2016). International scholarship graduates influencing social and economic development at home: The role of alumni networks in Georgia and Moldova. Current Issues in Comparative Education, 19(1), pp. 76–91.

Dant, W.P. (2010). Squaring their roots: Leadership perceptions and practices of some US-trained African professionals in the public sector. (Doctoral Dissertation). University of Maryland. Retrieved from http://drum.lib.umd.edu/handle/1903/10245 (Accessed 12 November 2016).

Dassin, J. (2009). Higher education as a vehicle for social justice: Possibilities and constraints. In: T. Volkman, J. Dassin, and M. Zurbuchen (eds.). *Origins, Journeys and Returns: Social justice in international higher education.* New York: Social Science Research Council, pp. 19–36.

Deardorff, D.K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of studies in international education*, 10(3), pp. 241–266.

Deardorff, D.K. (2015). The BIG Picture: Reflections on the Role of International Educational Exchange in Peace and Understanding. *All Azimuth*, 4(2), pp. 45–51.

Denson, N. and Zhang, S. (2010). The impact of student experiences with diversity on developing graduate attributes. *Studies in Higher Education*, 35(5), pp. 529–543.

Dolby, N., (2004). *Encountering an American self: Study abroad and national identity.* Comparative Education Review, 48(2), pp. 150–173.

Ehrlich, T. (2000). *Civic responsibility and higher education*. Westport, CT: The American Council on Education and The Oryx Press.

Eyler, J., Giles Jr, D.E. and Braxton, J. (1997). The impact of service-learning on college students. *Michigan Journal of Community Service Learning*, 4(1), pp. 5–15.

Fantini, A. (2006). Exploring and assessing intercultural competence. World Learning Publications Paper 1. [Online]. Available from: http://digitalcollections.sit.edu/worldlearning_publications/1 (Accessed 12 November 2016).

Farrow, H. and Yuan, Y.C. (2011). Building stronger ties with alumni through Facebook to increase volunteerism and charitable giving. *Journal of Computer-Mediated Communication*, 16(3), pp. 445–464.

Gargano, T. (2009). (Re)conceptualizing international student mobility: The potential of transnational social fields. *Journal of Studies in International Education*, 13(3), pp. 331–346.

Hudzik, J. K. (2014). *Comprehensive internationalisation: Institutional pathways to success.* London: Routledge.

Institute of International Education (2015). International Students at All Institutions, 2001/02–2014/15. Open Doors Report on International Educational Exchange. Available at: http://www.iie.org/opendoors (Accessed 12 November 2016).

Kiely, R. (2004). A chameleon with a complex: Searching for transformation in international service-learning. Michigan Journal of Community Service Learning, 10(2).

Martel, M. and Bhandari, R. (2016). *Social Justice and Sustainable Change: The impacts of higher education,* New York: Institute of International Education.

Luescher-Mamashela, T.M., Ssembatya, V., Brooks, E., Lange, R.S., Mugume, T. and Richmond, S. (2015). Student engagement and citizenship competences in African universities. In: N. Cloete, P. Maassen. And T. Bailey (eds). *Knowledge Production and Contradictory Functions in African Higher Education*. Cape Town: African Minds, pp. 230–259.

Marsh, R., Baxter, A., Di Genova, L., Jamison, A., and Madden, M. (2016). Career choices, return paths and social contributions: The African alumni project. Full Report. Toronto: The MasterCard Foundation.

Mattes, R. and Mozaffar, S. (2011). *Education, legislators and legislatures in Africa. Higher Education Research and Advocacy Network in Africa Paper*. Wynberg, South Africa: Centre for Higher Education Transformation.

Mawer, M. and Day, R. (2015). International scholarships: Programme impact and comparative analysis. IIE Networker, Fall 2015 Edition, pp. 16–17.

Nussbaum, M.C. (2012). *Not for profit: Why democracy needs the humanities.* Princeton, NJ: Princeton University Press.

Pascarella, E.T. and Terenzini, P.T. (2005*). How college affects students: A third decade of research (Vol. 2)*. San Francisco: Jossey-Bass.

Pires, M. J; Kassimir, R and Brhane, M. (1999). Investing in Return: Rates of Return of African Ph.D.s Trained in North America. New York: Social Science Research Council.

Potts, D. (2016). Outcomes of learning abroad programs. Australia: International Education Association of Australia. Available at: https://www.ieaa.org.au/research-projects/learning-abroad (Accessed 12 November 2016).

Rizvi (2009). Towards cosmopolitan learning. Discourse: Studies in the Cultural Politics of Education, 30(3), 253–268.

Rizvi, F. (2010). "International students and doctoral studies in transnational spaces", In: M. Walker. and P. Thomson. (Eds). *The Routledge doctoral*

supervisor's companion: Supporting effective research in education and the social sciences. New York: Routledge. pp. 158–170.

Sakamoto, R. and Chapman, D. W. (2011). *Cross-border partnerships in higher education: Strategies and issues*. New York: Routledge.

Sutton, R.C. and Rubin, D.L. (2010). Documenting the academic impact of study abroad: Final report of the GLOSSARI project. Paper presented at the Annual Conference of NAFSA: Association of International Educators, 30 May – 5 June, Kansas City, MO.

Teferra, D. (2008). The international dimension of higher education in Africa: Status, challenges, and prospects. In: D. Teferra and J. Knight. (eds). *Higher education in Africa: The international dimension*. Boston: Boston College Center for International Higher Education.

The MasterCard Foundation, (2016). The MasterCard Foundation Scholars Program. [Online]. Available at http://www.mastercardfdn.org/the-mastercard-foundation-scholars-program (Accessed 30 November 2016).

UNESCO Institute of Statistics. (2016). Global flow of tertiary-level students. {Online]. Available at: http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx (Accessed 12 November 2016).

Vande Berg, M., Paige, R. M., and Lou, K. H. (2012). *Student learning abroad: What our students are learning, what they're not, and what we can do about it*. Sterling, VA: Stylus.

Wild, K., and Scheyvens, R. (2012). *Aid, education and adventure: Thai women's participation in a development scholarship scheme*. Palmerston North. N.Z.: Massey University Institute of Development Studies.

Winchester-Seeto, T., Bosanquet, A. and Rowe, A. (2012). Smoke and mirrors: graduate attributes and the implications for student engagement in higher education. In: I. Solomonides., A. Reid. And P. Petocz. (eds). *Engaging with learning in higher education*. Faringdon, UK: Libri Publishing. pp. 413–438.

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Aryn's research examines the learning experiences and trajectories of internationally mobile students, focusing in particular on the convergence of expectations that students encounter and negotiate in transnational education spaces. Her current projects include a 3-year study of social networks, engagement with an online social networking and learning platform, and self-efficacy among scholarship recipients studying at African and North American universities. She received her doctorate in comparative and international development education from the University of Minnesota in the USA. Previously, she lived and worked in Rwanda as an international educator and conducted educational research and program evaluations throughout East Africa.

CHAPTER 7

Case Study: Open Society Scholarship Programs

Zoe Brogden

7.1 Introduction

> The purpose of the Open Society Foundations is to promote the development of more open societies. We have two principal ways of doing this. One is to develop institutions. The other is to try to enhance the knowledge, awareness, skills and values of individuals so as to promote their commitments to open societies and their capacity to contribute to open societies. Scholarships play a crucial role in the second of these ways of advancing our goals. (Aryeh Neier, President Emeritus, Open Society Foundations)[1]

Perhaps uniquely in the world of philanthropists, George Soros has prioritized an individual's educational development since the inception of his philanthropic career in 1979. Some of his earliest financial interventions helped black students in apartheid South Africa gain an education that would otherwise have been out of reach. A conviction in the power of the individual to have a greater positive social impact after being bolstered by a quality higher education experience remains enshrined in the mission of Open Society Scholarship Programs (Scholarships hereafter). Over 35 years since those first grants supported black South Africans, Scholarships remains

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the central entity within the Open Society Foundations (Open Society hereafter)[2] through which scholarship and educational fellowship programs are designed and administered.

The following case study describes the evolution of Scholarships' grantmaking since the formation of the department in 1994, highlighting key interventions designed to strengthen the capacity of an individual to elicit positive social change in their home communities. This study makes use of key internal strategies, program documents, directives from senior management and board members, and examples of Scholarships' programs[3] to highlight the consistent, if subtle, emphasis Open Society's scholarships place on empowering agents of social change. Grant programs designed by Scholarships have incorporated a blend of four overarching themes: responsiveness; 'lifeline' support; innovation; and capacity building. Social change has, on balance, been a more implicit than explicit concept. This study reveals how, despite a lack of systematic, in-depth evaluation, combined with an ongoing tension between geographic coverage and the programmatic depth, Open Society's faith in the efficacy of scholarships remains strong.

7.2 Program History

As the introduction above suggests, the decision to form a department focusing on scholarship administration came well after the first scholarships were awarded. When the Scholarship Programs' department was formed in 1994, Open Society was already administering 124 separate scholarship programs from its various offices, which funded 4000 individuals per year from Belgrade to Ulaanbaatar. With large-scale funding for the administration of the US government's Edmund J. Muskie awards, and a demand for supplemental support for certain groups of displaced people, a centralized office to streamline program administration, financial management, internal and external communication, evaluation, and partnership development was sorely needed. The embryonic Scholarship Programs incorporated several programs, all focusing on grants for international education in the social sciences and humanities for students and faculty from the Baltics, the Balkans, Eastern and Central Europe, the former Soviet Union, and Burma. Regional and in-country scholarships continued at locally based Soros foundations during this time, due to the belief that national-level scholarships were better managed by dedicated local staff (Greenberg and Yenkin 1994).

From this point onwards, programs for international academic mobility have been inspired by the foundation's overarching aim: to foster open societies. Program documents from 1996 on the mission of Scholarships' grantmaking summarizes this well: '[to] create lasting, cross-national ties through the exploration of current political, economic and social issues and [to] provide grantees with the knowledge needed to foster open societies in their home countries' (Loerke 1996). This language remains relevant to Scholarships' grantmaking in 2016.

In addition to the themes of responsiveness, 'lifeline' support, innovation, and capacity building identified above, the examples that follow strongly reflect the identification in Baxter's chapter (see Chap. 6) of three rationales for 'change agent' scholarships: developing technical skills; leadership capacity; and the commitment to civic engagement. The sections below offer examples of programs which served a specific geographic country or region (Burma, Haiti and the former Yugoslavia) and those which assisted a specific stage of the academic lifecycle (faculty to undergraduates). The study then drills down to a more nuanced, programmatic level, outlining key responses to internal and external partnerships, and ending with a look at program design itself ('enhancements' and outreach and selection procedures) and its impact on social change.

7.2.1 Responsive Grants and Lifelines for Social Change: Geography

In 2016, the roster of countries where Open Society has a grantmaking and advocacy footprint is truly global, but traditionally, the focus has centered heavily on the former Soviet Union, the Baltics, and socialist Eastern Europe. Any type of scholarship or fellowship intervention in these geographies in the early 1990s could be categorized as 'capacity-building' grants to individuals ripe for engagement in social change after decades of communism and socialism. Beyond the former Soviet bloc, some programs addressed an acute societal need, classified in program strategies as 'humanitarian', and not purely designed to build human or intellectual capacity (Loerke 2009). Scholarships' interventions in Burma, Haiti, and the former Yugoslavia, all of which were offered for a limited time frame only, provide interesting illustrations.

Burma

Through the Burma Project, an Open Society program, supplemental grants to students from Burma were awarded after the pro-democracy

demonstrations of August 8, 1988 (the 8888 Uprising). In 1994, Scholarships launched the *Supplemental Grants Program–Burma*, offering partial financial support to Burmese students based in border areas, neighboring countries, or the West. These students' educational experience, already degraded since the military takeover in 1962, became impossible after 1988. Open Society's partial financial contributions were tenable for university study at any level and in any field. In 2007, a regional partner organization based in Thailand, Thabyay Education Fund, noted that viable applications could come from within Burma, as well as from neighboring countries. In response, Scholarships created a fully funded master's awards program, tenable at Southeast Asian universities in targeted fields in the social sciences and humanities. To date, Open Society's engagement with Burma has included approximately 3500 grants to Burmese students and scholars between 1995 and 2014. No other Scholarships program has been as flexible with the level of study or range of fields.

The Former Yugoslavia

War has also influenced Scholarships' reaction to a crisis. As the former Yugoslavia nosedived into civil war in 1991, George Soros responded with supplemental grants to enable students to start or complete their education outside of their home countries. The *Supplementary Grants Program for Students from the Former Yugoslavia* was launched in 1994 with a USD $5 million budget over five years to assist up to 2000 students annually. Selection criteria note a preference for individuals who were more likely to return home in the future to 'work for the cessation of war, opening boundaries, and for the pacification, economic and democratic rebirth of the region' (Open Society Fund, Inc 1993), signaling that these grants had the additional intent of contributing to long-term social change efforts. Until this program closed in 1999, approximately 4000 grants were made.

Haiti

Extending Scholarships' grantmaking to Haiti in 2009 signaled a foray into a new geography. In response to recommendations from the Soros Economic Development Fund, a social impact investment initiative, and colleagues at the Fondation Connaissance et Liberté, the local Open Society-supported foundation in Port-au-Prince, a grant was given to EARTH University in Costa Rica to support Haitians enrolling in bachelor degree programs in agronomy. EARTH University offered a student-centered curriculum focusing on social entrepreneurship to strengthen

marginalized communities in Latin America. Though agronomy stood outside of Scholarships' remit of the social sciences and humanities, the funding addressed an acute need to embolden young social entrepreneurs to revitalize their communities sustainably, which aligned strongly with the missions of Open Society. This support became all the more relevant after the earthquake in Haiti in 2010, an event which prompted Scholarships to design nimble 'emergency' grants. Final-year bachelor's students stranded within a nonfunctioning educational system were supported to travel to the University of the West Indies, as well as to select schools in the United States to complete their education. In addition, Scholarships partnered with the Tropical Agricultural Research and Higher Education Center, also in Costa Rica, to fund Haitian students pursuing master's degrees in development practice, thereby increasing the level of training with which grantees would return. To address structural issues within universities, 12 Haitian faculty members traveled to EARTH University to observe the student-centered model, and, in a little-used grantmaking intervention, six university administrators also received short-term training grants to learn about EARTH University's administrative functioning.

7.2.2 Capacity-Building Grants for Social Change: From Faculty to Undergraduates

The social sciences and humanities were defined in a 1998 Scholarships strategy document as 'in greatest need of attention due to their stalled development in the Soviet era and their importance in supporting open society' (Loerke 1998). This focus, and the stagnation of universities after the fall of the Soviet Union, has been a resoundingly ripe area for social change grantmaking, more specifically, grantmaking for educational change. From 1997, Scholarships' interactions naturally dovetailed with the work of the Open Society Higher Education Support Program, a program granting strategic support to select university departments throughout the post-Soviet space. Scholarships' support for academic capacity building centered on structured sabbatical visits for university faculty from select countries within the former Soviet Union to visit Western institutions, primarily in the United States. These grants were designed to expose faculty to current pedagogy, academic networks, and the latest research resources in order to enhance their capacity to teach innovatively at their institutions of employment. These grants were seen as 'high impact' awards for targeted change that would bear fruit in the short, medium, and

long term (Loerke 1998). The intentionality for social change was clear: if one could empower an individual through a structured grant to learn how faculty peers in the United States operate, a multiplier effect on their fellow faculty, staff, students, and local academia would result. From 1999 to 2012, the *Faculty Development Fellowship Program* supported approximately 190 faculty from 12 countries, who received grants lasting up to three consecutive spring semesters at universities in the United States.

Giving faculty the opportunity to take a shorter, one–two-month period away is also a nimble grantmaking intervention, especially for those who cannot take extended leave from commitments at home. As part of the *Oxford and Cambridge Hospitality Schemes*, faculty from the former Soviet Union and Eastern Europe were immersed in these academic havens for month-long visits. From 1987 to 2013, up to 70 faculty per year had the time and space to live within colleges and use library resources to advance their research.[4] These grants have a legacy that can be traced back to George Soros' support for over 500 Russian scientists to travel to the University of Oxford from 1982 to 1989.

Other programs have also focused on academic reform in countries of need. The *Doctoral Fellows Program* targeted scholars from Georgia, Kyrgyzstan, Moldova, and Tajikistan who expressed a strong preference to teach at home after gaining an advanced degree. Representing some of the highest amounts Scholarships has awarded for individual grants, this program secured university placements for successful candidates and awarded four years of full funding[5] to set grantees on the path to completing a doctoral degree in North America.

Though the majority of Scholarships' support has been for master's, doctoral degrees, and faculty visits, support for younger generations has not been neglected. Undergraduate support has its legacy in George Soros' long-term support for eastern and southeastern European students to study at the American University in Bulgaria, an institution grounded in a liberal arts curriculum. In addition, from 1994 to 2012, Scholarships designed and administered the *Undergraduate Exchange Program (UEP)*, an award for students enrolled in undergraduate studies in select countries of the Balkans, Central Asia, Eastern Europe, and Mongolia. These awards gave students the opportunity to spend their second year at a partner institution in the United States that offered exposure to a liberal arts education. This grant was developed over time to nurture individuals dedicated to social change by making service learning a key pillar of the grantee's experience. The efficacy of the combination of international study and civic engagement

is highlighted in Baxter's chapter (see Chap. 6) in her summary of work by several scholars suggesting the positive effect this combination can have on a student's civic attitudes. UEP grants required scholars to take part in volunteering activities while at the host university, as well as to design and implement a year-long 'home country project' upon their return, which addressed an issue of concern within their home communities. During its 18 years of operation, the Undergraduate Exchange Program has supported approximately 930 individuals.

7.2.3 Innovative Grants for Social Change: The Influence of External Partners

From the founding of the department, Scholarships has influenced, and been influenced by, strategic partners. All grants have been leveraged through cost-sharing arrangements with universities and other large donors. In all cases, university partners have reduced the costs of tuition. Institutional funding bodies, such as the UK Foreign and Commonwealth Office, Scholarships' partners, and administrators of the Chevening Scholarships, have contributed a third of the total costs of all *OSF-Chevening Awards*, along with Open Society and a partnering UK university. Awards for master's degree study, faculty exchanges, and PhD degrees in Germany have been made possible by a partnership with the German Academic Exchange Service/DAAD, in which each party co-funds 50 percent. Leveraging costs has numerous benefits, enabling Scholarships to fund more awards in more countries and broadening access to a wider range of quality educational opportunities than operating alone could offer.

The choice of partner universities goes far beyond monetary offset. However, there is no set formula for a choice of host university, and, over time, Scholarships has developed relationships with universities on sliding scales of compatibility. Some partnerships, such as with Columbia University's School of Social Work in New York, and the George Warren Brown School of Social Work at Washington University, St. Louis, have had international aspects to their programs, which suited the *Social Work Fellowship Program* when it was established in 2000. Some institutions offer value-based alignments, such as the Heller School at Brandeis University in the United States, a partnering institution within the *Civil Society Leadership Awards*, which has the creation of positive social change underpinning its curriculum. Scholarships frequently try to cluster grantees to solidify networks between partner universities. This opportunity has been possible

at many universities worldwide, including the University of Hong Kong, Rutgers University in New Jersey, and the University of Essex in the United Kingdom.

Partnerships have also a shifted Scholarships' vision to new geographies. The UK Foreign and Commonwealth Office encouraged Scholarships to expand its jointly funded master's awards into Afghanistan, Bangladesh, Indonesia, Jordan, Palestine, Pakistan, and Syria, while conversations with a long-term partner, Columbia University's School of Social Work, sparked master of social work awards to be offered in Jordan.

Interestingly, the governments of 'sending' countries have also directly shaped Scholarship Programs' grantmaking. Scholarships partnered with governments in Georgia and Moldova to help bolster the capacity of their civil service. In the case of Moldova, Open Society was approached to help develop Moldova's public administration as they began on the path to European Union accession. In Georgia, a skills gap was identified in high-level civil servants in select ministries.[6] As a result, in 2011, Scholarships launched the *Civil Service Awards*, which provided master's degrees in the United States to selected civil servants who had the potential to become 'agents of change' in policy-orientated positions (Open Society Foundations 2010). Select ministries in both countries guaranteed scholars three years of employment upon graduation. In total, 30 civil servants, 15 each from Georgia and Moldova, received opportunities for advanced training and returned to bolster the capacity of the participating ministries.

7.2.4 Innovative Grants for Social Change: The Influence of Internal Partners

Open Society is an extensive organization comprising a web of issue-based and regionally focused offices, programs, and foundations. Scholarships has responded to several approaches from various programs to design initiatives addressing acute capacity gaps. By building human capacity in specific fields and leveraging Open Society's existing efforts and expertise, scholarship awards can play an invaluable role in catalyzing change. A strong example of this is scholarships in the field of law. In 2012, Scholarships, in partnership with Open Society's Human Rights Initiative (HRI), launched the *Disability Rights Scholarship Program*, offering scholarships for fully funded degrees in disability rights law. HRI saw the signing of the UN Convention on the Rights of Persons with Disabilities in May 2008 as a paradigm shift in the field of disability rights. In the countries of priority to HRI's work

(mostly in Central and South America and Africa[7]), HRI staff encountered a capacity gap in legal experts and advocates for the rights of the disabled. To respond, HRI created a consortium of law schools with expertise in disability rights, including the National University of Ireland in Galway, Cardiff and Leeds Universities in the United Kingdom, McGill University in Canada, and Syracuse and American Universities in the United States, which all offered tuition offsets. Since 2012, the program has supported 64 scholars from 18 countries, bolstering legal capacity and creating local advocates.

As the examples above illustrate, professional master's degrees are an integral part of Scholarships' strategy. Back in 1998, master's scholarships were offered in social work, public health, law, education, public administration, pedagogy and teacher training, as well as environmental management. Through these degrees, individuals would be able to reframe and rebuild these fields locally. Sixteen years later, the majority of Scholarships' master's awards are funneled through one flagship program: the *Civil Society Leadership Award*.[8] After shifting eligibility into new countries, mostly in east Africa, these awards target committed civil society activists who have a keen sense of how an advanced applied degree from abroad could help them be more effective leaders at home.

7.2.5 Innovative Grants for Social Change: 'Enhancements'

> Scholarships staff design and implement programs that help selected individuals earn internationally recognized credentials and absorb instructive experiences generated by cross-cultural immersion, propelling these individuals towards productive participation in positive social change. (Loerke 2015, p. 1)

As the quote above suggests, the design of an Open Society scholarship goes beyond administering financial support. Since the current program director, Martha Loerke, was hired in 1994, Scholarships has operated with a consistent conviction that extracurricula support will help bolster a grantee's ability to contribute to the development of open societies. As a result, 'enhancements' have included pre-scholarship orientation sessions, grantee conferences, internships, communication efforts, and alumni activities.

'Enhancements' represent 14 percent of Scholarships' 2016 grantmaking budget and are considered to be an integral part of a 'continuum of care'

toward the grantee. Scholarships and its advisory board retain a strong conviction that these activities build social and intellectual capital. Enabling grantees to develop effective social networks with a like-minded yet diverse body of scholars has been one of the key motivators in creating a pre-academic summer school. Designed, developed, and managed by Scholarships staff, a three-week-long summer school for a select group of grantees has been running since the first school was held on Lake Issyk-kul, Kyrgyzstan, in 2003. Scholars take social science, academic writing, and debate classes over the course of a school session. This experience is capped off with a 2-day predeparture orientation session that often incorporates alumni, thus further aiding network creation. Feedback from host universities and co-funding organizations has alluded to an enhanced academic performance from those who attend. In addition to this very practical benefit, strategy language has made consistently clear that creating a forum for new grantees to spend a prolonged period together will foster the creation of lasting communities.

The assumption is that creating networks and building social capital will allow grantees to leverage these links as they drive innovative, active, and vibrant social change in the future. Reflecting on the summer school, one Belarussian alumna of the *Civil Society Leadership Awards* noted in a focus group with Scholarships staff that 'the phenomenal thing that happens here is the feeling of belongingness, not only [to] this organization, but to this broader network of people that are united by the shared goal to make their society back home better'.[9]

Regional conferences, which bring together up to 100 scholars and alumni based in a specific geographic region, help to cement links between cohorts of individuals who may otherwise never have met. Though Scholarships are considering existing platforms such as LinkedIn to connect thousands of grantees and alumni, in-person meetings are still considered productive ways to share ideas, perspectives, triumphs, and challenges.

7.2.6 Innovative Grants for Social Change: Grantmaking Procedures

Scholarships' grantmaking process, specifically the recruitment and selection stages, is designed to embody Open Society ideals of transparency, meritocracy, and fairness. Scholarships carefully design an open and transparent application and selection process that often includes in-person interviews with a panel of academics, Open Society staff and Scholarships'

alumni. As the 2014 program strategy confirms: 'The key message is clear: local connections don't count. Transparency is key' (Loerke 2014).

In addition to being good grantmaking practice, the emphasis on transparency is a result of the realities of the countries in which Scholarships has engaged. In the years after the fall of communism, countries in the former Soviet Union were mired in rampant corruption: opportunities scarce; knowledge was withheld; and informal networks were relied on to cope with everyday life. In some countries, varying degrees of corruption remain. By marking applications as free of charge, sending all paper-based (and now electronic) applications to Open Society offices in New York and London for review, and holding interviews in person where possible, Scholarships has attempted to stand outside of local ways of operating, indirectly promoting values intrinsic to positive social change. The belief in the efficacy of this process was reflected by one locally based Scholarships coordinator at the Open Society Foundation for Albania, Brunilda Bakshevani. In a country where corruption is pervasive and promoting transparency is one of the foundation's strategic aims, she considers the wide dissemination of information and remaining personally available for consultations as creating a local reputation for trust. In conversation with the author, she notes 'transparency is the most important part of the process'.[10] As the quote above makes clear, one of the central facets of corruption is the censorship of information. Announcing scholarship awards and calls for applications as widely as possible proves to be a problem, even in the internet age. During its operational history, Scholarships has enlisted the help of educational advising centers (EAC).[11] To ensure scholarship calls reach as wide an audience as possible, EAC staff work hard to disseminate calls within local news media, hold informational sessions at local universities, and collect and send all paper-based applications back to Scholarships' central offices. Throughout the 1990s, the doors of these centers were open to give free and impartial advice on higher educational opportunities, helping students learn English and take standardized admissions tests, and holding film and debate nights. Such activities were novel in the post-Soviet context at the time, and helped those who wanted access to opportunities make independent, informed choices on education abroad. To give a sense of the reach the EACs have achieved, from 2001 until 2013, almost 49,000 applications were received from 25 countries served by these entities across the Balkans, the Baltics, the former Soviet Union, and Mongolia, with Scholarships awarding grants to almost 5500 individuals.

This focus on transparency is also highlighted in Everlyn Anyal's chapter (See Chap. 5) in describing the ethos behind the Ford Foundation's International Fellowship Program's outreach and recruitment efforts, which also prioritized creating access and promoting transparency to marginalized communities around the grantmaking process.

7.3 A Note on Evaluation

The 'tension between being responsive and being strategic', as a 2006 program strategy discusses, remains relevant 10 years later (Loerke 2003). Over its 20-year history, Scholarships sought to strike the right balance between the number and type of grants offered in a specific country. This has produced an internal debate over the breadth of Scholarships' work versus its depth in a particular geography or field. Scholarships need to be responsive to the vision of the Open Society chairman, senior management, partnering bodies, and the wider Open Society network, while also remaining on course to fulfill its own programmatic vision. Since 1994, approximately 15,000 individuals from over 30 countries have received scholarships, and at the height of the programmatic budget in 2012 (USD $26.3 million), staff were administering almost 1000 grants per year. Even after a major budgetary cut to USD $12.8 million as part of a foundation-wide strategy review in 2013, around 300 grants per year are awarded, complete with 'enhancements'.

Evaluating the impact of the awards on an individual's personal trajectory and the contribution they make to their home communities, however, was never systematized. In view of the significant number of grants and 'enhancements' to administer, staff found little time to develop evaluation strategies. Despite reduced grant numbers, creating a system for the robust tracking of alumni and the mining of measurable data and personal narratives remains both a priority and a challenge. Program evaluations and 'tracer studies' of grantees have been conducted by external consultants, often commissioned at landmark junctures, such as 10 years of grantmaking in a particular country or field. The inauguration of a new advisory board in 2009 brought new thinking on evaluating impact, which was previously considered as intangible and long-term in coming to fruition. Suggestions for evaluations every five years to shape and refine a program's aims and measure the role of individuals in fostering 'resilience'—a key feature in social change—have all been discussed, as well as helping to define effective exit strategies where Scholarships have operated for lengthy periods. All

these debates will help Scholarships look critically at its grantmaking over the short to medium term.

7.4 Conclusion

As this case study has illustrated, a strong intentionality for social change has been present in Open Society Scholarship's grantmaking since the mid-1990s. An acute societal need for quality higher education, caused by political and social erosion, war, or natural disaster, has left the Open Society Chairman, senior managers, and partner organizations resolute in their belief that academic support for individuals dedicated to improving their home societies remains relevant.

Despite the paucity of hard data on the impact Scholarships' alumni have made, the broader issue of 'being the change you want to see' is the most salient aspect of Scholarships' grantmaking. Beyond creating scholarship opportunities for a wide range of potential leaders, Open Society has a neutral stance as to how an individual scholar contributes to social change after the cap and gown are retired. The belief in fostering open societies is firmly rooted in individual agency: the freedom to think critically and with integrity, and to move forward after hearing the voices of all. Scholarships are an enabler, and the individual grantee must do both the challenging academic work and find her or his own way of forging a positive path for their home region. The funding body does not dictate what social change looks like; rather, those deciding what change should look like are nurtured and supported with educational tools and social networks. Within Scholarships, the tension between breadth and depth remains an ongoing issue. In light of Scholarships' advancement into new countries in Africa, there is a need to look closely at the impact that just a handful of scholarships can make to advance social change in those countries. A parallel situation exists in countries where Scholarships have a deeper legacy—Kazakhstan and Georgia, for instance—where grants are no longer offered after many years of consistent funding. The issue here lies in assessing the impact Scholarships has already had, and what part this funding may have played in the more liberal changes and developments witnessed in recent years. 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. Having patience in this process is key, and investors in individuals should bear in mind that intangible outcomes, especially in regard to social change, are inherent in this mode of grantmaking.

Notes

1. Aryeh Neier, personal communication with author, June 10, 2016.
2. The abbreviated term ‘Open Society’ is used throughout this chapter as the name for the global network of foundations (some formally and informally known as ‘Soros Foundations’) which make up George Soros’ philanthropy. The largest offices within Open Society include offices in Barcelona, Brussels, Hungary, the United Kingdom, and the United States, and with numerous other foundations around the world.
3. The term ‘program’ will be used to describe specific scholarship programs designed and administered by the Open Society Scholarship Programs. Programs have a separate award title, a distinct purpose, are targeted at specific populations and countries, and are, in some cases, offered in a limited range of subjects at specified universities only.
4. The *Oxford and Cambridge Hospitality Schemes* were co-funded by Open Society, the British Council, and the respective universities.
5. The *Doctoral Fellows Program* was offset by tuition cost-sharing arrangements from the host universities.
6. The *Civil Service Awards* were eligible for employees at the Georgian Ministry of Labor, Health and Social Affairs; the Ministry of Environmental Protection and Natural Resources; the Moldovan Ministry of Education; Ministry of Labor, Social Protection, and Family; Ministry of the Economy; Ministry of Transportation; Ministry of Agriculture; Ministry of Foreign Affairs and European Integration; and The State Chancellery.
7. The *Disability Rights Scholarship Program* has been offered in Argentina, China, Colombia, Ghana, Kenya, Liberia, Mozambique, Malawi, Mexico, Peru, Sierra Leone, Tanzania, Uganda, Zambia, and Zimbabwe.
8. The *Civil Society Leadership Awards* are open to citizens of Azerbaijan, Belarus, Burma/Myanmar, Cambodia, Democratic Republic of Congo, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Laos, Libya, Republic of Congo, South Sudan, Sudan, Syria, Turkmenistan, and Uzbekistan.
9. Civil Society Leadership Awards Alum, in discussion with Inga Pracute, Program Specialist, Open Society Scholarship Programs, Istanbul, August 25, 2015. Internal document. The name of the alum is withheld by mutual agreement.
10. Brunilda Bakshevani, personal communication with author, July 6, 2016.
11. Scholarships have worked with EACs in Azerbaijan, Belarus, Bosnia and Herzegovina, Croatia, Estonia, Georgia, Kazakhstan, Macedonia, Montenegro, Moldova, Mongolia, Romania, and Ukraine, with smaller advising centers operating within local Open Society offices in Albania, Armenia, Bulgaria, Hungary, Kyrgyzstan, Latvia, Lithuania, Poland, and Tajikistan.

References

Greenberg, K. J., and Yenkin, A. (1994). Scholarship Activities of the Soros Foundation. New York: Internal Document.

Loerke, M. (2009). Network Scholarship Programs 2010–11 Strategy. Unpublished internal document. Open Society Foundations.

Loerke, M. (1998). Network Scholarship Programs: A Working Paper for Strategic Discussions. Unpublished internal document. Open Society Foundations.

Loerke, M. (2003). Programs Strategy 2004–06. Unpublished internal document. Open Society Foundations.

Loerke, M. (1996). Regional Scholarship Programs Open Society Institute. Unpublished internal document. Open Society Foundations.

Loerke, M. (2015). Scholarship Programs 2016–2020 Strategy. Unpublished internal document. Open Society Foundations.

Loerke, M. (2014). Scholarship Programs Strategy 2014–2017. Unpublished internal document. Open Society Foundations.

Open Society Foundations. (2010). 2011 Civil Service Awards—Moldova. Grant Announcement.

Open Society Fund, Inc. (1993). Announcement: Open Society Fund, Inc. Supplementary Grant Program for Students from the Former Yugoslavia.

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CHAPTER 8

Case Study: Balancing Change and Continuity—The Case of the Commonwealth Scholarship and Fellowship Plan

John Kirkland

8.1 Introduction: Origins and Structure

International scholarship programs are too readily assumed to have constant, if varied, objectives. Constant objectives are important in establishing traditions. Well-established programs, with clear and recognizable aims that have the backing of generations of alumni, tend to be more prestigious than newer ones.

The Commonwealth Scholarship and Fellowship Plan (CSFP) provides a remarkable example of a program maintaining a high profile, while continually responding to changing environments. Its reach, objectives and scholarship offers vary significantly since that specified to the first cohort of Commonwealth Scholars in 1960 and yet the Plan retains its identity.

The 'Commonwealth' to which the CSFP relates is a grouping of 52 countries, mostly (but not quite exclusively) former British territories, designed to preserve a special collaborative relationship between them in a post-independence era. The concept dates back at least to 1926, when the

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'Imperial Conference' agreed that 'the UK and its dominions are 'equal in status, and no way subordinate to one another in any aspect of their domestic or external affairs … and freely associated as members of the British Commonwealth of Nations' (The Commonwealth 2017).

Eight countries were represented at that influential meeting. Thirty years later the idea of Commonwealth was changing in a radical and relatively unplanned way, as the trickle of newly independent states turned into a flood. Hilary Perraton, author of the only authoritative history of the CSFP, explains that 'hoping to retain the cosiness of Commonwealth meetings, attended by a handful of countries, the British tried to find a formula for a two-tier Commonwealth' (Perraton 2015). They failed. Eleven countries attended the Prime Ministers Meeting in 1960. The newly styled 'Heads of Government Meeting' in 1971 attracted 32. The Commonwealth was no longer a 'white mans' club. Not all members persisted with the Queen as Head of State, and were certainly not uncritical of Britain.

The idea of a voluntary association of former colonies had few templates from which to work. The first Conference of Commonwealth Education Ministers, held in Oxford in 1959, declared that the Commonwealth was 'a new experiment in human relationship. It is founded on a belief in the worth and dignity of the human individual and a recognition of the value of freedom and cooperative action' (Commonwealth Relations Office, 1959a). The Commonwealth Scholarship and Fellowship Plan, formally established at the 1959 conference was a reflection of these aspirations.

The Plan was introduced at a time when the Commonwealth played a much more prominent role in British policy than today. Ironically, the idea was conceived not in any educational forum, but at a meeting of Commonwealth Trade Ministers held in Montreal in 1958, the most acceptable of a package of alternatives first put forward by the hosts across a range of policy areas. Education Ministers resolved the details at their Oxford meeting the following year (Commonwealth Relations Office 1959b). This determined that the Plan would be based around five specific principles:

1. The Plan would be additional to, and distinct from, any other Plan in operation.
2. The Plan would be based on mutual cooperation and the sharing of educational experience amongst the nations of the Commonwealth.
3. The Plan should be sufficiently flexible, to take account of the diverse and changing needs of Commonwealth countries.

4. While the Plan would be Commonwealth wide, it should be operated on the basis of a series of bilateral agreements to allow for the necessary flexibility.
5. Awards should be designed to recognize and promote the highest standards of intellectual achievement.

The emphasis on flexibility was deliberate, and reflected in the structures through which the Plan would be implemented. No central body was established to offer or manage Commonwealth Scholarships. Instead it was left to each Commonwealth country to identify an agency through which its involvement would be managed; in most cases this was a relevant Ministry, but some of the developed nations established new structures for the purpose. The 'agencies' would serve two principal functions—they would select award holders for any scholarships being hosted by their country, and they would nominate candidates for scholarships being offered to citizens of their country. Nor was any central funding mechanism established; awards would be financed by the host country, and it would be for each country to determine how many awards to offer.

Some intentions can be discerned from the above principles. The vision of the Commonwealth as a partnership is reflected in the desire for both host and home countries to be involved in identifying award recipients. The expectation that scholarships would be hosted by developing, as well as developed countries (a function which some newly independent states were better able to fulfill in the 1960s than 30 years later), reflected the vision of independent states. The principles are also underpinned by the belief stated in the Oxford declaration of the importance of the individual, and perhaps recognition that if the Commonwealth were to succeed as an institution, then it must be meaningful to individual citizens. There is also an emphasis on quality. Awards should support the 'highest level' of intellectual achievement, whatever the subject of study.

Member countries responded to the challenge in different ways. Scholarships were concentrated on those countries best able to finance them—the UK agreed from the outset to support at least half of the total—however as many as 14 countries were hosting awards by 1967, including smaller numbers in newly independent states such as Ghana, Nigeria and Sri Lanka. There were no common criteria to determine who was nominated for awards from home countries. Some hosts expanded provision to embrace Fellowships for mid-career professionals, some focused on formal degree programs in their awards. Some developing countries suggested that

lower-level qualifications could be added to the menu of degree level, mainly postgraduate, awards on offer.

There were also differences of emphasis within countries; in the UK, the different perceptions of the balance between developing leaders, public diplomacy, international development and pure academics were evident from an early stage. These partly reflected political differences—Conservative governments have tended to tie international development objectives more closely to foreign affairs objectives, while Labour ones have given development objectives more independence. Similar tensions can be seen in the more recent decisions of Canada and Australia to merge their development functions into wider foreign affairs portfolios. For Britain, the desire to link development, foreign affairs and trade functions has taken a new shape in recent months, as the government has sought to link foreign assistance policy to the development of new trading relationships in response to the referendum vote for Britain to leave the European Union.

The Commonwealth Scholarship Commission (CSC), established by the British government to manage its contribution to the Plan, partly protected it from these policy shifts. Although its founding legislation (HMSO 1959) makes clear that it must carry out any Ministerial directive, no such formal directives have been issued since 1960. The legislation also forbids Ministers from involvement in selection of specific students. It has thus allowed an arms-length relationship, in which academic and other specialist presence has afforded a degree of continuity. Nonetheless the Commission remains dependent on government for its annual funding allocation. It may have no legal requirement to select award holders in conformity with prevailing government priorities, but it would be foolish not to reflect these priorities in its wider thinking.

8.2 A Changing Environment

Despite, or perhaps because of, the lack of any effective mechanism to direct the Plan, the basic 'offer' of postgraduate scholarships, supplemented with smaller numbers of Fellowships, has remained throughout its history. The political environment in which it has operated, however, has changed markedly. This can be traced in the series of Reports on the Plan to the triennial Conferences of Commonwealth Education Ministers.

The 1960s were a period of confidence and expansion—for both scholarships and the Commonwealth. As noted above, awards were offered in several African and Asian countries, and in some cases attracted students

from the UK and other developed nations; a high proportion of these pursued a long-term interest in their host regions on returning to the UK, following careers in diplomacy, development or academia. The Plan enjoyed gradual expansion in its early years.

Thereafter the picture was more mixed. Universities in developing countries were not able to maintain the progress of the 1960s, victims of economic crisis, internal disruptions and, by the 1980s and 1990s, disillusionment of donor bodies about the role of higher education in development. International scholarships were not a priority. Some countries have also reduced their focus on the Commonwealth. In the mid-1990s, Australia decided not to offer awards: part of its concentration on the Pacific region. Hong Kong left the Commonwealth in 1997. Canada has been an inconsistent supporter of the scheme, having withdrawn twice and returned once in the last decade.

For all of these reasons, the Plan became less diverse, although this did not necessarily affect overall numbers. International students were becoming more important to the developed world, particularly, in the case of the UK, following the introduction of full cost tuition fees from the early 1980s. High-cost higher education tends to be good for scholarship numbers: universities become more competitive in their recruitment, while government wants to demonstrate that high-quality students can still access the system. The UK Commonwealth Scholarship Commission received increased funding to help demonstrate this; part of a wider package to expand UK international scholarships announced in 1983 (Hansard 1983).

By 1993, both the UK and the Commonwealth-wide Plan reached a peak in numbers. However, skepticism was growing, both domestically and internationally, about the value of international scholarships. British Government funding for Commonwealth Scholarships was cut four times during the remaining years of the decade, while a report to the 2000 Conference of Commonwealth Education Ministers revealed that the number of countries offering awards had reduced to six (UK, Canada, India, New Zealand, Brunei and Jamaica)—the lowest ever. The United Nations Millennium Development Goals (MDGs) (United Nations 2000) encouraged governments to focus their development efforts on primary education. This approach was eagerly endorsed by the UK's new Labour government elected in 1997, which distanced development from foreign policy through the establishment of a new Department for International Development (DFID).

Responding to these factors, the UK Commonwealth Scholarship Commission made a conscious decision to focus its awards portfolio toward development needs. Reforms agreed upon in 2001 marked the most radical change in provision since the Plan began. Conventional postgraduate scholarships remained, but were joined by a new program of distance learning awards—recipients of which need not visit the UK—and short-term awards for staff working in occupations linked to development. The shift placed greater emphasis on Masters, rather than doctoral, study. Within the Plan's doctoral component, the 'split-site' program through which doctoral candidates at developing country universities were supported to spend one year in the UK was enlarged, in an attempt both to recognize increasing academic capacity in some middle-income countries and to support more doctorates within a limited budget.

Attitudes toward the role of higher education in international development began to change in the new millennium, for example, through the publication of the World Bank's (2000) *Higher Education in Developing Countries: Peril and Promise*. By the time that the UK hosted the development-focused G8 summit in 2005, higher education was firmly back on the development agenda. In the succeeding decade, the Plan has re-asserted itself. The more explicit link between UK awards and international development has been rewarded with funding increases from governments of both parties. Internationally, the 50th anniversary of the Plan in 2009–2010 was marked by the development of an endowment fund—the first ever central source of funding for Commonwealth Scholarships—to support awards in low- and middle-income countries. These developments, together with continued support from long-standing hosts such as India, New Zealand and Malaysia, have pushed up both award numbers and the number of countries hosting awards. Yet, at the same time, the proportion of awards hosted in the UK has also increased, rising to over 90% following the decision of Canada to cease funding in 2012.

8.3 Defining the 'Development Scholarship'

The increased focus of UK Commonwealth Scholarships on international development has coincided with renewed confidence of the international development community in higher education as a vehicle for economic and social development. Much of the renewed investment has rightly been devoted to building up domestic infrastructure, and some scholarship investment is being targeted at local or regional, rather than international,

awards. International scholarships have proved durable, however. The Sustainable Development Goals, announced in 2015 as successors to the MDGs, include a specific target to increase scholarship numbers to the least developed countries by 2020 (United Nations 2015).

Not all international scholarships have international development as their main purpose. A controversial aspect of the new Sustainable Development Goal target is that it does not discriminate according to why an award is being offered. Some countries offer scholarships with the intention of attracting skilled labor from developing countries, rather than building capacity there. Some also confuse subsidies for higher education generally with scholarships aimed at 'deserving' individuals. Several European countries, for example, subsidize tuition fees for all overseas students, without any selection, but regard the difference between full economic cost and subsidized fee as scholarships.

In the UK, the clearer emphasis of Commonwealth Scholarships since 2001 on development complements that of another international scholarship program (the FCO Chevening Scholarships) on public diplomacy. This leads to the question of how far it is possible to define particular characteristics of scholarships, according to their stated objectives.

International scholarships can be categorized in several ways (e.g. Balfour 2016). However, for current purposes we can propose five categories, as follows:

1. **National Interest (Narrowly Defined):** Scholarships are driven by the desire of the host country to fill particular skills or other labor market shortages. Recipients are encouraged (or even obliged) to remain upon completion of award.
2. **National Interest (Broadly Defined):** Scholarships are intended to benefit the host country in less direct or measurable ways, for example, winning long-term friends for public diplomacy purposes or enhancing the reputation of national higher education systems.
3. **Merit Based:** Scholarships are awarded to the most able candidates, regardless of their personal background or likely impact on national or development objectives.
4. **Development Based (Individually Focused):** Scholarships seek to address disadvantage, prioritizing candidates who are under-represented in some way. The main aim is to help the individual, although by doing so there may be wider development benefits, for example, the emergence of role models.

5. **Development Based (Society Focused):** Scholarships prioritize candidates who appear most likely to address development problems in their respective countries, regardless of personal background. Recipients may be encouraged or required to return home (or work on relevant projects) following completion.

The above categories are not mutually exclusive. National interest programs, for example, are likely to bring some development benefits, and vice versa. All categories of award are also likely to be merit-based to some degree.

UK Commonwealth Scholarships conform most strongly with the final category outlined above; development impact has been defined as being at the level of society, rather than the individual. Access issues are subject to regular review—for example, the Commission has a 50% female recruitment target for its scholarship selections—but selection committees do not consciously seek out candidates from under represented backgrounds to the same extent of some programs. Rather, they prioritize applications according to likely development impact on the home country. The applicants' statements of development objectives rank equally with academic merit in selection criteria.

Other criteria can be used to indicate the extent to which scholarship programs are 'development orientated'. An obvious example is the extent to which awards are focused on developing countries. The OECD indicators used to service the Sustainable Development Goals are too broad for this purpose, not discriminating between low- and middle-income countries. Subject of study is another indicator, although not an unproblematic one since opinions vary on the development impact of specific disciplines. Within the UK, however, it is true that the development-orientated Commonwealth Scholarships Program has over twice the proportion of science awards than the public diplomacy-orientated Chevening Scholarships offered by the Foreign Office.

Other differences can be seen in the level of support provided during the award. Public diplomacy schemes tend to focus on deepening interest in the host country; development ones place more emphasis on skills development. Public diplomacy awards are more likely to require that all or most of the time on award is actually spent in the host country; development ones may be less concerned. In addition to large numbers of distance learning awards, UK Commonwealth Scholarships also permit substantial periods to be spent in the home country for fieldwork purposes and, through the

split-site awards described above, support doctoral work in the UK as part of a degree program awarded at a developing country university. All of these features could be said to tie the award more closely to the needs of the home country.

The categories above oversimplify the distinction between scholarships—they are 'ideal types'. A clear understanding of their relative importance is, however, helpful in defining whether objectives have been achieved, a topic on which scholarship schemes throughout the world are increasingly being asked to deliver.

8.4 Understanding Outcomes

For much of its first 40 years, the Commonwealth Scholarship Commission paid little attention to its alumni, and even less to evaluation. Until 2000 no alumni database existed, nor any regular means of communication with alumni: such contact as existed at local level was instigated by former scholars themselves. Occasional surveys had taken place—most notably one in the late 1980s (Niven 1989)—but these were not seen as a part of a wider, continuous program of engagement. Instead priority had been given to maximizing the proportion of expenditure devoted to the scholarships themselves.

The closer alignment of the scheme to development objectives from 2001 onward provided an incentive to change this. Demonstrating development impact depended fundamentally on knowing what alumni did in their subsequent careers. For the Commission, evaluation is a major reason for undertaking alumni work. The use of alumni for fundraising has not figured prominently, although over 200 alumni did contribute to the endowment fund established to mark the 50th anniversary of the Fund in 2009. There has also been increasing recognition of the role that alumni can play in promoting the program to future generations of applicants. From this low base, the Commission has rapidly expanded alumni tracing. In 2016, for the first time, it had more 'traced' than 'untraced' amongst its 25,000 alumni. A regular hard copy magazine is complemented by electronic communication networks that focus on professional interests and national alumni chapters in around 20 countries. The resulting network has also opened the gateway to evaluation work.

Evaluation activity has focused around two core questions—the career trajectories of scholars and fellows after their award and what types of impact they have had (particularly, in this case, on the development of their home

countries). Answers to the former can largely be obtained from analysis of alumni data: the latter, however, requires more detailed analysis and a degree of interpretation. In all cases evaluation needs to feed back into the question of whether current scholarship processes can be improved, and if so, how.

The proportion of alumni who return home is often seen as an indicator of development value, but 'snapshot' surveys of return rates represent a blunt tool. Our surveys suggest that around 18% of respondents currently live outside their home region, but mask considerable variation (Mawer et al. 2016). For example, surveys consistently show lower return home rates from developed, rather than developing, Commonwealth countries. Perhaps not surprisingly, those who had undertaken fellowships—short periods of academic and professional development without a degree qualification—were also more likely to be working in their home country than those who undertook longer scholarships. Findings also suggest that figures for residency vary significantly throughout careers, with distinct peaks and troughs. For both scholarships and fellowships, alumni appear to have a greater propensity to be outside their home region, some 3–4 years following their award than in the years immediately before or afterwards, and for scholarships in particular, another peak seems to emerge a decade after the first, with absentee rates reaching 30% before subsiding again (Mawer et al. 2016). The first of these peaks may be explained, at least in part, by subsequent training. The second is more uncertain, but given the significant proportion of alumni in academic careers may reflect mid-career fellowship opportunities.

Although the 2001 reforms placed a greater emphasis than before on (relatively vocational) Masters qualifications, historically the dominant mode of provision has been for doctoral study. In these circumstances, it is no surprise to find that academic careers accounted for just over 50% of the alumni studied in the latest CSC research report (Mawer et al. 2016). Interestingly, there was a net inflow to academic life as a result of the scheme. Conversely, the public sector suffered a net outflow, with less alumni working there after the award than previously, although it was still the second highest form of employment. The growth of distance learning, professional fellowships and, to some extent, Masters courses with a stronger vocational focus, can be expected to change the dominance of academic career trajectories in the future.

Recent evaluations of Commonwealth Scholarships distinguish between socioeconomic impact and impact on government policy making

(e.g. Day et al. 2009; Scurfield and Barabhuiya 2014; Mawer et al. 2016). This moves beyond anecdotal evidence that shows how Commonwealth Scholars have risen to leadership positions, to identify channels through which impact is generated. In the latest research report, these channels are identified as: the production of analytic research; teaching and training; design, invention and development; implementation and coordination; policy development and technical assistance; advocacy; and publication and dissemination (Mawer et al. 2016). Predictably—given what we know about the employment sector and subject background of many Commonwealth Scholarship recipients—the quantity and quality of education, scientific, and research applications were commonly cited as substantive impacts from the funding. More generally, examples related to socioeconomic impact were more forthcoming than those relating to the relatively narrow area of impact on government policy.

There were also other variations suggested by Mawer et al.'s (2016) analyses. At a regional level, for instance, alumni from Africa were more likely to report socioeconomic impact than those from other regions, although these were less marked for impact on government policy. Doctoral students were generally more likely to report impact than those who had studied for Masters degrees, regardless of their geographic origin. Interestingly, there was little difference between genders, perhaps suggesting that, once over the considerable historical hurdle of getting an international scholarship, women are successful in their subsequent careers.

8.4.1 Contribution, Attribution and Commonwealth Scholarships

How much of this impact derives from Commonwealth Scholarships? Impact clearly derives from personal attributes as well as those gained through education. Even within the latter category, the Commonwealth Scholarship is only one stage of the educational process, and in many cases, only one of several scholarships obtained at various stages. For many, particularly doctoral candidates, however, it represents the highest, and often terminal, qualification in the labor market.

Unraveling this complexity is a problem for all scholarship programs, but we can draw some conclusions. Most alumni would not have been able to undertake their course of study without the scholarship. Surveys tend to show around two-thirds agreeing unconditionally with this statement, and perhaps another quarter that they would have found other means to do it via other scholarships (Mawer et al. 2016). This latter proportion is

encouraging for a development scholarship; it suggests that recruitment is taking place within the right ‘pool’ of candidates and is not concerned if these acquire the necessary skills from another route. A public diplomacy program, which is more likely to consider itself in competition with other countries for the best candidates, might be less sanguine. Only a very small minority felt that self-financing was a realistic option. These findings are self-reporting at present, without a control group, but over time will be set against results from a longer-term counterfactual study, which will compare the careers of successful candidates against those of unsuccessful applicants.

Second, we have confidence that the Scholars themselves consider that their scholarship added to their skills and knowledge. The overwhelming majority consider that skills have been advanced overall, and had accessed technology or expertise not available to them in their home country. Smaller majorities recognized specific skills, such as the ability to manage projects, as being enhanced. Our alumni also confirm that they were able to apply these skills in future employment—three-quarters said ‘significantly so’. The relevance of skills gained during the scholarship appears to be confirmed by data on career mobility. Of those students who had been employed prior to taking up their scholarship, over 60% returned to a more senior position immediately, and over 80% considered the award had helped them secure advancement over the following 12 months (Mawer et al. 2016).

Although many of our questions assume that impact comes primarily through employment, this is not the only route. Many scholars included voluntary positions in NGO’s or charities or political campaigning activity in this context. It would be interesting to measure whether these also have been enhanced by the scholarship experience; whether, for example, being a scholarship holder helps develop a sense of social responsibility. Alternatively, high levels of voluntary activity might be associated with the increased prospect of securing a scholarship in the first instance. Such activities tend to be sought by selection committees as evidence of future commitment or leadership.

Finally, although our analysis has focused on development outcomes, these tend to overlap with public diplomacy objectives. One area where this applies is in the propensity of scholarships to develop enduring relationships with the host country. In the case of Commonwealth Scholarships, given the high proportion of doctorates amongst the alumni, the most common form of contact was with supervisors at host universities, often manifested in concrete activities such as joint papers. Social contact was also strong, but predictably declined over time. The reverse applied with professional

contacts, such as membership of professional associations based in the UK, which were less likely to result but more durable (Mawer et al. 2016).

8.5 Conclusion and Lessons for the Future

The evidence base provides plentiful examples of scholars who have risen to senior positions and made significant impact on their societies. They value their association with the scheme and the UK as a host country, and maintain significant links. The issue of how far these outcomes are attributable to the scholarships is still being unpacked. Alumni responses suggest that they are, at least in the critical early stages of their career. Through a new longitudinal research framework and ongoing counterfactual study, we are seeking to build quantifiable evidence of this contribution.

The achievements of alumni are welcome, although they are perhaps different ones to those anticipated by the founders in 1959. Ironically, the question of whether CSFP alumni have developed more affinity with the Commonwealth as a result of their awards is one about which we know relatively little. The extent to which scholarships influence attitudes is an important area which most alumni and evaluation schemes underplay. We may know that alumni are likely to obtain influential positions (see Mawer, Chap. 13), but we know less about whether alumni are more likely to promote democracy and human rights or to counter corruption, either generally or as a result of their period on scholarship. Similarly, we have little insight into whether they are more likely to take a positive view toward the Commonwealth as a worthwhile association.

Three conclusions can, however, be stated. Firstly, that the CSFP demonstrates the importance of durability. Schemes derive added value from longevity and the recognition that comes with it.

Secondly, that to achieve longevity scholarship programs may need to adapt to changing realities. Done thoughtfully, adaptation can be achieved without damaging overall prestige and reputation. The founders of the CSFP showed foresight in anticipating the need for flexibility in their founding statement.

Finally, scholarships exist in an increasingly political environment. In a future where higher education institutions seek to reconcile full cost tuition fees with increasing access, there will be more need for scholarships, and competition will intensify further. In this environment, there will be an increasing requirement for scholarship providers to be strategic, even political in their operation, needing to define their niche in a crowded market

and ensure that key stakeholders—funders, host universities, applicants and alumni—are aware of their 'brand'. In the current UK environment, this involves a balance between maintaining Commonwealth Scholarships as a distinctive development program, and demonstrating that they work effectively with other UK Government programs in the national interest. There will also be a need for evidence to back up such claims.

At the turn of the century, UK Commonwealth Scholarships did not maintain a regular alumni or evaluation program, preferring instead to maximize expenditure on scholarships directly. In common with many other international scholarship programs, it now sees a need for such activities as being critical. This need is only likely to intensify in the foreseeable future.

References

Balfour, S. (2016). SDG Target 4b: A global measure of scholarships [ED/GEMR/MRT2016/P1/10]. Paper commissioned for the Global Education Monitoring Report 2016, Education for people and planet: Creating sustainable futures for all. Paris: UNESCO.

Commonwealth Relations Office. 1959a. Report of the Commonwealth Education Conference, Oxford 15–28 July 1959. London: HMSO, p. 4.

Commonwealth Relations Office. 1959b. Report of the Commonwealth Education Conference, Oxford 15–28 July 1959. London: HMSO, pp. 18–19.

Day, R., Stackhouse, J. and Geddes, N. 2009. *Evaluating Commonwealth Scholarships in the United Kingdom: Assessing impact in key priority areas*. London: Commonwealth Scholarship Commission in the UK.

Hansard. 1983. H.C. Vol. 36, col. 879. (9 February).

Her Majesty's Stationery Office [HMSO]. (1959). Commonwealth Scholarships: a Bill to make provision for the matters arising out of the recommendations of the Commonwealth Education Conference 1959 (Bill 40). London: HMSO, p. 2.

Mawer, M., Quraishi, S. and Day, R. (2016), *Successes and complexities: the outcomes of UK Commonwealth Scholarships 1960–2012*. London: Commonwealth Scholarship Commission in the UK.

Niven, A. 1989. Commonwealth Scholarship and Fellowship Plan: Tracer Study Final Report. London: Commonwealth Secretariat.

Perraton, H. 2015. Learning Abroad: a History of the Commonwealth Scholarship and Fellowship Plan (2nd ed). Newcastle, UK: Cambridge Scholars Publishing.

Scurfield, K. and Barabhuiya, F. 2014. *Evaluating Commonwealth Scholarships in the United Kingdom: Review of the Commonwealth Professional Fellowship scheme 2008–2011*. London: Commonwealth Scholarship Commission in the UK.

The Commonwealth. 2017. Imperial Conference, 1926. [Online]. Available at: http://thecommonwealth.org/history-of-the-commonwealth/imperial-conference (Accessed 16 January 2016).

United Nations. 2000. United Nations Millennium Declaration [A/RES/55/2]. [Online]. Available at: http://www.un.org/millennium/declaration/ares552e.pdf (Accessed 16 January 2016).

United Nations. 2015. Transforming our world: The 2030 agenda for sustainable development [A/RES/70/1]. [Online]. Available at: https://sustainabledevelopment.un.org/post2015/transformingourworld/publication (Accessed 29 Nov, 2016).

World Bank. 2000. Higher education in developing countries: Peril and promise. Washington: The World Bank.

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PART III

The Dynamics of Return

CHAPTER 9

Influencing Pathways to Social Change: Scholarship Program Conditionality and Individual Agency

Anne C. Campbell

9.1 Introduction

A scholarship alumnus from Moldova once told me how he had become enthralled with the idea of informational technology as a driver for development while studying in the United States. Upon his graduation, he was required to work for the Government of Moldova as a condition of his scholarship program. He had just begun the second year of a 3-year commitment when I asked him whether he could implement his new knowledge in his government position. He replied:

> I tried to, but you know, my job now is not related to this.[. . .]I tried to look at opportunities for this social innovation hub; I was kind of thwarted because I have to work for government for three years, you know? That is something that is non-government. So, I have ideas, but I don't know how to work on implementing them. So, I'm just watching how others do it.

This scholarship program alumnus speaks directly to a significant tension that can be present in international scholarship programs between the

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expectations and goals of scholarship funders and those of scholarship recipients in the years immediately following a student's graduation. For some scholarship participants, the expectations of their funders and their personal choices align. Yet others—like the Moldovan alumnus quoted above—find themselves pulled between two opposing goals. In these situations, students may be disappointed, poised to challenge the conditions of the scholarship, or perhaps limited in their ability or interest to contribute to social change.

This chapter will explore these topics in greater detail, addressing the following questions:

1. What do we know about the relationship between program guidelines set for students upon the completion of their scholarship (scholarship conditionality) and the decisions and actions made by a scholarship recipient (personal agency)?
2. In what ways might scholarship conditionality promote or limit a person's interest and involvement in social change?

To set the stage for answering these questions, it is worthwhile to revisit the three dominant frameworks found in scholarship program models. Each framework represents how various funders and administrators envision social change occurring through international higher education.

The first and most prominent framework is human capital theory, which states that through education a student develops knowledge and skills that become "fixed" in him or her (Smith 1952, p. 119) and will lead to greater economic gain. Taking this idea one step further, the effect of this education can "spill over" to positively influence others, leading to improved social and economic outcomes in the family, community, and workplace (McMahon 1999). In the case of scholarships, financial investment in one's education will not only benefit that person, but it will "spill over" to positively influence the person's workplace, community, and country.

A second common theory found in scholarship programs is that of education as a human right (United Nations 1948), suggesting that the right to education is paramount and that scholarships are a way to level the opportunities available to talented students worldwide. One such example, as noted by Lehr (2008), is the case of Cuba, where the right to free education is written into the Cuban constitution. The government has extended their free tertiary education to professionals from other low- or middle-income countries with the expectation that these individuals will

return home to use their knowledge for the development of their own countries (Richmond, cited in Lehr 2008).

The third approach is that of human capabilities (Sen 2003) that frames the goal of education as a vehicle to increase the individual's choices and "freedom," leading toward humans choosing a good life. As Melanie Walker argues, the human capabilities approach "implies a larger scope of benefits from education, which include enhancing the well-being and freedom of individuals and peoples, and influencing social change" (2012, p. 389). While many scholarship programs include reference to individual well-being and freedom as an important part of the scholar's development, few have noted the goals of human capabilities among the program outputs.

With these three theories in mind, we next turn to a logic model that illustrates how many scholarship programs are designed.

9.2 A Logic Model Undergirding Scholarship Conditionality

Most international scholarship programs are designed with the assumption that the scholarship—like higher education in general—prepares students for their future endeavors. The theory of change present in many programs is that a scholarship experience for individuals will eventually lead to a desired impact on social and economic development in their home country (Fig. 9.1) through graduates' engagement in social change.

Those who design scholarship programs often think of the program in a normative or developmental way, assuming that participants will experience the program similarly and emerge better equipped to be agents of social change. These assumptions are to be expected as programs are typically designed before individuals are selected. However, a scholarship recipients' effect on social change is not only hard to measure in practice, it can also be difficult to influence and, particularly, to predict. Models often fall short of capturing the breadth and range of experiences alumni can pursue following completion of the program.

To mitigate these uncertainties, many scholarship program administrators employ conditionality, setting certain expectations designed to influence participants' choices, including the types of social change activities in which they engage. These conditions are typically placed on the period immediately following scholarship completion, typically for 1 to 3 years. It is this stage—the end of the academic scholarship when the grantee is planning for next steps—on which this chapter is focused.

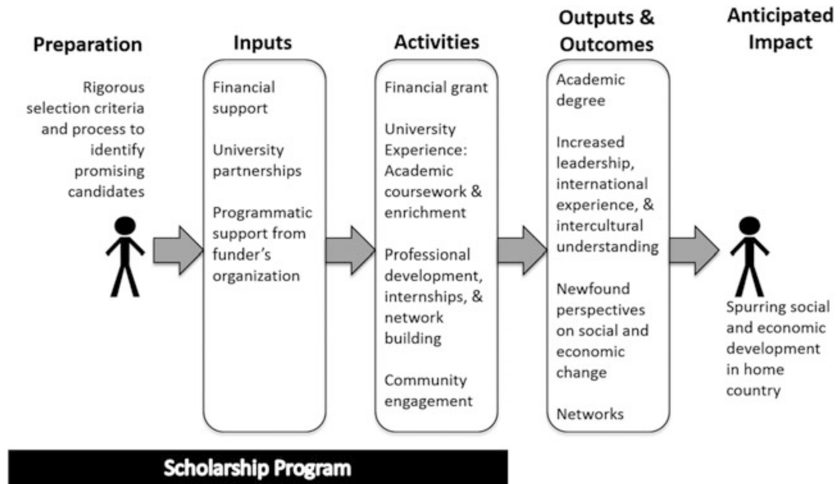

Fig. 9.1 Composite logic model of international scholarship programs that aim to spur social change (Campbell 2016a)

9.3 Types of Scholarship Conditions and Program Provisions

Upon review of current and previous scholarship programs, three main types of post-scholarship conditions emerge: (1) binding agreements, (2) social contracts, and (3) vague post-scholarship guidelines. As will be explored below, these types of agreements often signal the underlying values and explicit goals of the scholarship program.

9.3.1 Binding Agreements

In *binding agreements*, individuals typically agree to the scholarship funds *and* the post-scholarship commitment at the outset. Usually, these post-scholarship bonds are a commitment to work following their studies, with the intention that the graduates will apply their newfound knowledge and skills for the gain of the sponsoring organization. Similarly, these binding agreements typically make clear the penalties if individuals do not fulfill their bond, such as having to pay back the costs of their education or jeopardizing the family home, which has been offered as collateral.

Binding agreements are often associated with international scholarships funded by private companies or national governments that typically send the student on a scholarship experience with the expectation they will return with new skills. Toward this aim, scholarships in this category likely specify the academic degree, the work conditions, and the length of service needed to fulfill the scholarship requirements. Examples include Singapore's Agency for Science, Technology and Research (A* STAR), and the Government of Kazakhstan's Bolashak Program, where surveyed alumni believe the requirement to work in Kazakhstan for five years is "appropriate, given the government's investment in their education" (Perna et al. 2015, p. 181). In addition, scholarships with binding agreements appear to be predominantly in applied fields—such as business, law, government, science, or engineering—and within programs that support studying at the graduate level.

9.3.2 *Social Contracts*

The second type of scholarship condition is a *social contract*, or an approach where the funder delivers a strong, consistent message of what is expected of the grantee following their studies, without putting a binding agreement in place. Programs with social contracts are typically more open to individualized pathways for graduates, allowing the scholar to explore personal interests and exercise choice, while at the same time emphasizing a broad vision to which participants are expected to subscribe. To supplement this, funders may design specific program components aiming to prepare the student for their return (e.g., internships in the students' home countries or project development or grant-writing courses). Instead of penalizing non-compliant choices, programs in this category tend to incentivize the behaviors they wish to promote among their graduates through various mechanisms, including alumni grants, home country-based internships, job placement services, or by providing examples of outstanding alumni.

Programs with social contracts tend to have goals of nation- or multi-country-wide political, social, or economic development (nebulous terms with multiple pathways) and are likely to be funded by private foundations, host university programs, and high-income country government aid programs, whose goals are broad. They also tend to have a range of options for the student's area of study. An example is the MasterCard Foundation Scholars Program, which aims to "create a movement of young leaders unified by a common purpose and a vision for economic and social change,

particularly in Africa" through education, leadership development, career advising, and other forms of comprehensive support (2015, p. 2). For more information, see the MasterCard Foundation Scholars Program case study in this book.

9.3.3 Vague Post-scholarship Guidelines

The third category is the *vague post-scholarship guideline*. Before or during these scholarship programs, there is little (or no) information provided to the individual recipients about the expectations of them following their scholarship education. Program materials may simply state that graduates are expected to return home, without clear indications of what types of activities or employment in which they are to engage. In some cases, the selection criteria for the program indicates that a successful candidate will demonstrate a commitment to their country of origin, which may be determined either through an essay sample or during a selection interview.

For programs with vague post-scholarship guidelines, there are likely multiple reasons that the conditions are unclear. First, the goal of the program may be to provide students with *access* to education—perhaps to a certain field or level of study not available in the students' home country. Alternatively, the motivation may be aligned with diplomatic goodwill and cooperation. In many of these programs, students are "invited" to study in a foreign country. Such is the case of the Government of China scholarship programs for African students, which aims to build diplomatic goodwill (Dong and Chapman 2008) yet includes vague references for future economic cooperation (Nordtveit 2011).

Second, it may be that due to a difficult situation in the home country, students are not sure when it might be safe to return home or how they may apply their education, making it impossible to specify expectations. One such example is the Albert Einstein Academic Refugee Initiative sponsored by the UN's Refugee Agency (UNHCR). UNHCR originally offered tertiary education scholarships across myriad fields, but after several years of implementation, chose to focus instead on business administration, social sciences, and medical sciences, as these degrees tended to give refugees greater chances of employment in their host countries (Morlang and Watson 2007). In a more recent example, the Institute for International Education's (IIE) Syrian Consortium for Higher Education in Crisis which supports scholars and students to "continue their academic work in safe haven countries until they can return home" (IIE 2012).

Third, conditions may be vague for new programs, in cases where funders are not yet sure of the realistic expectations to place on their graduates. Yet with time and experience, programs language may be sharpened with more concrete terms. One illustrative case is the US Government's Muskie Program which used very basic program language about what the graduates could do in 2002, stating the successful candidates would be "committed to returning home after the completion of their program" (2002, p. 1). With time, this singular guideline on post-scholarship engagement has morphed to a more extensive set of expectations that included "sharing the benefit of the program with their community" and "becoming engaged in...endeavors designed to benefit the development of the home country" (American Embassy in Uzbekistan 2011).

9.3.4 Differential Impacts of Conditionality

It is worth asking whether these three different types of scholarship conditions influence participants in different ways. There is some evidence, for instance, that binding agreements positively influence participants to return to their home countries within 12 months of completing their studies (Marsh et al. 2016, p. 53). Those students with binding agreements might feel compelled to return based on the aims of the scholarship and to fulfill the commitments made, often combined with a sense of patriotism and will to give back for the privilege of studying abroad. Alternatively, they may be concerned about penalties applied if they do not return, although there is some evidentiary support that penalties do not strongly influence students' choice, especially if they are recruited by local firms or emigrate to a third country (Basford and van Riemsdijk 2015).

A more general consideration is that different types of visa may be issued to the recipient based on the scholarship conditions, especially if the student is being "sent" to study abroad or is being "invited" by a host country or university. Visa stipulations are another way that expectations can be communicated to scholars, as they may dictate that participants return home immediately after their studies or can restrict future visits to the host country. However, visa regimes rarely force a person to remain in their home country; rather, they lengthen or curtail the permitted stay in the host country. As such, visas tend not to prevent recipients from subsequently relocating to another third country after returning home from a scholarship.

For instance, a small minority of UK-funded Commonwealth Scholarship recipients are now resident in the United States (Mawer et al. 2016).

On the question of whether types of scholarship conditionality differently influence alumni engagement in social change and the types of activities chosen, little comparative research exists. This is partly because it is difficult to estimate graduates' engagement in social change efforts soon after they return home. On the one hand, they may be energized by their study abroad and ready to enact change, while on the other hand, they are likely devoting time to managing their transition, finding employment, and dealing with cultural adjustment issues (see Gaw 2000).

9.4 Personal Agency and Factors Influencing Alumni Choice

Despite similar scholarship program models, individuals experience their programs differently, make unique choices, and take advantage of distinct options at the end of their studies. In this section, three categories of forces that can affect a recipient's scholarship experience are highlighted: individual agency, individual characteristics, and push and pull factors.

9.4.1 Individual Agency

Individual agency can be defined in relation to scholarship programs as the ownership for decisions and actions made by a scholarship grantee, given the options available at the time. It is how an individual exercises their choices and weighs their interests and desires against a given range of possibilities and specific life goals. Naturally, options change over time as the individual examines their abilities, grows and develops skills, reflects on their situation and future opportunities, and is exposed to, and creates, new social structures and relationships (Bandura 2001). Given this understanding, individual agency is a significant factor in how any individual will engage in social change efforts.

In the case of scholarship programs, a graduate's viewpoint on available options is likely very different at the end of the scholarship than it was at the beginning. For example, students are exposed to advanced study with novel frameworks, enhanced skills and tools, employment opportunities, and new collaborators and networks. Students' impressions of themselves, their estimation of their abilities, and their perception of past choices or situations

may change. Moreover, the magnitude of the changes experienced by the students can vary widely among participants in a specific program, with some students changing their area of study, selecting a new career, or developing significant personal relationships. These potential shifts present new options and possible dilemmas for scholarship students.

As an example, I worked with an undergraduate scholarship recipient from southeastern Europe who became more comfortable sharing his sexual orientation—and began speaking out for others' rights—during his studies in the United States. Until his time abroad, he had not talked about his homosexuality, beholden to, and shaped by, family and social constraints. With his newfound voice for sexual minority rights, he returned home to find an environment quite hostile to sexual minorities, with national policies proposed to criminalize certain behaviors and campaigns to ban gay marriage. At this time, the recipient felt stuck: he was unable, due to personal safety concerns, to follow the plan that he had crafted during his studies (supported by his scholarship funder) to publicly advocate for sexual minority rights. This vignette provides a good example of how agency, interests, and options may change during studies abroad and, moreover, how the ability to fight for social change may be in tension with the scholarship's conditionality to return home.

9.4.2 Individual Characteristics

An intriguing question for those who study scholarship outcomes is whether specific factors may predict someone's behavior following a program. While there are some interesting insights highlighted below, there is far from a holistic model to predict the pathway that individuals will follow. Moreover, I would suggest that searching for a predictive model of post-study outcomes is problematic for two reasons. Firstly, models ignore (or at least downplay) the participant's agency—choices that are often vast for talented individuals like scholarship alumni—and have no way to capture the myriad opportunities that exist for the scholar following their studies. Secondly, any sort of predictive model will likely be used as a tool to *aid in the selection of* scholars, prioritizing those with specific personal characteristics or those from certain countries. These types of predictive models are not only based on incomplete data but they are estimations that tend to be realized across large datasets: models are rarely well adapted to foreseeing individual results. The technique of using such models will invariably result in a blemished and biased selection process and should be avoided.

Factors that may affect an individual's choice tend to fall into three categories: enduring factors, process characteristics, and external conditions and opportunities. These three categories of individual characteristics shed light on the complexity of both the factors influencing post-study decisions and, consequently, the practicality of expectations embedded in scholarship program conditionality.

Enduring Factors

Enduring factors are those characteristics that remain true throughout a lifetime, such as home country or childhood socioeconomic status. While these attributes may be weighed heavily in scholarship program selections, there is little evidence to show a strong correlation between enduring factors and post-scholarship behavior.

One of the more widely studied enduring factors is the relationship between different home countries and likelihood of the individual to return to that country post-scholarship. For example, in a review of approximately 2000 graduates of the United Kingdom's contribution to the Commonwealth Scholarship and Fellowship Plan, researchers found that recipients from certain global regions, like Australasia, had a statistically significant lower rate of return, while other regions, like Southeast Asia, had a higher rate (Mawer et al. 2016). Moreover, certain countries—with Nigeria specifically mentioned—had a disproportionate number of alumni abroad.[1] Interestingly, this study also found that scholarship recipients' likelihood of living in their home country changed depending on the number of years since they completed their scholarship, with those students who completed their scholarship in the last 1–2 years most likely to be living in their home country (Mawer et al. 2016). While these findings help illuminate the complex picture of student return after scholarship, they could not be separated into meaningful patterns of which nationalities were most or least likely to return immediately after their scholarships.

In another example, a recent report on African alumni[2] who attended five universities in North and Central America found statistically significant regional variance in return rate (Marsh et al. 2016). Students from West Africa were found to return home at a lower rate than those from East and Southern Africa. In addition, the authors noted that Africans who had studied abroad were more likely to return to their home country if they were married or in a long-term relationship prior to studying abroad. African students surveyed for the report were also more likely to return to their home country if their parents had lower levels of education, but there

was a weak or non-existent relationship between the likelihood of a student returning to their home country based on their gender, childhood economic status, or type of home community (rural or urban).

Process Characteristics

Process characteristics are those factors that are related to the scholarship, such as university attended or degree earned. For some process characteristics, the outcome may be significantly different between the time when one was selected for a scholarship and when they graduate, such as the knowledge or experience gained during the participant's studies.

Of these factors, there is some evidence to suggest that the level of degree earned is significant in whether the individual will return home. Chang and Milan (2012) found that many (73.3%) foreign PhD students in US science, engineering, or health fields stated that their immediate post-graduation plan was to remain in the United States. Moreover, there is some evidence that the chances of a PhD graduate choosing to return home has decreased with time. Kim et al. (2011) found that the percentages of US PhDs (across disciplines) who stayed in the United States increased from 33.9% during the 1980s to 66.1% during the 2000s. Marsh et al. (2016) found that African graduates had a higher rate of return in the 1960s–1980s, with a decline thereafter. They also found that African PhD holders were more likely to return than those who had pursued an undergraduate degree abroad, likely due to greater professional networks and personal responsibilities later in life (Marsh et al. 2016). Notably, these studies do not focus specifically on scholarship grantees and the doctoral statistics are likely skewed by the sciences and engineering fields, where research and development postdoctoral appointments are common next steps in career trajectories (Finn 2014).

Students may gain a host of additional skills while studying abroad, including language proficiency, intercultural skills, self-confidence, openness to learning, and flexibility (Dwyer and Peters 2004; Williams 2005). Baláž and Williams (2004) note that students can also build personal and professional networks while studying overseas. Furthermore, international study has been shown to influence individuals' career trajectories, like spurring an interest in overseas employment opportunities or working in an international organization (Norris and Gillespie 2009). These factors—some of which have been discussed in more detail in Chap. 6—can also shape an individual's post-scholarship steps.

Two additional components that are often included in international scholarships programs that may influence participants' post-scholarship choices are community service learning experiences and professional internships. In their study of African alumni, Marsh et al. (2016) reported that 39% of alumni who participated in service learning or volunteering activities, and 29% who had internships, said that they used these experiences often or very often in their current work. The authors also found a significant correlation between scholarship recipients who worked in the host country during their studies and lower rates of return to the home country (Marsh et al. 2016). Moreover, anecdotal evidence indicates that the professional connections made through these volunteer and professional opportunities are likely to influence grantees' post-scholarship choices, as some of the temporary engagements become permanent. In sum, the knowledge and experience gained during the scholarship will inevitably influence the post-scholarship pathway.

External Conditions and Opportunities

The third category, *external conditions and opportunities*, is a collection of environmental factors that exist outside of the scholar and scholarship program. These are the contextual factors that can influence the individual's choices, such as professional opportunities or the economic conditions in the students' home country. Unlike enduring factors, external conditions and opportunities are dynamic and can vary dramatically given the state of a specific professional field or current events.

Academic literature points to a few specific conditions in the home country that may influence scholarship recipients' decision to return to, work in, and stay in their home countries. The first set of these factors relates to employment opportunities and the culture of the workplace. Tung and Lazarova (2006) found that in a study of Romanian scholarship alumni, 58% would like to leave Romania and work abroad if given the opportunity. Interestingly, one of the chief reasons for seeking employment abroad was due to the work culture, with 54% of the respondents identifying that the professional standards they experienced while studying abroad "were in conflict" with the work culture at home (2006, p. 1863).

The daily tension of working in a professional environment that does not fit expectations likely takes a toll on the scholarship alumnus, both through struggling under the system that clashes with their professional experiences abroad and the energy required to attempt to advocate for a shift in standards. Among scholarship alumni I have interviewed, expectations to

comply with unscrupulous practices in government, higher education, the judiciary, and law enforcement caused some of them to seek positions elsewhere (Campbell 2016a). On this point, Tung and Lazarova suggested that the students' scholarships "allowed them to attain further experience in Western universities, thus making them even more valuable to their home countries – and ironically – less likely to return there" (2006, p. 1857). These points raise questions about whether it is reasonable to expect skilled professionals to return to work in positions in which the organizational culture is notably different than the overseas professional environments to which they adapted.

Often scholarship recipients from lower-income countries are concerned about the quality of materials or resources available in their home countries to continue their work. In the case of Kenya, for instance, Odhiambo (2013) noted that due to low-quality facilities and few professional development opportunities—in addition to a significant increase in student enrollment and low professor salaries—many faculty leave Kenyan universities. Exodus from research and teaching posts appears to be especially acute in the Science, Technology, Engineering, and Mathematics (STEM) fields, where high-quality labs are expensive to establish and maintain. Some governments have been aware of this problem and able to invest in mitigation through incentives and better infrastructure investment. Both Pan (2011) and Zha and Wang (Chap. 12) have observed that the Chinese government devoted considerable funding to developing "returning-student entrepreneurial parks"—complete with start-up loans and tax breaks—to entice those Chinese academics abroad to return and engage in work to spur national development.

In addition to employment factors, other external conditions and opportunities—such as the social, political, and economic contexts of the home country—may shape scholars' decisions. In a comparative study of the ways that scholarship alumni perceive their contribution to social change in the Republics of Georgia and Moldova, I found that alumni were more interested in returning home and working for social change when the current government was actively involved in promoting democratic ideals, improving services, and eradicating corruption (Campbell 2016a). In this transition from a Soviet system to a new democracy, alumni took up positions that they believed were directly related to social change, often in government and non-governmental organizations. Moreover, in the case of Georgia, a strong alumni network helped the alumni to support each other in job

searches, volunteer work, establishing new community projects, and for support (Campbell 2016b).

9.4.3 Overall Push and Pull Factors

When the idea of personal agency is combined with the characteristics of the individual, features of the scholarship program, environmental conditions, and opportunities available to the scholar, the result is what international student mobility scholars often refer to as *push and pull* factors. *Push factors* are the elements that drive an individual to move away from their current location, whereas *pull factors* are those elements that attract them to the new location. Together, these factors help to illustrate how individuals often weigh a multitude of diverse elements when making career and life choices. For international scholarship recipients, there tend to be additional factors—beyond those weighed by their peers or others who may be contemplating mobility for economic or other reasons—including scholarship conditionality.

Much discussion of push and pull factors has been conducted on a macro level and in the context of the global competition for talent: Marsh and Uwaifo examine this literature in Chap. 11. Two studies that have taken a richer, more detailed look specifically at push and pull factors related to post-scholarship choices have been published by Baxter (2014) and Polovina (2011). In the first study, Baxter (2014) interviewed 34 participants in the Rwandan Presidential Scholarship Program. The interviewees outlined factors that influenced their choices of whether to return home following their scholarship studies in the United States. Among these, economic considerations, workplace conditions, and political stability in their home country, and sense of identity and belonging, were all noted as important. The study also highlighted one important aspect that goes typically unaccounted for in push and pull models: expectations set by the students' family. For some scholarship recipients, especially those from poor communities or families, family members encouraged them to seize their opportunities abroad to find a job with a higher salary and send additional funds home. Moreover, participants in the study reported that they felt "ill-equipped" with only undergraduate studies to enter Rwanda's workforce, with many reporting they hoped to pursue further education before returning home.

In the second study, which looked at 27 Serbian scholarship alumni, Polovina (2011) reported push and pull factors for both those living abroad

(the "mobile" group) and those alumni who were currently living in Serbia (the "immobile" group). Both groups were initially driven to study abroad because they believed the experience would build confidence; both groups were motivated to return to their home country because of their family and friend networks; and both also suggested that their desire to leave Serbia is partially because of a disorganized or "ruined" state system that did not appear to be changing (Polovina 2011). Interestingly, the most significant differences of opinion between the groups were in the perceived quality of higher education, support for research, opportunities to work with experts and observe new practices, and the potential of career development within the sciences: the mobile group all stated that there were greater opportunities abroad.

Push and pull factors are also likely to change over the individual's life. Return decisions are not necessarily permanent and may be delayed, especially as careers and personal considerations change. For example, the alumni may receive a career promotion that "pulls" them to a large global city or back home. Alternatively, graduates may be "pulled" to another location when they have children and choose a new location with a better school system. On the other hand, if the economy in their country of residence spirals down or a civil war breaks out, alumni are "pushed" to reconsider their current residence. In my own research (e.g., Campbell 2016a), I have observed that a grantee's relationship to their home country—and the advocacy work in which they are involved—can shift during their lives. For example, a scholarship alumnus living abroad may return home if a national revolution ushers in a new government whose leaders welcome progressive ideas from abroad. This phenomenon has been seen recently in Ukraine, where Ukrainian alumni from western universities have responded to over 50 requests for advice from the post-Maidan government, and some have been placed in leadership positions (Professional Government Initiative 2016).

As the range of push and pull factors indicates, scholarship conditionality is only one consideration among many. Graduation is a natural point at which the scholarship recipient will carefully consider next steps, but it is at this point—immediately upon the completion of studies—that conditionality requirements (and visa regulations) are almost always applied. Recipients can therefore find themselves in a position of little time and many options, leading to increased anxiety. Yet with such a broad range of considerations in play, scholars who choose not to follow the conditions of their scholarship program may not be intentionally defying their goals. In

fact, they may be pursuing options that they believe position them better for future contributions to social change, such as further education, internships in a certain organization, or seeking partners or funders for nascent projects. As some of the examples above indicate, while program conditionality may be a factor immediately upon graduation, wider commitment to both returning home and contributing to social change will likely vary across a much broader time span.

9.5 Points of Tension in Scholarship Programs

As types of scholarship conditionality, one's personal agency, and individual predictive factors coalesce into push and pull factors, tensions can manifest in many international scholarship programs. Unresolved, these tensions may lead participants to be unprepared for their post-scholarship activities, frustrated with their position, and set awry on the mission to support and spur social change following their studies. At the outset of this chapter, I outlined three theories that undergird scholarship program design: human capital theory, a human rights-based approach, and a human capabilities framework. Each framework not only implies a different goal or measurement of success, it also influences how the program is designed in the first place, including the type of conditionality attached to the scholarship.

The theories align well with the three broad approaches to scholarship conditionality. Programs that subscribe to human capital theory—that the student's education will lead to both increased income and a "spillover effect" to boost economic and social conditions in their home communities—are likely to issue binding contracts. These contracts require individuals to return home for specific employment assignments so that home countries reap a return on the educational investment. Programs rooted in a rights-based approach focus on access to education for the participant and the role the participant has in promoting others' rights following their studies. Conditionality tends to follow one of two routes: vague guidelines are more likely associated with programs whose goal is to provide *access* to education, whereas social contracts are likely for programs that aim to steer their participants to promote rights for others. Finally, programs that prioritize a human capabilities approach encourage participants to explore new fields and topics, are flexible to a student's changing interests, and emphasize personal choice in their post-scholarship activities. These programs are more likely to have vague or flexible post-scholarship guidelines, with the

message that the next step for the scholar is to maximize their potential impact, regardless of vocation or residency.

The tension lies in that some programs combine theories or send mixed messages to their students. For example, it would be illogical to require a graduate who has been part of a program steeped in human capabilities—with an emphasis on developing new interests—to return to a low-paying, entry-level job in government when their interests and skills no longer match this position. This is the case of the Moldovan scholarship alumnus quoted on the first page of this chapter, who developed a new interest in technology for development but was unable to move this idea forward given the conditions of his scholarship contract.

Unfortunately, the tension of having unclear or multiple theories of change within a single scholarship program can ultimately lead to lack of clarity of successful outcomes resulting in frustration, for both administrators and participants. Without clarity of theory and values, scholarship program administrators pass the burden of trying to achieve multiple goals to their participants. Mixing of theories—and subsequently the shaping of program values and activities—places significant pressure on an individual to accomplish all things, potentially diluting any single objective.

More generally, scholarship programs are designed in a logical, normative fashion, with the assumption that selected scholars will have a parallel experience in a sequential way, leading to similar or complementary outcomes that contribute to change in the students' home countries. While some funders understand that each host university will provide a different experience for their grantees, many programs are designed with the following assumptions: that participants are similar and will experience the program in a symmetrical way, that participants will be shaped during their studies, and that overseas higher education will prepare them for their home countries (see Chap. 6 for further discussion). Scholarship conditionality is added to programs to make explicit the expectations for scholarship grantees to contribute to social or economic change in their home countries. Moreover, students within a program are often given the same "types" of education (level, quality of institution, length of program) with similar supplemental training leading to the same expectations: that students will participate in social change following their graduation and beyond.

This single program design model—found most commonly among programs in line with human capital theory—does not always allow for personal agency and individual characteristics and contributions. Few models incorporate grantees' motivations for applying, the skills and experience they

bring to the program, their enduring attributes and new opportunities and skills presented during the scholarship, their plans for their future, and how they may go on to influence social change. For example, what if a student enrolled in a Master's of Public Administration degree with a commitment to return and work for their Ministry of Economy finds they have a passion for public health? Would a degree in public health also positively contribute to social change development in the home country? The answer is surely yes, yet some programs would not permit a degree change due to strict program guidelines and conditionality agreements.

It may not be only a change of interests: it could also be a shift of identity. For example, Rizvi (2005) suggests that while studying abroad, students can become "dislodged" from their home countries and their devotion to helping the country, resulting in a "transnational" identity where they associate with a blend of home and host cultures. Indeed, some programs actively promote a similar idea of the "global citizen." Likewise, students may expand their interest in social change to a range of issues that extend beyond the borders of their country. For example, a student with experience fighting for fair wages in rural Nicaragua may expand her familiarity and interest in working with advocates who campaign for global pay equity for women across Latin America. Therefore, scholarship models that are focused on applying an individual's skills and efforts to national development may not be flexible enough to accommodate, account for—and welcome—the inevitable change experienced by participants who subsequently expanded their horizons.

9.6 Conclusion and Implications

As is evident from my framing of the issues above, I believe scholarship conditionality and individual agency may collide, exposing tensions in competing theories of change, incongruences in program models, and unclear and multiple expectations placed on participants. In truth, there is still a gap in the understanding of how conditionality may affect individuals and their roles in social change, both in the first few years after a scholarship and in the longer term. Longitudinal research across cohorts of a scholarship program or different programs across countries could illuminate what types of support were most useful to the recipients in their quest to create social change.

To help overcome these difficulties with conditionality and agency, we need new models for scholarship programs that allow for recipients to

develop their interests, expand their networks, and increase their choices during the scholarship period, with significant support given to the alumni's social change engagement in the long term. Instead of trying to fit talented individuals into predetermined job descriptions or setting predetermined outcomes of how knowledge and skills will be applied upon graduation, funders should consider allowing the individual the freedom to build on their experiences, choose their pathways, and design projects or positions that contribute to the home country. These new models could be in the form of individualized scholarship plans in which recipients set personal goals, allowing for change and growth within that plan while they continue to expand their knowledge and skills and seek new opportunities to help their country. In addition, flexible plans will also fit the changing contours of students' home countries. These plans could be monitored by an advisor who could incorporate students' personal push and pull factors, home country connections and networks, and resources available at the students' host universities; all contributing to a specialized engagement plan for social change.

This reframing would change and expand the notion of scholarship conditionality. Instead of top-down, one-size-fits-all approach, conditionality agreements can be reconceived as planning tools for the important and dynamic social change work following academic study. With more personalized, flexible notions of conditionality, scholarship program alumni can continue to be supported from the moment of graduation far into their career and social change trajectories.

Notes

1. Notably, most alumni who lived abroad did so in countries with higher Human Development Indicator (HDI) scores than their country of origin.
2. Not all participants in this study were part of an international scholarship program.

References

American Embassy in Uzbekistan. (2011). Edmund S. Muskie Graduate Fellowship Program paper application instructions. American Embassy in Uzbekistan. Available at: http://photos.state.gov/libraries/uzbekistan/231771/PDFs/2012%20Muskie%20Paper%20Application%20Instructions%20_Uzbekistan_.pdf (Accessed 31 October 2016).

Baláž, V. and Williams, A.M. (2004), 'Been there, done that': international student migration and human capital transfers from the UK to Slovakia. *Population, Space and Place*, 10(3), pp. 217–237.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), pp. 1–26.

Basford, S. and van Riemsdijk, M. (2015). The Role of Institutions in the Student Migrant Experience: Norway's Quota Scheme. *Population, Space and Place*. Early view: doi: 10.1002/psp.2005.

Baxter, A. (2014). *The burden of privilege: Navigating transnational space and migration dilemmas among Rwandan scholarship students in the U.S.* PhD dissertation, University of Minnesota Digital Conservancy, University of Minnesota. Available at: http://hdl.handle.net/11299/166947 (Accessed 6 Dec 2016).

Campbell, A. (2016a). *International scholarship programs and home country economic and social development: Comparing Georgian and Moldovan alumni experiences of "giving back"*. PhD dissertation, University of Minnesota.

Campbell, A. (2016b). International scholarship graduates influencing social and economic development at home: The role of alumni networks in Georgia and Moldova. *Current Issues in Comparative Education*, 19(1), pp. 76–91.

Chang, W.Y. and Milan, L.M. (2012). International Mobility and Employment Characteristics among Recent Recipients of US Doctorates. National Center for Science and Engineering Statistics. Available at: http://www.nsf.gov/statistics/infbrief/nsf13300/ (Accessed 11 June 2016).

Dong, L. and Chapman, D.W. (2008). The Chinese Government Scholarship Program: an effective form of foreign assistance? *International Review of Education*, 54(2), pp. 155–173.

Dwyer, M., and Peters, C. (2004). *The benefits of study abroad*. Transitions Abroad, 27(5), pp. 56–57.

Edmund S. Muskie/Freedom Support Act Graduate Fellowship Program. (2002). 2002 Program Description. Unpublished document.

Finn, M. G. (2014). Stay rates of foreign doctorate recipients from U.S. universities, 2011. Report Prepared the National Center for Science and Engineering Statistics of the National Science Foundation. Available at: https://orise.orau.gov/files/sep/stay-rates-foreign-doctorate-recipients-2011.pdf (Accessed 8 November 2016).

Gaw, K.F. (2000). Reverse culture shock in students returning from overseas. *International Journal of Intercultural Relations*, 24(1), pp. 83–104.

Institute of International Education. (2012). IIE consortium commits to emergency support for Syrian students and scholars: 33 organizations worldwide commit over $1.3 Million. Press Release. Available at: http://www.iie.org/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2012/2012-11-14-IIE-Consortium-Commits-to-Emergency-Support-for-Syrian-Students-Scholars#.V2KowLQ0f8k (Accessed 13 April 2016).

Kim, D., Bankart, C.A. and Isdell, L. (2011). International doctorates: Trends analysis on their decision to stay in US. *Higher Education*, 62(2), pp. 141–161.

Lehr, S. (2008). Ethical dilemmas in individual and collective rights-based approaches to tertiary education scholarships: the cases of Canada and Cuba. *Comparative Education*, 44(4), pp. 425–444.

Marsh, R., Baxter, A., Di Genova, L., Jamison, A., and Madden, M. (2016). Career choices, return pathways and social contributions: The African alumni project. Full report prepared for the MasterCard Foundation Scholars Program. The MasterCard Foundation, Toronto, Canada. Available at: http://africanalumni.berkeley.edu/media/African-Alumni-Project-Final-Full-Report-Aug-2016.pdf (Accessed 8 November 2016).

Mawer, M., Quraishi, S. and Day, R. (2016). Successes and complexities: The outcomes of the UK Commonwealth Scholarships 1960–2012. Full Report. Available at: http://cscuk.dfid.gov.uk/2016/04/successes-and-complexities-the-outcomes-of-uk-commonwealth-scholarships-1960-2012/ (Accessed 6 Dec 2016).

McMahon, W.W. (1999). *Education and development: Measuring the social benefits.* Oxford University Press.

Morlang, C. and Watson, S. (2007). Tertiary refugee education impact and achievements: 15 Years of DAFI. UNHCR Report. Available at: http://www.unhcr.org/uk/568bc70e9.html (Accessed 11 June 2016).

Nordtveit, B.H. (2011). An emerging donor in education and development: A case study of China in Cameroon. *International Journal of Educational Development*, 31(2), pp. 99–108.

Norris, E.M. and Gillespie, J. (2009). How study abroad shapes global careers evidence from the United States. *Journal of Studies in International Education*, 13(3), pp. 382–397.

Odhiambo, G.O. (2013). Academic brain drain: Impact and implications for public higher education quality in Kenya. *Research in Comparative and International Education*, 8(4), pp. 510–523.

Pan, S.Y. (2011). Education abroad, human capital development, and national competitiveness: China's brain gain strategies. *Frontiers of Education in China*, 6(1), pp. 106–138.

Perna, L.W., Orosz, K., Jumakulov, Z., Kishkentayeva, M. and Ashirbekov, A. (2015). Understanding the programmatic and contextual forces that influence participation in a government-sponsored international student-mobility program. *Higher Education*, 69(2), pp. 173–188.

Polovina, N. (2011). Are scholarships and mobility programs sources of brain gain or brain drain: The case of Serbia. In: N. Polovina and T. Pavlov (eds), *Mobility and emigration of professionals: Personal and social gains and losses*, pp. 164–181. Belgrade, Serbia: Group 484 and Institute for Educational Research.

Professional Government Initiative. (2016). Professional Government Initiative: By Ukrainian Alumni of world-class universities. Available at: http://www.proukrgov.org/eng (Accessed 12 October 2016).

Rizvi, F. (2005). Rethinking "brain drain" in the era of globalisation. *Asia Pacific Journal of Education*, 25(2), pp. 175–192.

Sen, A. (2003). Human capital and human capabilities. In: Fukuda-Parr, S. and Shiva Kumar, A.K. (eds). *Readings in Human Development: Concepts, measures and policies for a development paradigm*. Oxford: Oxford University Press.

Smith, A. (1952). An inquiry into the nature and causes of the wealth of nations: In: R. M. Hutchins and M.J. Adlers (eds), *Great books of the western world: Vol. 39. Adam Smith*. Chicago: Encyclopedia Britannica (Original Work published 1776).

The MasterCard Foundation Scholars Program. (2015). Developing young leaders: 2015 Handbook. Toronto: The MasterCard Foundation.

Tung, R.L. and Lazarova, M. (2006). Brain drain versus brain gain: an exploratory study of ex-host country nationals in Central and East Europe. *The International Journal of Human Resource Management,* 17(11), pp. 1853–1872.

United Nations. (1948). Universal Declaration of Human Rights. Available at: http://www.un.org/en/universal-declaration-human-rights/ (Accessed 8 November 2016).

Walker, M. (2012). A capital or capabilities education narrative in a world of staggering inequalities? *International Journal of Educational Development*, 32 (3), pp. 384–393.

Williams, T.R. (2005). Exploring the impact of study abroad on students' intercultural communication skills: Adaptability and sensitivity. *Journal of Studies in International Education*, 9(4), pp. 356–371.

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CHAPTER 10

What's Next? Facilitating Post-study Transitions

Martha Loerke

10.1 Introduction

There are several key pivot points in any degree-based scholarship process where the alignment of the award program's goals with the realities of the individual grantee's experience is tested. International scholarship programs offering comprehensive support (meaning, more than just tuition and living costs) for advanced degree study (Master's and above) try to facilitate the individual's experience of these junctures with various program enhancements. From designing an application and selection process sensitized to the contextual realities of the target constituency, to ensuring university placements that speak to the individual's goals and interests, and continuing on to offering pre-departure orientations and academic advising, program administrators triangulate the myriad needs of beneficiaries with available resources and program goals. This chapter investigates the moment when the alignment of program goals and individual reality is thrown into particularly high relief: the end of the academic study portion of the scholarship. What will the individual do next? What does the program offer at this critical moment, and what does the individual actually need? Has the program design produced the individual profile envisioned by the program's mission? The previous chapter in this volume (Campbell, Chap. 9) delves into the

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second question; the text below, from the perspective of a practitioner and donor, explores the third.

These questions are increasingly important as international scholarship programs spotlight the cultivation of leaders for positive social change across the globe. The common default position of managing post-study transition by incentivizing 'return home' skirts an obvious challenge: return rates in and of themselves do not always indicate whether or not the program accomplished the goals envisioned in its mission. This is a particularly acute problem for programs with broad missions such as 'cultivating future leaders,' 'building open society,' or 'promoting social justice.' International scholarship programs with implicit or explicit social change agendas tend to express their missions in terms that reflect the geopolitical context within which the program has been launched. In this chapter I explore how context drives mission, how the context-mission dynamic impacts program design, and how the resulting designs open or narrow the gap between mission and grantee realities at the point of post-study decisions. The programs discussed below have been purposively selected to show how this frequently overlooked moment sits between program mission and program outcomes. Because the decisions of the individual at the end of their academic study are so strongly intertwined with program outcomes, effective post-study support options should be fully represented in the discourse of best practice in international scholarship program design.

I present three broad categories of programs with similar origins, intentions, and design. Programs in each category exemplify instructive points in the ongoing evolution of end-of-study transition facilitation, an evolution of design which seems to reflect a similar evolution in perceptions on how individuals engage with social change. The first category includes programs that emerged in Western countries in the aftermath of World War I and World War II. Programs from this era are characterized by a fairly straightforward belief that the exchange of ideas, enabled via the international exchange of scholars and students, not only advances research and builds knowledge but also enhances the chance for peace through improved cross-cultural understanding. Prominent examples of this classic model include the Fulbright Scholar Program (USA), the Commonwealth Scholarships and Fellowships (mainly UK), and the Deutsche Akademische Austauschdienst awards (DAAD, Germany).

The second category includes programs that prioritized capacity building and leadership development for newly emerging countries in the post-colonial and post-communist arenas. These designs grappled with

extending broadly conceptualized (as opposed to targeted trainings for organizational or institutional purposes—see Boeren, Chap. 2, this volume) support into politically transitioning societies and fledgling market economies, with an eye toward encouraging sectoral reforms in addition to strengthening public diplomacy. The Joint Japan-World Bank Global Scholarship Program (JJ-WB GSP), the US Department of State's Edmund S. Muskie and Freedom Support Act Graduate Fellowships (Muskie/FSA), and the Chevening Awards of the British Foreign and Commonwealth Office all exemplify this line of endeavor. In this category, we see implicit change agendas (i.e., expected multiplier effects generated by individual grantees) layered beneath development and reform goals, and a related increased attention to certain grantee support mechanisms.

The third category represents programmatic responses to new concepts of social change leadership and human development entering the public realm from thinkers such as Amartya Sen (1999) and Martha Nussbaum (2011). Programs in this category explicitly state their desire to cultivate social change leaders and promote new visions of inclusion by giving voice to non-traditional profiles from marginalized communities. In some ways a natural evolution from the capacity-building-for-development mantra of Category II programs, programs in Category III exhibit a capacity-building-for-social change philosophy with program designs that try to anticipate the needs of individuals from widely disparate home country contexts and personal trajectories. Financially, this program model tends to originate from foundations as opposed to national governments or international aid agencies. The Civil Society Leadership Awards (Open Society Foundations), the Rhodes Scholars, and the Gates-Cambridge Scholarships are instructive models of contemporary thinking about post-study transition for international scholarship recipients.

Although a certain level of post-study transition programming exists across all three categories, the variations at play suggest uncertainty as to what style of support, if any, should attach to this pivotal moment in the international scholarship experience. Unlike well-developed initiatives for improving applicant recruitment beyond urban centers and traditional elites, or the frequent deployment of pre-academic preparatory courses to help new grantees bridge toward unfamiliar academic environments, there is no clear-cut directive on what is necessary or even appropriate for post-study transition support. Concerns about cultivating dependency with over-engineered grantee support scaffolding are valid, especially in light of insufficient research on the efficacy of one approach over another. Nevertheless, because effective

post-study support extends the benefits of the overall investment, ultimately strengthening program impacts, it is important for program designers and donors to include post-study transitioning in their overall vision of the international scholarship experience. This is neither intuitive nor cost-free, and after the program model review below, I present several suggestions for low-cost adjustments that might circumvent commonly perceived challenges.

The methodological basis of my report is desktop research of international scholarship program websites, review of international scholarship program evaluations and reports, and review as well of internal documents from my work at the Open Society Foundations over the past 22 years. It is clear from my research that invoking broad concepts like mutual understanding, capacity building, open society, or social justice as an implicit or explicit mission of an international scholarship program, requires clarification. At the outset, program goals should state where the desired change or program impact is expected to sit: in the individual, in a specific geography, in a community of practice around a specific issue, or possibly in a larger social movement. How a donor or programming agency expresses its position on this point will help decide what kind of post-study efforts should be made to propel grantees toward expressing their social change potential most effectively.

10.2 Category I: Cross-Cultural Exchange and Mutual Understanding

The shock and devastation of World Wars in the first half of the twentieth century released enormous energy for promoting world peace through improved cross-cultural understanding. As early as 1919, on the occasion of the creation of the Institute for International Education in New York, the Institute's founding fathers "believed that we could not achieve lasting peace without greater understanding between nations—and that international educational exchange formed the strongest basis for fostering such understanding" (IIE 2016a). As geo-political tectonics continually shifted during the 1940s and 1950s, colonial empires wobbled and gave way to the seemingly immutable alignments of the Cold War. Diplomats and politicians saw that universities had a crucial role to play in post-war reconstruction and establishing a new world order. Dominant Western powers were determined to steer the world toward value systems presumed to securitize

humanity against future assaults. The diplomatic intentions of the United States, the United Kingdom, and post-war Germany were expressed in the Fulbright, Commonwealth, and DAAD scholarship programs.

The Mutual Educational and Cultural Exchange Act (commonly known as the Fulbright-Hays Act) adopted by the United States Congress in 1961 affirmed the framework for the Fulbright Scholars Program, initiated by Senator J. William Fulbright in 1946. The purpose of the Act was

> to enable the Government of the United States to increase mutual understanding between the people of the United States and people of other countries by means of educational and cultural exchange; to strengthen the ties which unite us with other nations by demonstrating the educational and cultural interests, developments, and achievements of the people of the United States and other countries of the world, and the contributions being made toward a peaceful and more fruitful life for people throughout the world; to promote international cooperation for educational and cultural advancement; and thus to assist in the development of friendly, sympathetic, and peaceful relations between the United States and the other countries of the world. (OLRC 2017)

Along similar lines, the British government launched the Commonwealth Scholarships in 1959 (see Kirkland, Chap. 8, this volume), at a point when preserving the alliances of the formal Commonwealth structure in the face of splintering colonial rule elsewhere was of tantamount importance. Hence their original intention to "provide a practical manifestation of Commonwealth collaboration by enabling citizens to share the wide range of educational resources and experiences that existed in member countries" (Kirkland et al. 2012). Commonwealth Scholarship recipients are reminded at the outset of their award of the program's expectations: "Our aspiration for you is that you will continue to thrive in your academic or professional career, and that your experience in the UK will boost your personal contribution to the development of your country when you return home" (CSCUK 2016). At the origins of both the Fulbright and Commonwealth programs, the mere expression of program goals was important in and of itself: a publicly stated belief in the power of academic exchange to increase mutual understanding and strengthen international relations was at this juncture both an end and a means (Wilson 2015a).

Originally established in 1925, the Deutsche Akademische Austauschdienst (DAAD) program as we know it today grew out of the

general proliferation of exchange programs in the 1950s. Under its current motto of 'Change by Exchange,' DAAD "promotes understanding between countries and individuals and helps secure the peace" (DAAD 2016a). At the heart of DAAD's mission lies a strong commitment to building academic capacity domestically and internationally, to "meet the challenges of the future through the vibrant exchange between academic systems," and "help developing countries establish effective university systems which in turn promote social, economic and political development" (DAAD 2016a). In this sense it represents an alternative approach from the Fulbright and the Commonwealth Scholarships by embedding individual international academic mobility within a larger goal of improving higher education institutions and networks in partner countries. Nevertheless all three programs retain the broad-stroke goals characteristic of classic international scholarship programs, whereby the value of the mobility in and of itself is as important as any subject studied or degree earned. Program models in this category are characterized by large-scale government funding and are therefore intended to serve the funding country's national and international interests.

Not surprisingly, such broadly articulated missions create a real challenge for designing targeted post-study supports for program beneficiaries. A logical option with maximum space for the range of academic disciplines and countries populating the alumni communities of these programs is simply to support alumni associations and their modern iteration, virtual networks. The Fulbright Foreign Student Program has created an online global community (IIE 2016b) for international exchange among alumni. Following various options for face-to-face encounters offered by Fulbright Enrichment Seminars during the formal award period (IIE 2016c), grantees are invited to pursue volunteer projects, mentoring, and in some cases small grants back in their home country by joining the International Exchange Alumni network.

Commonwealth Scholarship grantees are similarly encouraged to join alumni networks and seek "inclusion in the Directory of Commonwealth Scholars and Fellows" (CSCUK 2016). Specifically, the Commonwealth Scholarships Commission has created a shared space for CSC Scholars on LinkedIn, both a general group where "Fellows and alumni. . .discuss issues and post news of conferences, events, and research activities" and professionally defined groups, "which cover a wide range of disciplines and are coordinated by experts in the field" (CSCUK 2016).

Interestingly, the 2014 DAAD Annual Report notes that while 54 percent of the foreign students express a desire to stay in Germany after completing their studies, others leave their studies early and/or find it hard to 'connect' within their German host community (DAAD 2014). Citing the large percentage of students wanting to remain in Germany in positive terms leaves open the question of whether the agency might value retention in Germany as much as it values return to home country. The 'Embarking on your Career' information on their website is almost entirely focused on employment in Germany, for instance (DAAD 2016b).

That said, DAAD does support alumni to return to Germany for 1- to 3-month academic stays—a logical and effective mechanism to strengthen the program goals of "vibrant exchange between academic systems" (DAAD 2016a). Additionally alumni can join a global web-based network, which encourages them to mentor new applicants, connect to other alumni in their region, and share employment information.

The classic exchange models favored existing intellectual elites in their earlier formations, but have since shown flexibility in their pursuit of non-traditional profiles: both DAAD and the Commonwealth Scholarships accept applications from refugees, for instance. Flexibility in outreach and selection has not necessarily generated innovations in post-study transition mechanisms; nevertheless the reliance on building networks is perhaps logical given the range of disciplines, countries, and levels of study supported by these programs. Post-study transition in this category assumes that the 'what next?' question will be answered by individual beneficiaries independently. Without explicit goals of sectoral or community impact, the notion of pro-actively bridging the individual benefits of the international scholarship experience into larger communities is largely unaddressed.

10.3 Category II: Capacity Building and Leadership Development

The rise of nation-building in post-colonial (1960s/1970s/1980s) and post-communist (1990s/2000s) arenas shifted public diplomacy goals of the post-war era toward new responses to the emerging needs of transitioning societies. The language of 'capacity-building' and 'leadership development' starts to populate international academic exchange program missions, promoting sectoral reforms (governance, public policy, finance, business, and judicial, among others) deemed necessary to establish political

systems receptive to and capable of building market economies. Underlying the explicit goals of capacity-building for development and reform lurks implicit goals of social change, as pursuing these goals inevitably generate adjustments in the status quo. Pursuing capacity-building-for-development intentions assumes benefit beyond the individual to a particular sector, if not national policy but the concept of leadership in these programs stops short of cultivating leadership for change in social communities. Without abandoning the broad public diplomacy ambitions of the first category, program language in Category II nevertheless becomes more specific, perhaps more rooted in organizationally defined benefit. One scholar notes that after September 11, 2001, educational exchanges move more firmly into the 'realm of marketization,' which means the "discourse of educational exchange has subtly shifted from one of mutual understanding, goodwill, and peace to one of 'impact,' 'effectiveness,' and 'accountability'" (Bean 2015). The latter terms create an obvious tension between program mission and individual experience, since as 'free-agent' individuals, program grantees may or may not follow the linear projections toward clear results envisioned by the program mission (Campbell, Chap. 9, this volume).

Launched in 1983, the Chevening Awards program of the British Foreign and Commonwealth Office (FCO) "offers a unique opportunity for future leaders, influencers, and decision-makers from all over the world to develop professionally and academically, network extensively, experience UK culture, and build lasting positive relations with the UK" (Chevening 2016a). The terms 'influencers' and 'decision-makers' hint at an increasingly instrumentalist view of how international scholarship programs serve foreign policy needs: expectations of what the beneficiary will accomplish are growing more complex, more oriented toward tangible benefits (in policy-making, in government, presumably in the private sector as well) beyond the individual to his or her professional community.

Even more explicit in its capacity and leadership development intentions is the Joint Japan/World Bank Scholarship Program (JJ/WBGSP). Originating in 1987 "as part of a special Japanese initiative to strengthen human resources in developing countries," JJ/WBGSP supports individuals to develop the "skills that are necessary in order for countries to prosper in the highly interconnected and competitive global economy" (The World Bank Group 2017). Somewhat unusually, the program goals also includes expectations for how Japanese beneficiaries should contribute to international development: "Japanese national scholars are expected to advance their professional career with a keen focus on the alleviation of

poverty and enhanced shared prosperity in developing countries" (The World Bank Group 2017). The notion of a global community of professionals plays out further in the post-study support mechanisms included in this scholarship model (see below).

The US government was quick to exploit both diplomatic and development opportunities created by the fall of the Berlin Wall in 1989. Originally launched in 1992, as the Benjamin Franklin Fellowships, the Edmund S. Muskie and Freedom Support Act Graduate Fellowship Program was the first openly competed scholarship for US-based study in the 15 states of the former USSR. The Scholarship Programs department at OSF was one of four original administering agencies, an engagement that lasted from 1992 to 2004. "The purpose of the Muskie Program is to train people who will assume leadership positions in their native countries"; people who are "able to demonstrate professional aptitude and leadership potential in the field of specialization" and who are "lacking a source of funding for study in the United States or access to another US-based training program" (Muskie/FSA 1994). Including a financial need criterion sent a clear message about tapping new profiles, a message reinforced by Program directives for recruiting in non-capital cities and striving for gender equity. Similar to the origins of the Fulbright and Commonwealth programs, offering publicly competed, merit-based awards in the post-Soviet context in itself meant promoting transparency and access. Beyond this notable characteristic, all three of these examples represent nuanced but significant departures from the classic Category I models, and their post-study transition mechanisms (see below) underscore in particular their emphasis on practical applications of international study abroad.

This category represents perhaps the biggest gap between mission and design at the post-study transition moment: despite clear mandates to recruit beyond traditional elites in the target countries, there is little programmatic attention to the difficult choices those new profiles face after their studies are complete. The intention to spur reform via individual capacity building does however lead to some innovations such as pre-study language classes, cross-cultural orientations, and mid-year grantee conferences. Post-study transition support mechanisms in this category are characterized by an emphasis on post-scholarship professional networks and employment. Connecting alumni for the sake of general associational benefit (Category I) now adopts a more purposive agenda and language: alumni networks should advance professional careers, not just lead to greater understanding across cultures. The option to take up post-study internships

materializes, in addition to support for professional networks within online alumni communities.

The Chevening awards scheme includes 'Chevening Connect,' linking current grantees to alumni via a web-based matching program featuring search options by subject area, country of origin, industry type, current location, and current employment. The idea is that this encourages peer-to-peer professional connections, a kind of 'buddy system' that supports mentoring (Chevening 2016b). Professional networking is the tool deployed by the JJ-WBGSP as well, in their "Alumni and Scholars Capacity Enrichment Network for Development" (ASCEND) initiative. ASCEND will "create and nurture active JJ-WBGSP alumni networks in countries and regions, connecting them to the World Bank and Japan," and "(P)repare JJ-WBGSP scholars to return home after completion of their degrees to make full use of their new skills and contacts to enhance the effectiveness and impact of their home institutions" (The World Bank Group 2017). A key component of ASCEND is an online discussion forum linked to a database of grantee/alumni CVs and thesis abstracts.

The Muskie program took a slightly different approach, with post-study career support that sought to extend the benefit of alumni professional expertise to the needs of local institutions of higher education, in hopes of creating wider and sustained impact. Seeking to build local capacities to teach the supported fields of study, the Scholarship Programs at OSF designed the Support for Community Outreach and University Teaching (SCOUT). This initiative supported both full and part-time teaching and special project activities that built upon the grantees' academic and professional experience. Full-time Teaching Grants were designed "to stimulate and facilitate the development of academic careers of Muskie/FSA alumni in their home countries and assist them in applying their knowledge and experience towards educating young people in their countries in the spirit of values of open civic society, rule of law, market economy and democracy."[1] Part-time Teaching awards allowed returning alumni to combine "their professional activities with university-level instruction. The Program supports … alumni … who have primary vocations outside academia in their home countries but are interested in developing and providing instruction at institutions of higher education or post-diploma training and retraining."[2]

In an early move to promote home-country civic engagement for returning international scholarship recipients, SCOUT also offered *Special Project Grants*, whereby alumni could submit proposals for projects

"designed to strengthen community, secondary and higher education by introducing innovative content, methods and materials of teaching and research, strengthening academic and scholarly exchange and fostering school and university linkages to the community."[3] SCOUT represents how multiple goals can be bundled into a post-study options package. It also shows how capacity-building models can enhance their impact by addressing *internal* home country brain drain (from academe to the public or private sector) as well as international brain drain. As an approach that went beyond the targeted professional networks common to many capacity-building scholarship models of the time, SCOUT exemplified new thinking about creating wider circles of influence for individual scholarship beneficiaries.

Transitioning and low-income countries continue to represent 'windows of opportunity' to improve access to international scholarship opportunities. Doing so necessitates preparatory initiatives (language training, pre-departure orientations, standardized test classes) to help bridge the gap non-elites frequently face in highly competitive international award programs. As applicant pools grow more inclusive, the international scholarship experience starts to represent what can be called a 'structured disruption' in the lives of the individuals seeking these new pathways. As noted, program designs acknowledge this disruption by devising various ways to improve access to and performance during the scholarship. Yet the enhancements attached to the capacity-building models seem to assume that the experience of winning and participating in the scholarship will suffice in preparing beneficiaries to achieve the wider institutional and societal goals of the program. How the structured disruption of the experience actually plays out for the individual has been treated elsewhere (Baxter, Chap. 6 and Campbell, Chap. 9, this volume); the next section of this chapter looks at several program design options that might mitigate some of its negative side effects.

10.4 Category III: Cultivating Social Change Leaders

Social change scholarship frameworks articulate expectations beyond individual benefit toward what an individual can do for his/her home community ('agents of change'). The added dimension of driving social (beyond sectoral or institutional) change sharpens the importance of post-scholarship choices, signaling a need for program designs sensitized to dramatically different social, political, economic, and academic cultures

across the globe. The emphasis on 'leadership' (already apparent in Category II) points to a complex expectation that the 'leaders' will be prepared to actively promote social change. In other words, normal scholarship benefits of deepening knowledge, building professional sectoral expertise, and absorbing cultural differences are now expected to produce results for broadly defined 'communities,'—possibly communities of professional practice, but also issue-oriented social groups, and, perhaps most challenging, marginalized geographic spaces and constituencies. The intention to create leaders may apply to any number of societal sectors—public or private, academic, or professional—but the emphasis is decidedly on empowering individuals to be agents of change.

The recently launched Civil Society Leadership Awards (CSLA) of the Open Society Foundations is a case in point. Structurally similar to the Muskie awards (full cost coverage, targeted fields of study, targeted countries, openly competed with a multi-phase selection process, and with various enhancements to assist non-traditional applicants), CSLA is an amalgam of scholarship programs administered by OSF from 1994 to 2013. A comprehensive award program openly competed in 17 countries "where civil society is challenged by a deficit of democratic practice in local governance and social development," CSLA supports "individuals who clearly demonstrate academic and professional excellence and a deep commitment to leading positive social change in their communities" (CSLA 2016). The program prioritizes outreach to community leaders and students in marginalized countries in a systematic attempt to help these individuals develop and improve their ideas and visions for leading change. Program guidelines encourage the selection of candidates with unusual personal trajectories as well as those with more traditional resumes, seeking a mix of professionals, activists, and authentic local voices.

The Gates-Cambridge and Rhodes scholarship programs are also explicit in their goals to create social change leaders. Gates Cambridge seeks to "build a global network of future leaders committed to improving the lives of others" (2017); Rhodes Scholars will exhibit "outstanding intellect, character, leadership, and commitment to service, [and] demonstrate a strong propensity to emerge as 'leaders for the world's future'" (The Rhodes Trust 2017a). The post-study transition mechanisms attached to all three programs opens up a relatively new area of activity for international scholarship programs, that of empowering individuals to lead if not create communities of social change-oriented citizens.

Once again seeking to link the power of the international scholarship grantee to the needs of organizations, the Scholarship Programs at OSF

recently launched the Civil Society Professionals Program (CSPP), an innovative internship opportunity for grantees of the Civil Society Leadership Awards. Whereas the SCOUT initiative described above sought to create or fortify links between returning professionals and local universities, the CSPP seeks to "bridge the academic experience of Scholarship Programs' grantees to professional opportunities that can both facilitate their return home and link them to the global OSF network and wider civil society" (CSPP 2016). The intention now is to extend the benefit of the individual scholarship into local, regional, and even international communities of civil society organizations. Our assumption is that this 'network immersion' will improve the capabilities of the individual, strengthen the capacities of the hosting organization, and cultivate a sense of shared purpose among those working towards building open societies. The internships are competitively awarded after hosts and grantees collaboratively propose an internship project; the process itself therefore embodies tangible results of active professional networking. Still in its infancy, the model remains untested; one prospective vulnerability may well be a lack of peer-to-peer support captured in the Gates-Cambridge and Rhodes models.

The Gates-Cambridge Scholarship Program and the current iteration of the Rhodes Scholarships at Oxford exemplify a highly evolved approach to post-study transition challenges, by setting the stage for this transition well before it actually transpires. Exploiting the added value of clustering grantees at one host university, these program designs include enhancements throughout the course of study that encourage reflective and confidence-building approaches to managing ambiguity and decision-making. Rhodes Scholars at Oxford participate in a 'Service and Leadership Program' (The Rhodes Trust 2017b) that includes skills workshops, global challenge discussions, internships, and grantee retreats. In their second and final year of study, the grantee retreat focuses specifically on preparing for post-study transition. 'Transition therapy' includes exercises to promote personal growth awareness alongside professional identity construction. Back on campus, multiple student-led clubs cultivate fledgling networks for contemporary social issues: Rhodes Social Impact Group, Rhodes to Asylum, and the LGBTQ Society are some of the grantee-defined groups available.

Gates-Cambridge Scholars also benefit from on-campus enhancements within their 'Learning for Purpose' program (Learning for purpose 2017). Designed and implemented by the grantees themselves, Learning for Purpose offers a variety of interactive options ('brain trusts,' TED talk video

discussions, scholar blogs, scholar-led skills workshops) exploring cross-cutting themes such as 'Driving Change,' 'Sharing Ideas,' 'Crafting/Creativity,' 'Catalyzing Teams,' and 'Reflection and Resilience.' In this case, the attention to cultivating generic life skills with peer-to-peer learning underscores a key point for the scholarship holders: they are a resource as well as a friend for their peers.

Active reflective practice during the academic term not only recognizes the individual's need to approach personal growth and complex societal topics with openness and confidence, but also sows the seeds for coherent and meaningful networks in the post-scholarship world. Both the Rhodes and Cambridge models explicitly acknowledge and create space for peer-to-peer learning, underscoring the importance of developing personal coping capacities in tandem with professional and academic competencies during the scholarship period. It is possible that some of this peer-to-peer learning occurs naturally in programs that support clusters of students at host universities, but leaving this crucial interaction open to chance is not ideal. Inevitably, some grantees will end up on the outskirts of informal groups of friends, and those are precisely the individuals who might benefit most from facilitated and inclusive peer spaces.

International scholarships explicitly promoting positive social change agendas frequently operate on the assumption that an individual's development of 'soft skills' (critical thinking, inter-cultural competency, decision-making, adaptability, etc.), layered atop rigorous academic study, will naturally cultivate future leaders (Baxter, Chap. 7, this volume). Yet we have learned that winning the award and achieving a degree is not sufficient for actually realizing program goals. Several of the innovations showcased above suggest that reflective practice during the scholarship itself may well mitigate certain post-study transition challenges. The OSF model suggests a different approach to amplifying professional networking as a post-study option. In all three examples, we see complex interpretations of what is meant by a 'comprehensive' scholarship, and the implications for resource allocation are interesting: the goals of a program and its grantees might well find closer alignment if transition-oriented discussions and targeted follow-on options figured more prominently in the program's overall design.

10.5 Common Challenges, Possible Solutions

What we now need to consider are the realities of program design and implementation, staying cognizant that some of the more attractive features described above exist within specific and well-resourced environments, and

are preceded by recruitment, selection, and placement practices that may or may not be available throughout the landscape of international scholarship schemes. Programs and donors frequently allocate resources with a difficult choice in mind: adding more programming may mean supporting fewer individuals. This is a tough dilemma, particularly for programs extending awards into politically and economically constrained communities where simply helping people 'get out' is a compelling imperative. Yet perhaps 'more' programming isn't the answer so much as 'different' programming. For instance, most comprehensive international scholarship programs (meaning, those that offer enhancements beyond funding travel, stipend, and university fees) already allocate resources to events or gatherings whose content could be supplemented by if not recalibrated towards 'what's next?' discussions. Given the pertinence of cultivating good decision-making and transition skills for grantees early on in their studies, orientation programs are a natural moment to begin conversations about the non-academic challenges that lie ahead and available resources to draw on. University site visits by program staff, grantee conferences, and any skills-oriented workshops are also logical contexts for similar discussions.

In addition to financial cost, consideration of human resources is unavoidable. Administering international scholarship programs is already labor-intensive, and adding new elements to program design and implementation requires staff time, attention, and follow through, as well as quality staff training. Here the Gates-Cambridge and Rhodes Scholars models offer possible solutions: One, work with host university partners to see if existing resources on-campus could be applied to preparing grantees for post-study transition (see Baxter, Chap. 7, this volume) and, two, explore what the grantees themselves can bring to the table; peer-to-peer learning empowers the grantees to think of themselves as resource leaders and encourages them to collaboratively identify the questions and issues most relevant to their needs. The latter model does not necessarily depend on having a certain number of grantees clustered at one host; one could imagine regional peer groups communicating online that would work as well, especially if the grantees within the designated region have had previous face-to-face meetings earlier in their program. That noted, further research on the added value of enhancements, generally for developing the inter-personal skills, know-how, networks, mentors, and work experience necessary to ease post-graduation transition is needed to convince scholarship program leaders to increase investment in post-study options.

Outside of staff- or grantee-led reflective discussion, other academic and non-academic experiences could also help grantees confront ambiguous and difficult choices with managed expectations if not full confidence. Recent discourse related to cognitive behavior (Holmes 2015) suggests that exposure to the unfamiliar and dislocation from home community bolster mental capacity not only for tolerance, but also for creativity. Within social change agendas, creative problem-solving is clearly a quality we value highly and expect rigorous academic study in alternative environments to produce.

Perhaps it is time to adopt a more holistic vision of what 'learning' in international scholarship programs means. For professional degree earners, working with host country civil society organizations and local government offices engaged in community welfare could open up new insights into how various kinds of resources can be identified and creatively applied, even in under-resourced areas. Alternatively, participating in a local advocacy effort, perhaps even local demonstrations, would flesh out the strengths and weaknesses of host country government policy and public practice. Fairly common to undergraduate academic experiences, options to volunteer in low income communities, attend city council meetings, participate in environmental clean-ups, and intern with municipal government offices would offer valuable experiential learning contexts for international scholarship students, particularly those anticipating leadership roles in their home communities. For visiting professors from sending country universities, observing if not participating in university-community initiatives could give them fresh ideas for developing their home institution's ability to offer politically palatable yet socially transformative opportunities for their students.

Helping international scholarship beneficiaries directly experience communities of practice outside of the classroom would certainly tighten the alignment between social change goals and individual grantee experience. Fostering reflective practice within communities of shared values during the scholarship offers grantees a stronger position from which to contemplate next steps, because it exposes them to the choices others make in facing uncertainty, ambiguity, and unknown consequences. If programs are deliberately seeking to cultivate social change leaders, building social change experiences into the scholarship program clearly advances the goals of the program.

Ultimately the challenge of establishing causality between specific program elements and desired social change outcomes begs for more research and new approaches to evaluation. Vulnerabilities in all of the models

discussed raise the question of breadth vs depth: would focusing resources on one style of engagement, one region, or one issue deliver more sustained results than a multi-pronged enhancement approach? Is there a strong rationale for developing and strengthening a 'critical mass' of social change leaders in a particular sector and country/region? Can critical mass theory help us design better programs for positive social change?

10.6 Concluding Observations

Channeling resources toward finding, selecting, and preparing grantees to perform well in their host environment is not synonymous with supporting positive social change in the home environment. Implicitly of course we all recognize that actually creating positive social change on a meaningful scale in any community or country is both an ambitious and ambiguous target. Scholarship programs nevertheless play a crucial role in helping individuals develop their own ideas, capabilities, and strategies for producing a larger good.[4]

Program goals are effectively advanced by thoughtful holistic program designs that recognize key pivot points for individual beneficiaries. Whether the individual opts for an immediate return home, a deferred return via another international experience (another advanced degree, a job or an internship, or a personally motivated relocation), or an extended stay in their host country, the scholarship program's ability to situate this individual further along his or her path to becoming an agent for positive social change depends largely on its ability to prepare the individual for managing difficult and ambiguous choices.

Programs designed to foster positive social change in struggling communities must think outside of the purely academic box, and put as much attention to the post-study experiences and choices of their grantees as to their recruitment and selection strategies, their pre-academic preparatory support, and their engagement with grantees during the scholarship period. If a program is primarily interested in changing the facts on the ground of the sending communities and countries, post-study transition support should incentivize return home, possibly with support for home country projects and local internships, and, where possible, regular regional gatherings.

Alternatively, if a program prioritizes change or progress within a targeted issue area (access to justice, health rights, transparent governance, drug policy), post-study transitioning can be facilitated with international

internships at policy-making hubs, or additional training in advocacy, litigation, and data-driven research. Positive social change can emerge from both physical return and professional returns (Dassin 2009), but a program's goal should be clearly supported by its design, with a clear and consistent awareness of the kinds of choices the individual will have to make, and the points along the way where the program can help.

A key question therefore for grantees at the end of their studies is: what's next? In this chapter we reviewed program designs that try to help grantees answer this question in ways that affirm and reflect the goals of the international scholarship program. To be sure, program administrators, donors, and state agencies can choose to downplay this moment, and this question, in program design, on the basis that more programming risks creating a type of grantee dependency on scholarship support. But I would argue that this approach is shortsighted, because at such a critical point for the individual and the larger goals of the program, it is logical and feasible to incorporate thoughtful options that pave the way to greater returns on the overall investment in human potential.

We are witnessing a gradual closing of civil society space in many countries around the world, a situation which both demands significant investment in future leaders, but also calls into question what constitutes appropriate 'expertise,' much less 'leadership,' in evolving global realities. International scholarship programs breathe life into local and global conversations about knowledge, learning, and human development by offering transformative experiences to individual scholars. Bracing for uncertainty and ambiguity, in fact 'learning' how to be uncomfortable with the choices at hand but still be able to move forward, are qualities that are increasingly essential for individuals seeking to lead positive social change. Conditions that pertained in their home community at the time of application may or may not pertain at the time they graduate. The content of the courses they undertook may not match up to viable jobs back home. The expectations of their families may well change from eager support to desperate demands. Their own perceptions about what they need in order to survive and even thrive will be challenged.

Traditionally promoted with the belief that exposure to alternative educational resources and cultures would spur mutual understanding and promote peace, many scholarship programs have more recently shifted toward promoting 'positive social change' and 'leadership.' Given evolving perceptions of the agency of individuals in social change, donors and administering agencies need to recalibrate their vision of what a pathway to positive social

change should look like in today's international scholarship program world. Attending to the individual grantee's '"what's next?' moment is an essential part of this task.

Notes

1. Support for Community Outreach and Teaching (SCOUT), Internal Memo, November 6, 2000.
2. Support for Community Outreach and Teaching (SCOUT), Internal Memo, November 6, 2000.
3. Support for Community Outreach and Teaching (SCOUT), Internal Memo, November 6, 2000.
4. Aryeh Neier, personal communication with author, June 10, 2016.

References

Bean, H. (2015). Strategic Communication and the Marketization of Educational Exchange. *All Azimuth*, 4(2), pp. 31–44.

British Council and DAAD. (2014). *The rationale for sponsoring students to undertake international study: an assessment of national student mobility scholarship programmes*. Manchester, UK: British Council.

Chevening. (2016a). Welcome to Chevening. [Online]. Available at: http://www.chevening.org (accessed 7 December 2016).

Chevening. (2016b). Chevening Connect. [Online]. Available at: http://www.chevening.org/alumni/chevening-connect (accessed 7 December 2016).

Civil Society Leadership Awards [CSLA]. (2016). Program Announcement, July 2016. Unpublished document.

Civil Society Professionals Program [CSPP]. (2016). Program Announcement, March 2016. Unpublished document.

Commonwealth Scholarship Commission in the UK [CSCUK]. (2016). Commonwealth Scholars Handbook 2016. [Online]. Available at: http://cscuk.dfid.gov.uk/wp-content/uploads/2011/03/handbook-2016.pdf (Accessed 7 December 2016).

Dassin, J. (2009). "Return" and "Returns": Brain drain and the path back home. In: T. Volkman, J. Dassin, and M. Zurbuchen (eds.), *Origins, Journeys and Returns: Social justice in international higher education* (pp. 231–248). New York: Social Science Research Council.

Edmund S. Muskie and Freedom Support Act Graduate Fellowships [Muskie/FSA]. (1994). Program Announcement. Unpublished document.

Gates Cambridge. (2017). Gates Cambridge: A global scholarship at Cambridge University. [Online]. Available at: www.gatescambridge.org (accessed 7 December 2016).

German Academic Exchange Service [DAAD]. (2014). 2014 DAAD Annual Report. [Online]. Available at: https://www.daad.de/medien/jahresbericht_2014_englisch.pdf (Accessed 30 January 2017).

German Academic Exchange Service [DAAD]. (2016a). Motto – DAAD – Deutscher Akademischer Austauschdienst. [Online]. Available at: https://www.daad.de/der-daad/ueber-den-daad/portrait/en/29145-motto/ (accessed 7 December 2016).

German Academic Exchange Service [DAAD]. (2016b). Embarking on your career after studying – DAAD – Deutscher Akademischer Austauschdienst. [Online]. Available at: https://www.daad.de/deutschland/in-deutschland/arbeit/en/12362-embarking-on-your-career-after-studying/ (accessed 7 December 2016).

Holmes, J. (2015). *Nonsense: The Power of Not Knowing*. New York: Crown Publishers.

Institute of International Education [IIE]. (2016a). History: who we are. [Online]. Available at: http://www.iie.org/Who-We-Are/History#.WEiJZ7IrIs4 (accessed 7 December 2016).

Institute of International Education. (2016b). Fulbright Scholar Program. [Online]. Available at: http://foreign.fulbrightonline.org/alumni (accessed 7 December 2016).

Institute of International Education. (2016c). Fulbright Enrichment Program. [Online]. Available at: http://foreign.fulbrightonline.org/about/foreign-fulbright/fulbright-enrichment-program (accessed 7 December 2016).

Kirkland, J., Ransom, J., Stackhouse, J., and Taal, S. (2012). Commonwealth Scholarship and Fellowship Plan 2009–2012. Paper presented at the 18th Conference of Commonwealth Education Ministers, 28–31 August 2012, Mauritius.

Learning for purpose. (2017). Learning for Purpose: Gates Cambridge. [Online]. Available at: http://learningforpurpose.com (Accessed 30 January 2017).

Nussbaum, M. (2011). *Creating Capabilities: The Human Development Approach*. Harvard University Press, Cambridge, MA.

Office of the Law Revision Counsel [OLRC]. (2017). *Congressional statement of purpose*. United States Code, Title 22 – Foreign Relations And Intercourse, Chapter 33 Mutual Educational And Cultural Exchange Program, Section 2451 [Original 1961]. [Online]. Available at: http://uscode.house.gov/view.xhtml?path=/prelim@title22/chapter33&edition=prelim (Accessed 30 January 2017).

Sen, A. (1999). *Development as Freedom*. New York: Anchor Books.

The Rhodes Trust. (2017a). Rhodes House – home of the Rhodes Scholarships. [Online]. Available at: http://www.rhodeshouse.ox.ac.uk (accessed 7 December 2016).

The Rhodes Trust. (2017b). Service and leadership programme –the Rhodes Scholarships. [Online]. Available at: http://www.rhodeshouse.ox.ac.uk/rhodes-scholars/service-and-leadership-programme (accessed 7 December 2016).

The World Bank Group. (2017). World Bank Scholarships Program. [Online]. Available at: http://www.worldbank.org/en/programs/scholarships (accessed June 17, 2016).

Wilson, I. (2015a). Ends Changed, Means Retained: Scholarship Programs, Political Influence and Drifting Goals. *British Journal of Politics & International Relations*, 17(1), pp. 130–151.

Wilson, I. (2015b). Exchanges and Peacemaking: Counterfactuals and Unexplored Possibilities. *All Azimuth,* 4(2), pp. 5–18.

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CHAPTER 11

Global Migration of Talent: Drain, Gain, and Transnational Impacts

Robin R. Marsh and Ruth Uwaifo Oyelere

11.1 Introduction

An increasing part of globalization is the international competition for highly skilled professionals to fuel technology-driven developed and emerging economies. Tertiary educated emigrants and international students and alumni are the primary conduits of human capital transfer. Recent data suggest a steeply increasing trend in the proportion of high-skilled emigration to total emigration, reaching 35 percent by 2000 or an estimated 24 million, the majority from source countries in the Global South settled in OECD (Organization for Economic Co-operation and Development) countries[1] (Docquier and Rapoport 2012). This global competition for 'talent', particularly in the STEM fields, has implications for the educational and employment aspirations of youth in developing economies who often see study abroad and emigration as a promising avenue for income and professional advancement. Shortages of medical personnel in many industrialized countries, in part the result of aging populations, has also increased

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the demand for medical professionals and contributed to ‘medical brain drain’, particularly from sub-Saharan Africa, the Caribbean, and the Philippines. Whether or not the emigration of talent is a net gain or net loss for sending countries depends in large part on the ‘return’ trajectories of emigrants and, for those who may never return, the nature of their continued connectedness with countries of origin. It also depends, fundamentally, on the parallel investment in the quantity and quality of developing country institutions of higher education and employment generation for highly skilled graduates.

Studies on brain drain tend to differentiate trends in international student mobility from trends in emigration of skilled labor 25 years and older who were educated in their home countries. Nevertheless, the ‘push’ and ‘pull’ factors explaining the emigration decisions of young professionals are similar to those explaining decisions to study abroad, as well as whether and when to return to countries of origin. In this chapter, we first review the brain drain debate. Next we present relevant data on talent mobility, including international student mobility, focusing on consequences for human capital formation and institutional development in source countries. We conclude by developing a set of policy implications for mitigating ‘brain drain’ and capitalizing on the growing potential of diaspora and transnational communities to stimulate economic development and social change in countries of origin.

11.2 The Brain Drain Debate: A Review of the Literature

The economic literature generally defines ‘brain drain’ as the proportion of tertiary educated population that has emigrated from a country. In some data sets, this group is restricted to emigrants 25 years and above to gauge permanent skilled migration versus student mobility (Docquier et al. 2009; Capuano and Marfouk 2013). Which countries are more likely to experience an exodus of skilled human capital? According to Docquier and Rapoport, the highest rates of tertiary educated emigration are observed in the lower-middle income countries, “where people have both the incentives and the means to emigrate” (2012, p. 684). Regionally, the highest rates of brain drain are found in the Caribbean, the Pacific (Oceania), Central America, and sub-Saharan Africa (Docquier et al. 2009). About one in three of sub-Saharan African emigrants had tertiary education in 2000. Globally, countries with 30 percent or higher skilled emigration in descending order include: Haiti, Sierra Leone, Ghana, Kenya, Laos, Uganda, Eritrea,

Somalia, El Salvador, Rwanda, and Nicaragua (Capuano and Marfouk 2013, from Docquier et al. 2009).

The debate on brain drain relates to the 'winners' and 'losers' at a national or subnational level. Those who argue emigration leads to brain drain claim the majority of tertiary educated emigrants from developing countries are educated in government subsidized institutions of higher learning established to build human capital for national development. Hence a direct loss for source countries occurs when a country's human capital is depleted through permanent or long-term emigration at the expense of governments, further exacerbated by lost future tax revenues (Capuano and Marfouk 2013). Another argument for why emigration leads to delayed development is concern for the radically reduced supply of innovators needed to drive economic growth and social change. This is especially relevant for smaller source countries with skilled emigration rates of 30 percent or higher. While a counter argument is that these individuals provide remittances which can be growth stimulating, clearly private remittances cannot compensate for the societal losses sustained by source countries, as noted in Collier (2013).

A number of economists have countered brain drain concerns by hypothesizing that skilled emigration may actually lead to 'brain gain' for source countries under certain conditions. They argue that the prospect of emigration to countries with higher returns to education induces greater investment (public and private) in education and skills acquisition to prepare for employment or study abroad. Net brain gain results when more individuals are propelled to invest in higher education (or invest more per capita) than actually succeed in out-migrating, leading to a net increase in the stock of highly educated residents. A study by Beine et al. (2008) shows mixed results on brain gain from a data set of emigration rates by education levels for 127 developing countries.

The data show slight brain gain for larger developing countries, including the major emerging economies of China, India, Brazil, and Indonesia, whereas small- and mid-size countries with mid-level tertiary enrolment combined with skilled emigration rates of 20 percent or higher experience brain drain without the compensatory brain gain. Worldwide, there are more losers than winners, and, whereas the net gains of the winners rarely exceed 1 percent of the skilled labor force, "in contrast the losses of the losers can be substantial and exceed 10 percent in many small Caribbean and Pacific countries" (Beine et al. 2008, p. 26). Furthermore, increased tertiary enrolment rates may be the result of factors unrelated to the

prospect of out-migration, namely, increased government emphasis and spending on higher education.

The literature is clear that immigrant remittances mitigate the private losses of skilled emigration. However, we can agree that remittances[2] do not take the place of fiscal investments in education or lost tax revenue, nor do they replace the resident talent needed for development.[3] Under what circumstances may remittances contribute to brain gain and other positive social changes in source countries? When skilled emigrants come from low-income households, remittances tend to go toward basic needs, school fees, and farms and other small businesses, improving the livelihoods and future economic prospects of migrant families and their communities through positive externalities. Further, remittances can substitute for missing or 'thin' markets for rural credit, health insurance, and social security. Remittances also serve as a form of savings for skilled emigrants aspiring to return home in circumstances that allow them to live well and establish businesses or accept positions in academia or government with less than competitive compensation. These positive externalities will be less impactful when skilled emigrants, including international students, come from upper middle class or high-income households.[4] Evidence indicates their remittances are largely spent on higher end consumption, often in real estate.

A study by Gibson and McKenzie (2011) provides evidence of heterogeneity across countries in sending remittances. These authors analyzed remittance data for over 6000 skilled emigrants living in 11 OECD countries and found that for most sending countries, less than half of tertiary educated migrants send remittances. They also found a strong negative correlation between source country per capita income levels and proportion of skilled emigrants who remit; hence, the poorest countries benefit most from remittances. For instance, less than 20 percent of highly educated Mexican and Chilean emigrants remit, compared to over 60 percent for Senegal and the Democratic Republic of Congo.

Further evidence of skilled emigrants from Africa sending remittances back to source countries can be found in a recent retrospective mixed methods tracer study of African alumni of international universities. Marsh et al. (2016b) found that 60 percent of alumni who remained abroad contribute remittances to their home countries, often to pay school fees for siblings and other relatives, and to support aging parents. The same study found that beyond consumption remittances, 40 percent of African alumni living in the

diaspora are making productive investments in their home countries, in some cases paving the way for an eventual return.

Another growing pathway through which highly educated emigrants are contributing to home countries has been described as 'brain circulation'. There are significant benefits to a source country's capacity for innovation and productivity when the outflow of talent turns homeward with state-of-the-art skills, capital, and international connections. One way to look at brain circulation is brain gain to both the source and receiving country. Recent literature suggests that the 'Asian Tigers'—Hong Kong, Taiwan, South Korea, and Singapore—have profited significantly from brain circulation and, after decades of brain drain, brain circulation is increasingly the story of China and India. There is also evidence that an increase in patenting activity by foreign-born inventors leads to an increase in foreign direct investment to immigrant countries of origin (Docquier and Rapoport, cited in Foley and Kerr 2011, p. 710). In the volume, The International Mobility of Talent: Types, Causes, and Development Impact, the editor asks, "*when can talent mobility serve sending countries?*" (Solimano 2008, p. 13), and the success stories of the aforementioned countries are presented as case studies.

While it is intuitively clear that high rates of skilled emigration can delay and impede institutional and political development in source countries, especially where return rates are low and there is little evidence of brain circulation, there are some examples that suggest positive political change arising from skilled emigrant influences. For instance, studies from Cape Verde, Mexico, and Senegal have demonstrated how households with migrants are more likely to participate in political processes for change such as voting and lobbying (Collier 2013). With radically reduced transaction costs for communication, emigrant communities can be in constant contact with their home communities and are poised to play a role in influencing economic decisions, political alliances, and core values which can lead to institutional change. Precisely because of the potential influence of skilled emigrants, authoritarian governments tend to be suspicious of their diaspora populations and may try to thwart the types of positive externalities that more open societies enjoy. There is considerable evidence of the strong influence on democratic governance by foreign trained nationals who return home, bringing with them not only technical knowledge but exposure to the democratic principles and processes of the country of study (Batista and Vicente 2011; Collier 2013; Chauvet and Mercier 2014).

11.2.1 The Special Case of Medical Brain Drain (MBD)

One field where the case of brain drain has been argued quite convincingly is in health care. Most foreign health professionals recruited and absorbed into OECD economies were fully educated and trained in their home countries, representing a double or triple loss for source countries in terms of educational investment, drain of scarce medical personnel, and foregone tax revenue. These losses are only partially attenuated by remittances. Studies have paid particular attention to medical brain drain (MBD) from countries of sub-Saharan Africa with very high patient-to-doctor ratios and poor public health indicators. The Philippines and Caribbean nations are also large suppliers of health talent to OECD countries, particularly nurses and elder care specialists. High rates of emigration by doctors and nurses are directly in response to the difficult working conditions, poor facilities, and low pay in source countries, on the one hand, and the privileged position of doctors and skilled nurses in the USA, Canada, and Europe, on the other. Even when foreign doctors are denied positions commensurate with their training, their situations are usually better than at home. As conditions in hospitals and clinics improve in countries of origin, there is the possibility and some evidence of return migration.

Several studies (Clemens and Pettersson 2006; Leipziger 2008; Uwaifo-Oyelere 2011; Docquier and Rapaport 2012; Capuano and Marfouk 2013) show data that substantiate significant MBD from Africa: 19 percent for the entire continent and 28 percent for sub-Saharan Africa, with widely varying rates for individual countries. Data on African-born health professionals employed abroad show that approximately one-fifth of African-born doctors (65,000) and one-tenth of African-born professional nurses (70,000) were employed overseas in a developed country in 2000. The 16 countries with 50 percent or higher proportion of physicians practicing abroad are Angola, Cape Verde, Congo, Equatorial Guinea, Ghana, Gambia, Guinea Bissau, Kenya, Liberia, Malawi, Mozambique, São Tome, Senegal, Tanzania, Zambia, and Zimbabwe. When South Africa is included as a destination, the rates are higher, particularly for Zimbabwe and other bordering countries. Average rates of MBD were found to be lower outside of Africa, about 13 percent in South Asia, and less than 10 percent in other regions (Clemens and Pettersson 2006).

An analysis by the World Bank on talent mobility concludes that policies to induce expatriate doctors to return home with moderate financial incentives are unlikely to be effective (Leipziger 2008). The income and work

environment differences are too great. Similarly, policies to restrict recruitment of foreign doctors and nurses on ethical grounds, notably in the UK, have not substantially reduced MBD. Nevertheless, there are many examples of health professionals who have studied and worked abroad and returned to their countries to become leaders in medical schools, research institutes, and health ministries, many at the forefront of controlling the HIV-AIDs pandemic. The US National Institutes for Health Fogarty Program sponsored dozens of African and Asian physicians to pursue graduate degrees in epidemiology and other public health fields in the USA, with return rates exceeding 80 percent, and even higher if employment with international agencies such as UNICEF and Centers for Disease Control and Prevention (CDC) is included (Marsh et al. 2016b). The newly appointed first director of Africa CDC, Dr. John Nkengasong, for instance, pursued his PhD in Europe and further study in the USA and now returns to Africa, "to provide strategic direction and promote public health practice within Member States" (The African Union Commission 2016).

In sum, increasing rates of high-skilled emigration, pulled by the global competition for talent from universities and science-driven industries, continue to drain human resources from countries with limited higher education and economic opportunities. For the larger source countries with dynamic economies, primarily in Asia, the brain drain is being redressed with high rates of return migration and sometimes delayed return after decades abroad, as well as the growth of transnational knowledge networks and joint ventures led by expatriates and diaspora communities, so-called brain circulation. Receiving countries are clear 'winners' in the global talent competition, particularly the high-tech corporate sector and internationalizing universities. For those countries left behind, a range of policy responses are available to reverse or mitigate the negative consequences of the exodus of their professionals and highly talented students—policy instruments that require separate and joint actions by receiving and source countries. Where there is bound to be a substantial lag before these high emigrant regions and countries can compete in skilled labor markets, the option of engaging their expatriates in productive exchanges is an important intermediary solution. These policy directions will be addressed in the final section of the chapter.

11.3 Trends in International Student Mobility

International student mobility and the transfer of human capital across borders have grown significantly in the twenty-first century. Globalization has played a major role in facilitating this movement. The expansion in transportation technology, internet access, mobile technologies, and other similar innovations have all fostered the movement of human capital across borders. Tertiary educated emigrants and international students who remain in their countries of study are the primary conduits of human capital transfer.

One of the indirect benefits of globalization is the desire of more students to gain experience outside their home country. According to UNESCO's Institute of Statistics (UIS), there are currently over 4.5 million globally mobile college and university students, a significant increase from 4.1 million in 2013 (UNESCO-UIS 2016; IIE 2016a). According to UIS data, the number of international students has tripled since 1990 and doubled since 2000. Projections to 2025 vary from a low of 5 million to a high of 8 million foreign students (Guruz 2008). Still, today the percentage of international students is only 2 percent of tertiary enrollment globally (an estimated 4 percent in the USA, over 10 percent in top receiving European nations), a reminder that most higher education is still received locally (UNESCO-UIS 2016). Given demographic trends and the high cost of an international education, we expect that most of the burgeoning demands for higher education in the Global South will be met through the growth and expansion of local public and private universities. Permanent emigration of individuals who receive tertiary education locally will continue to be an important channel through which brain drain occurs.

Where do these students go and which countries are they coming from? The USA is the leading host with over one million international students in the 2015/2016 academic year or about 20 percent of the total (IIE 2016a). The second largest host of international scholars is the UK with about 10 percent. The next ten top receiving countries for international students in descending order are France, Australia, Germany, Russia, Japan, Canada, China, Italy, South Africa, and Malaysia (IIE 2016a).

While developed countries host more international students currently, the last decade has shown signs of changes in the direction and flow of where students study globally (British Council 2015). Recent data from UIS show the enrollment share of the top five destination countries declined from 56 percent in 2000 to 50 percent by 2013 (UNESCO-UIS 2014).

Emerging and growing destinations for global students in Asia include China, Malaysia, South Korea, and Singapore, while South Africa continues to be a strong pull for students throughout Africa. Confirming the trend are data showing an increased share of international students studying within regions versus across regions over the last 15 years (ICEF Monitor 2016). For example, between 1999 and 2013, the share within sub-Saharan Africa rose from 18 percent to 22 percent. In Central and Eastern Europe, it rose from 25 percent to 40 percent, and within the Arab states, it rose from 12 percent to 30 percent, with Saudi Arabia and United Arab Emirates now both sharing the third most popular destinations for students from the region behind France and the USA (UNESCO-UIS 2014). These figures indicate a continuing expansion of higher education systems in regional destination hubs for local and international students. International students are attracted to these hubs in part because of recent tighter visa restrictions to some top destination countries (e.g. USA, Europe) and in part because of the rising tuition fees in these same countries. At the same time, regional hub universities are investing heavily in improving quality and signaling their readiness for internationally competitive students.

Data from IIE show that an estimated 12 percent of foreign students in US universities received some form of government scholarship in 2014/2015 and about 70 percent received no scholarship support (IIE 2016b, c). A large majority of international students are self-funded with personal and family resources, which explains the need and crafting of Sustainable Development Goal (SDG)-Target 4b to substantially increase the number of scholarships available to nationals of least developed countries by 2020 (Balfour 2016).[5] There is a dearth of reliable data on scholarships globally, sources of funding, countries of origin, and socioeconomic characteristics of recipients, deficiencies that will require immediate attention to ensure adequate monitoring of progress on Target 4b.

What can we learn from the trends highlighted above? First, global student mobility is growing but remains concentrated among a few countries. Second, while the developed world was the recipient of most of the inflows in the past, trends are changing and regional players in the Global South, such as China, Malaysia, Singapore, South Africa, Saudi Arabia, and the United Arab Emirates, are emerging or maturing as hosts. Finally, recent data show that the share of international students that receive scholarship support, particularly from governments, is very low with negative implications for education access and equity. SDG Target 4b aims to reduce this deficit. However, given that least developed countries are historically

more likely to experience brain drain, putting in place the right incentives to facilitate return or mitigate brain drain for countries of origin of international scholarship recipients is also imperative.

11.4 Knowledge-Based Economies and Competition for Skilled Labor

The global competition for skilled labor, particularly in STEM fields where industrial demand continues to outpace supply, is a growing component of globalization. Countries compete with one another to attract the 'best minds' to fuel science and technology-driven industries, research institutes, and universities. The process of securing the best and the brightest differs across countries depending on where they are in the development process. For fully developed countries, the strategy involves both recruiting and retaining national superior talent and, as needed, recruiting STEM talent from abroad—graduate students and professionals. For developing countries that have experienced an exodus of talent in the past, the strategy also involves facilitating the process of return migration, sometimes at odds with the interests of host countries.

There is ample evidence that the demand for products and services that draw on STEM-related expertise is expanding worldwide. For example, in the USA, between 2012 and 2016 requests by businesses for H-1B visas (foreign-worker visas) exceeded the 85,000 supply available each year. While anecdotal evidence suggests some gaming of the H1-B application process (Ghosh 2016), the demand for skilled workers in STEM fields in the USA and the inability of US natives to meet this need is real and fueling hopes for skilled emigration in many parts of the world. At present Indian nationals claim by far the largest number of H1-B visas.

In Canada, we also note policies that reflect a competition for skilled labor. Promising skilled labor permanent residency status is a huge incentive that is used to sway top talent to pick Canada as a destination versus other developed countries. The Canadian point system was adjusted in the 1980s to place more emphasis on education and skills as criteria for granting permanent residency. This change led to a large increase in emigration of highly skilled labor to Canada. The Canadian point system has been adapted for use by several other countries such as Singapore, Australia, and New Zealand.

Is the competition for skilled labor expected to decline or rise in the coming years? Dobbs et al. (2012) project by 2020 a global surplus of up to 95 million low-skilled workers and a global shortage of up to 95 million high- and medium-skilled workers. The policies and programs that competing countries put in place today will either position them as winners or losers in the bid to secure and hold on to tertiary educated labor in diverse fields. Of the 95 million new skilled jobs, the Dobbs et al. report projects nearly half or 45 million will be generated in developing countries and will require, for the most part, medium-skilled workers. This projection has important implications for investment in appropriate postsecondary training targeted to fill this demand, particularly high-quality vocational training. Although only a small fraction of future skilled workers will be educated abroad, perhaps 10 percent or less, there will be increased pressure for those on government scholarships to return home and assume lead technical and managerial positions. In the next section, we will discuss some of the policies and programs pursued by emerging and developing countries to drive return migration and facilitate brain circulation.

11.5 Source Country Policies and Programs to Incentivize Return and Brain Circulation

As highlighted above, return migration is on the rise. Some countries where brain drain was a significant issue in the twentieth century are now experiencing a return home of skilled migrants, including the delayed return of international students. In addition, some countries are beginning to leverage their diaspora populations to invest significant resources and expertise in home country industries and institutions, mitigating to varying degrees the initial brain drain effects. We consider some of the policies and programs employed by select countries both to incentivize return and to capitalize on the goodwill of successful diaspora communities to invest in their home countries. For international scholarship programs interested in promoting social change in the countries of origin of their scholars and fellows, a strategically important course of action would be to encourage alumni who remain in the diaspora to pursue professional alliances in their countries/regions of origin and to facilitate their 'giving back' irrespective of geographic location.

In 2011, 109 countries, out of the 174 countries with available data, had policies to encourage the return home of their citizens (UN Department of Economic and Social Affairs 2013). A larger proportion of developing than developed countries have such policies: 66 percent versus 54 percent. Korea, China, and India are often touted as examples of countries that have begun to enjoy the benefits of return migration. Useful questions to ask are how these sending countries have achieved this outcome and what other countries are doing to foster return migration, leverage their diasporas, and facilitate brain circulation. Jonker (2008) suggests that policies employed by governments to encourage return of skilled immigrants can be divided into three: first, incentives to build migrant networks; second, temporary return programs; and third, programs aimed at permanent return. Below we describe a few important examples across regions of policies and programs to facilitate return and brain circulation.

11.5.1 Asia

In Asia, China has become a leader in attracting back both its skilled workers and its talented students who went abroad to study (see next chapter's case study by Qiang and Dongfang for detailed explanation of Chinese government programs). China has achieved this using a multipronged approach. For example, the Chinese Academy of Sciences (CAS) launched the 'Hundred Talents Program' in 1994 and the National Talent Development Plan in 2010. Scientists selected receive research grants, housing allowances, and competitive salaries and benefits as incentives to return. More than 20,000 high-level overseas professionals have been recruited via government-sponsored return programs (Wang 2013). The Chinese government has also encouraged diaspora-based scientists to participate in national development through supporting transnational research activities. For instance, the government facilitates Chinese scientists abroad to maintain a second lab in China, enabling transfer of expertise to home-based scientists during temporary but extended periods of time. The 'Two Bases Program', set up by The National Science Foundation of China (NSFC), has an added benefit of allowing foreign-based Chinese scientists to test out the possibility of a permanent return home before making a firm commitment. The government has also created numerous 'science and technology parks' with specific provisions for luring back high-tech entrepreneurs and engineers (UN General Assembly 2006).[6] The same strategy has been successfully adopted by Taiwan and South Korea.

While slower in its attempt to foster return migration of skilled labor than China, India has also initiated several programs focused on drawing talented Indians back home. For example, several fellowship programs have been set up by the Indian Ministry of Science and Technology (MST) aimed at attracting back leading scientists of Indian origin. India's Defense Research and Development Organization (DRDO), through its Talent Search Scheme, is actively recruiting returned Indian scientists. Other government policies in India have aimed at making effective use of migrant and diaspora networks. In 2004 India set up a Ministry of Overseas Indian Affairs with the goal of engaging diaspora communities to further enhance flows of remittances, investments, and other valued resources (Jonker 2008). For instance, the MST has set up a website for science and technology Indian professionals in the diaspora to network and engage in collaborative research projects with their counterparts in India.

In the private sector, one of the most outstanding examples of brain circulation is the technology boom in India, driven in large part by successful expatriate Indians partnering with skilled peers in their home country. Saxenian (2008) documents how Chinese and Indian engineers and entrepreneurs from Silicon Valley—many with first degrees from home and advanced degrees from the USA—are reversing the brain drain, "as they return home to work, establish partnerships or start new companies, while maintaining business and professional ties with the U.S." (Saxenian 2008, p. 119). Similarly, Nanda and Khanna (2010) found that Indians who worked abroad in the software and service industries and returned to form businesses in smaller, less-networked cities of India benefitted most from the diaspora connections. Thus, the brain circulation benefits have spread far beyond the main hub of Bangalore (Docquier and Rapoport 2012).

11.5.2 Eastern Europe

While there is much discussion of potential brain drain from Asia and Africa, less is said about the significant movement of skilled workers from Eastern European countries to Western Europe after these countries joined the European Union (EU). In Bulgaria, for example, rapid emigration in the 1990s and early twenty-first century led to a significant decline in the population. The government responded in 2008 with the first National Strategy of the Republic of Bulgaria for Migration and Integration (2008–2015) and a subsequent National Strategy in the Field of Migration, Asylum and Integration (2011–2020). The reasoning behind these

strategies was to attract back the Bulgarians who live abroad and to strengthen relations with diaspora-based Bulgarians (Ivanova 2012). Innovative initiatives include 'Tuk-Tam' that connects Bulgarians who have experiences living and working abroad and 'Back2BG.com' that provides Bulgarians with education and experience abroad information on professional development and employment prospects in Bulgaria. Two similar programs to encourage return home to Poland are 'Closer to work, closer to Poland' and 'Become your own boss – stay in Poland',[7] both sponsored by the Polish Ministry of Foreign Affairs.

11.5.3 The Americas

Mexico's Council for Science and Technology, CONACYT, has a model repatriation program to incentivize scientific talent in the diaspora to return to Mexican universities and research institutes, including salary top-offs, moving expenses, and rewards for published research. Between 1991 and 2000, CONACYT funded the repatriation of nearly 3,000 researchers at a total cost of USD 57 million, a relatively small sum compared to the potential output of this community together with their international networks (Angel-Urdinola et al. 2008). In Colombia, Angel-Urdinola et al. (2008) profile CALDAS, a government program to engage expatriates worldwide to participate in academic exchanges and joint research projects as a cost-effective means to increase the country's competitiveness following a long period of political instability and high-skilled emigration.[8]

11.5.4 Sub-Saharan Africa

In Africa, as with many regions, success with return migration and fostering brain circulation are closely related to source country political stability, business conditions, and policies and programs to attract talent from diaspora communities. Marsh et al. (2016a, b) show data with a decreasing return rate of African alumni of US and Canadian universities over time from the 1970s through 2000, leveling off at about 40 percent after 2000. Return rates declined when opportunities on the continent were severely curtailed in the 1980s and 1990s, with some opening up and increasing dynamism since 2000. The Social Science Research Council study (Pires et al. 1999) on return rates of African PhDs trained in North America between 1986 and 1999 had similar findings.

Research has shown that students from Africa and other developing regions are significantly more likely to return home after study abroad if their education is sponsored by foreign aid or private foundation scholarships—as opposed to self-funding—with the expectation that knowledge gained will be used to advance development of their home countries (Pires et al. 1999; Marsh et al. 2016a, b; Angel-Urdinola et al. 2008). Nevertheless, the knowledge and skills of internationally trained scientists and professionals may be wasted if return obligations mean stagnation in poorly funded and managed institutions. Scholarship programs could incorporate more flexible return requirements to avoid these negative outcomes. Solimano (2008) found that international collaborations established while studying and working abroad, sometimes with expatriates settled in host countries, have been pivotal for enabling returning graduates to weather difficult periods and access resources and know-how during their careers.

In parts of Africa, local and multinational companies are actively recruiting African business and technology diaspora talent to return and be part of the dynamic growth of digital and mobile technology industries, with South Africa, Nigeria, Kenya, and Ghana leading the way. International companies doing business in Africa have the economic incentive to replace high cost expatriates with talented foreign-educated Africans, while Africans with return aspirations gain from the 'soft landing' into a secure job (Jobson 2014). *Homecoming Revolution: The Brain Gain Company for Africa* is a pan-African recruitment company based in South Africa dedicated to "getting African skills back on African soil". Founder Angel Jones finds that Africans will return home if they are motivated by more than a paycheck: "it has to be about long-term commitment and embracing new opportunities" (Jobson 2014).

A seriously under-tapped resource are the many foreign-born academics in the USA, Canada, and Europe who would welcome well-planned opportunities to contribute to higher education systems in their home countries. Since 2014, the Carnegie Foundation has partnered with the Council for the Development of Social Science Research (CODESRIA) to mobilize the African-born academic diaspora in the USA and Canada in revitalization of social science and humanity faculties of African universities and to further internationalization of education on both sides of the Atlantic. Reports by Zeleza (2013) for the Carnegie Foundation laid the groundwork for this program, recommending a transformation of historic brain drain into pathways for international collaboration:

> *Lest we forget, much of the academic diaspora was produced in Africa, and will always be an integral part of the institutional histories of these universities. The challenge is to turn the diaspora into the future of these universities as well as networks of intellectual resources and capacities that can help them utilize the human capital they built or nurtured at great expense and reposition the universities at home and globally.* (Zeleza 2013, p. 27)

11.5.5 Western Europe

While most efforts to encourage return are initiated in the sending country, some host country governments have established joint programs with the aim of fostering return migration. An example of a successful program based in Germany is the 'Returning Experts Program' initiated by the Center for Immigration and Development (CIM). Financed by the German Federal Ministry for Economic Cooperation and Development (BMZ), this program facilitates return migration for individuals who completed studies or professional work in Germany and show interest in returning to their home country, primarily to developing and transition economies. The program helps to reintegrate experts into development cooperation activities of their home country. According to CIM's website, the Returning Experts Program has assisted more than 10,000 persons in planning their return to their home country (CIM 2016).

11.6 Who Are the Winners and Losers from Talent-Based Immigration Policies?

11.6.1 Host Countries

Based on current evidence in the literature, it is reasonable to assume talent-based immigration is on average an economic winner for developed countries like the USA and Canada. Universities benefit significantly from international students and scholars, including the infusion of financial support. Data from IIE's Open Doors reports show that in 2015/2016, 83 percent of all international students studying in the USA were funded from non-US sources: in order of importance, personal and family funds, foreign governments, and current employers (IIE 2016b). Other benefits are associated with the high-quality scholarship of international students and their contribution in securing research grants for host country universities, in addition to the noneconomic enhancement of campus cultural

and geographic diversity. Another clear winner are the companies in host countries that depend on skilled immigrant labor, often at lower compensation for equally qualified native-born talent. Borjas (2013) estimates that immigrants increase profits of corporations in North America by an estimated USD 437 billion per year. International students who remain in host countries to pursue their careers benefit from higher salaries than in source countries, on average, although individual outcomes are heterogeneous and there are significant noneconomic costs to emigration.

In addition to the clear winners, some constituencies in host countries are losing out from immigration and may, therefore, be likely to support narrowing or closing the borders. For example, for the USA, Borjas (2013) estimates that immigrants make the US economy about 11 percent larger each year (USD 1.6 trillion) but that 97.8 percent of the increase goes to immigrants themselves in the form of wages and benefits, so the net benefit to the native-born population is trivial. This finding is a reminder that even when immigration may produce a net benefit for a country, discussions on the heterogeneity of impacts within the population are important. Recent pushback against expansion of the H-IB visa program in the USA is linked primarily with anecdotal evidence that the program may be displacing skilled Americans who have higher reservation wages. Another group that may lose out is educated minorities. Past research has provided clear evidence of discrimination against African-descendent skilled and unskilled labor in many developed countries. Borjas et al. (2010) and Kposowa (1995) have suggested negative employment effects of immigrants on black employment. While in this chapter we are focused on the impact of talent or skilled labor migration versus migration in general, it is noteworthy to mention that individuals who lack high school diplomas suffer the largest negative wage impact from immigration (Borjas 2013).

11.6.2 Source Countries

There is considerable heterogeneity in net impacts from skilled labor and student emigration on source countries. The loss of talented youth and skilled labor is particularly burdensome when home governments have subsidized their education and training without reaping the infusion of this talent into the local economy. Institutions of higher learning that forfeit scientists and researchers to the developed world lose out, as do the students who attend these universities. The special case of medical brain drain from particular regions and countries exacerbates the lack of skilled medical

personnel and health care availability, especially for poor communities. We have also noted the negative impact of high rates of skilled emigration on innovation, economic growth, and transformation of the public and social sectors.

Students seeking international study opportunities are on the rise, and it is pivotal that source countries turn these ambitions into win-win situations for scholars and their societies alike. Scholarship programs have an important role to play to ensure inclusion of non-elites and potential social change leaders as recipients. Combined with successful 'bridging back' support, these programs counter brain drain and enable source countries to benefit from knowledge transfer. The section on specific mitigating policies and programs highlighted ways that losses to home country development can be reduced through incentivizing return migration and engaging diaspora communities in transnational knowledge networks, a topic to which we return in the final section below.

11.7 Conclusions and Policy Suggestions

This chapter has affirmed assertions that brain drain, defined as emigration of tertiary educated skilled labor, is a continuing and accelerating process for developing countries across the world, particularly for small low-income countries, accentuating the lack of human capital for social and economic development (Beine et al. 2001; Solimano 2008). Hence, there is a strong rationale for source countries to encourage return of highly skilled members of the diaspora, generally, and international students, in particular, through a combination of control and incentive policies. At the same time, low- and middle-income countries often lack the resources to succeed in the global competition for talent, at least in purely economic terms, which is where encouragement of brain circulation and broad-ranged diaspora contributions can be effective strategies for engaging citizens abroad (and potentially their offspring) without requiring repatriation.

The evidence suggests that restricting emigration and student mobility through control mechanisms is less effective than incentivizing return with well-designed scholarship programs and competitive postgraduation employment environments (Angel-Urdinola et al. 2008). Furthermore, curtailing student mobility is likely to be counterproductive for source countries' short- to medium-term human capital formation.[9] Students

sponsored by foreign aid, private foundations, or national government scholarships to pursue degrees abroad are far more likely to return upon graduation than those who are self-funded or funded by host country universities (Pires et al. 1999; Marsh et al. 2016a, b). However, the real gain from return is captured when source countries have sufficient economic dynamism to absorb and utilize talent, including social mobility that opens up opportunities for management and leadership. Faced with difficult home environments, talented individuals will continue to seek opportunities to emigrate and respond positively to recruitment from other countries.

Below we list specific policy suggestions both to address some of the negative consequences for countries and constituencies left behind by the global competition for talent and to capitalize on expanding opportunities for transnational knowledge sharing. We leave for another chapter a thorough discussion of the issues and potential policy remedies for host country constituencies losing out from the influx of global talent.

11.7.1 Investment in Education and Innovation

> *Poor countries – and the development community – need to place much greater attention on reforms in tertiary education, not least because weak institutions themselves drive out the talented educators on whom successful domestic skill creation depends.* (Kapur and McHale 2005, p. 6)

The most sustainable way to compensate for loss of talent and stem further out-migration is to create or strengthen higher education and employment opportunities that utilize talent in home countries, a task made more difficult when developed countries are vying for the same talent. This chapter has shown that some emerging powers, notably China, are moving far ahead with this strategy. At the same time, the USA, Canada, and other host countries that have neglected their education and health sectors, resulting in insufficient supply of scientists, engineers, nurses, and doctors, have shared responsibility to make the necessary investments to address the shortages locally, with the accompanying benefits for their societies.

11.7.2 Incentivize Return Migration

With specific reference to encouraging the return of academics and scientists, there are clear lessons to be learned from successful incentive programs

that could be adopted more widely (Thorn and Holm-Nielsen 2008). For instance:

1. Design combined grant/loan scholarship programs that reward graduates for returning home by forgiving loans, with special incentives for joining universities outside of the capital cities (e.g. COLFUTURO, Colombia and CONACYT, Mexico)
2. Create employment for returning young scientists in science-based industrial parks (e.g. China, Taiwan, South Korea, Singapore)
3. Fund multiyear competitive grants for transnational peer-reviewed research proposals (e.g. the Millennium Science Initiative, pioneered by Chile in 1998, and expanded to Brazil, Mexico, Venezuela, Vietnam, and six countries in sub-Saharan Africa, with World Bank support: https://sig.ias.edu/msi)
4. Promote strong academic-industry linkages that foster innovation and entrepreneurship opportunities for return migrants (e.g. science clusters and production centers in Sao Paulo, Brazil)

11.7.3 Diaspora Engagement

Collaborations with increasing promise are networks of engaged diaspora communities with counterpart institutions and colleagues in their home countries. These socio-professional networks tap into the large number of skilled emigrants who remain deeply connected with their countries of origin and seek opportunities to contribute their expertise to processes of social change beyond remittances. When source country governments recognize this potential and develop supportive mechanisms, as shown in the country examples above, the networks are more likely to be fruitful and sustained. For the poorer countries, there is a strong justification for host country institutions to share in the costs of transnational scientific and social change collaboration.

Finally, increasing talent mobility, coupled with huge advances in global communications, leads to more individuals who self-identify as transnational or global citizens, and who live and work on two or more continents. Examples are the ‘transnational entrepreneurs’ commuting back and forth between the USA and India, Taiwan, Mexico, and South Africa; Chinese-born scientists and their laboratories in the UK availing themselves of the

Chinese government supported 'Two Bases' program, and African academics in North America joining African-based universities as Carnegie—CODESTRIA (Council for the Development of Social Science Research in Africa) Diaspora Fellows. For the smaller, low-income countries that suffer most from brain drain, it is especially important that host country institutions and international organizations actively support these transnational collaborations as well as voluntary return migration.

Notes

1. There are also important source or sending countries in the OECD such as Mexico, Poland, and Turkey.
2. There are many empirical papers on migrant remittances, skilled and unskilled, although data on the uses of remittances in sending countries is more anecdotal. See, for instance, Rapoport and Docquier (2006), Docquier and Rapoport (2012), Yang (2008), Gibson and McKenzie (2011), and Easterly and Nyarko (2009).
3. Summarized in Collier (2013, p. 221): "Lifelines keep people going (remittances), but they do not transform lives".
4. There are inadequate data on the socioeconomic background of skilled emigrants, and international students as a subset, which points to another area for future research. Collection of such data will permit more systematic analysis of the impact of socioeconomic background on return rates and remittances. Some scholarship programs (e.g. The MasterCard Foundation Scholars Program) are beginning to collect this information for their scholarship recipients.
5. "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" (United Nations 2015).
6. The case study that follows this chapter by Qiang Zha and Dongfang Wang provides a detailed exposition on the Chinese Government Scholarship Program.
7. For more on these programs and others, see Kaczmarczyk and Lesińska (2012).
8. Other professional diaspora networks include the South African Network of Skills Abroad (SANSA), Chinese Scholars Abroad (CHISA), the Arab Scientists and Technologists Abroad (ASTA), African Diaspora Network, and the Silicon Valley Indian Professionals Association (SIPA) (Thorn and Holm-Nielsen 2008).

9. "Preventing outflows of workers and students is not easy. It also prevents the acquisition by these individuals and to some extent by the source country of knowledge available abroad. In fact, from a policy point of view and at least in the short run, promoting emigration by workers and students (the latter probably more than the former) in order to acquire high levels of education and skills may very well be a cost efficient way to improve the quality of domestic human capital, as opposed to establishing say, universities or research institutes in the source country" (Solimano 2008, p. 186).

References

Angel-Urdinola, D.F., Takeno, T. and Wodon, Q., 2008. Student migration to the United States and brain circulation: issues, empirical results, and programmes in Latin America. In: A. Solimano, ed. *International mobility of talent: types, causes and development impacts.* Oxford: Oxford University Press.

Balfour, S. 2016. SDG Target 4b: A global measure of scholarships [ED/GEMR/MRT2016/P1/10]. Paper commissioned for the Global Education Monitoring Report 2016, Education for people and planet: Creating sustainable futures for all. Paris: UNESCO.

Batista, C. and Vicente, P., 2011. Do migrants improve governance at home? Evidence from a voting experiment. *The World Bank Economic Review, 25*(1), pp. 77–104.

Beine, M., Docquier, F. and Rapoport, H., 2001. Brain drain and economic growth: theory and evidence. *Journal of Development Economics*, 64(1), pp. 275–289.

Beine, M., Docquier, F. and Rapoport, H., 2008. Brain drain and human capital formation in developing countries: winners and losers. *The Economic Journal*, 118(528), pp. 631–652.

Borjas, G., 2013. Immigration and the American worker. *Center for Immigration Studies.*[Online] Available at: http://cis.org/immigration-and-the-american-worker-review-academic-literature (Accessed 1 July 2016).

Borjas, G.J., Grogger, J. and Hanson, G.H., 2010. Immigration and the economic status of African-American men. *Economica*, 77(306), pp. 255–282.

British Council. 2015. The shape of international education to 2025: Considerations for the next decade in international education. Available at: https://ei.britishcouncil.org/educationintelligence/shape-international-education-2025 (Accessed 16 January 2016).

Capuano, S. and Marfouk, A, 2013. African brain drain and its impact on source countries: what do we know and what do we need to know? Journal of Comparative Policy Analysis: Research and Practice, 15(4), 297–314.

Center for International Migration and Development (CIM). (2016). It's People Who Make A Difference, [Online] Available at: https://www.cimonline.de/documents/CIM-Flyer-prf-en.pdf (Accessed July 2016).

Chauvet, L. and Mercier, M., 2014. Do return migrants transfer political norms to their origin country? Evidence from Mali. *Journal of Comparative Economics, 42* (3), Pages 630–651.

Clemens, M. A. and Pettersson, G., 2006. A new database of health professional emigration from Africa, Center for Global Development Working Paper 95, Washington, DC. Available at: https://ssrn.com/abstract=924546 (Accessed 16 January 2016).

Collier, P., 2013. Exodus: How migration is changing our world, Oxford: Oxford University Press.

Dobbs, R., Madgavkar A., Barton, D., Labaye, E., Manyika J., Roxburgh C., Lund S. and Madhav S., 2012. The world at work: jobs, pay, and skills for 3.5 billion people. McKinsey Global Institute report. [Online] Available at: http://www.mckinsey.com/global-themes/employment-and-growth/the-world-at-work (Accessed July 2016).

Docquier, F., and Rapoport, H., 2012. Globalization, brain drain, and development. *Journal of Economic Literature*, *50*(3), pp. 681–730.

Docquier, F., Lowell, B.L. and Marfouk, A., 2009. A gendered assessment of highly skilled emigration. *Population and Development Review*, *35*(2), pp. 297–321.

Easterly, W. and Nyarko, Y., 2009. Is the Brain Drain Good for Africa? In: J. Bhagwati and G. Hanson, eds. *Skilled immigration today: prospects, problems, and policies*. Oxford: Oxford University Press. pp. 316–60.

Foley, C. Fritz and Kerr, William R.. 2011. Ethnic innovation and U.S. multinational firm activity. National Bureau of Economic Research Working Paper 17336. Washington, DC. Available at: https://ssrn.com/abstract=1918666 (Accessed 16 January 2016).

Gibson, J. and McKenzie, D., 2011. Eight questions about brain drain. *Journal of Economic Perspectives*, *25*(3), pp. 107–128.

Ghosh, P., 2016. Chasing dreams and dollars: India and the H-1B visa. *San Francisco Chronicle*, [Online] Available at: http://www.sfchronicle.com/business/article/Chasing-dreams-and-dollars-India-and-the-H-1B-7382822.php (Accessed June 2016).

Guruz, K., 2008. *Higher education and international student mobility in the global knowledge economy*, State University of New York Press, Albany, New York.

ICEF Monitor. 2016. US and UK losing market share to regional destinations. [Online]. Available at: http://monitor.icef.com/2016/03/us-and-uk-losing-market-share-to-regional-destinations/ (Accessed 1 July 2016).

Institute of International Education [IIE], 2016a. A quick look at global mobility trends, Project Atlas 2016 release. [Online]. Available at: https://p.widencdn.net/hjyfpw/Project-Atlas-2016-Global-Mobility-Trends-Infographics (Accessed November 2016).

Institute of International Education [IIE], 2016b. Open Door Reports. [Online]. Available at http://www.iie.org/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2015/2015-11-16-Open-Doors-Data#.V-Hlg4-cFPY (Accessed November 2016).

Institute of International Education [IIE]. 2016c. Scholarships for students from developing countries: establishing a global baseline (ED/GEMR/MRT/2016/P1/11 REV). Paper commissioned for the Global Education Monitoring Report 2016, Education for people and planet: Creating sustainable futures for all. Paris: UNESCO.

Ivanova V., 2012. Return migration: existing policies and practices in Bulgaria. In: I. Zwania-Rößler and V. Ivanova, eds. Welcome home? challenges and chances of return migration. Sofia: Transatlantic Forum on Migration and Integration. pp. 8–18.

Jobson, A., 2014. Returning for less. *Talent Central Career Insider Blog, African-American Institute* [Online]. Available at: http://www.aaionline.org/careerinsider/returning-for-less/ (Accessed July 2016).

Jonkers, K., 2008. A comparative study of return migration policies targeting the highly skilled in four major sending countries. MIREM Analytical Report, AR2008-05, RSCAS/EUI, Florence.

Kaczmarczyk, P. and Lesińska, M., 2012. Return migration, state policy and integration of returnees – the case of Poland. In: I. Zwania-Rößler and V. Ivanova, eds. Welcome home? challenges and chances of return migration. Sofia: Transatlantic Forum on Migration and Integration.

Kapur, D., and McHale, J., 2005. The global migration of talent: what does it mean for developing countries? Center for Global Development. CGD Brief. Washington, DC.

Kposowa, A. J., 1995. The impact of immigration on unemployment and earnings among racial minorities in the United States. Ethnic and Racial Studies, 18(3), pp. 605–628.

Leipziger, D., 2008. Brain drain and the global mobility of high-skilled talent. The World Bank: PREM Notes. Number 123.

Marsh, R., Baxter, A., Cliff, R., Di Genova, L., Jamison, A. and Madden, M., 2016a. Career choices, return paths and social contributions: The African alumni project. Abridged Report. Toronto, Canada: The MasterCard Foundation.

Marsh, R, Baxter, A, Di Genova, L., Jamison, A. and Madden, M., 2016b. Career choices, return paths and social contributions: The African alumni project. Full Report. Toronto, Canada: The MasterCard Foundation.

Nanda, R. and Khanna, T., 2010. Diasporas and domestic entrepreneurs: Evidence from the Indian software industry. *Journal of Economics & Management Strategy*, 19(4), pp. 991–1012.

Pires, M, Kassimir, R. and Mesky, B, 1999. Investing in return: rates of return of African PhD's trained in North America. Social Science Research Council, New York.

Rapoport, H. and Docquier, F., 2006. The economics of migrants' remittances. In: Handbook of the economics of giving, altruism and reciprocity, Vol 2: Applications, ed. by Serge-Christophe Kolm and Jean Mercier Ythier, 1135–1200. Amsterdam: Elsevier.

Saxenian, A., 2008. The international mobility of entrepreneurs and regional upgrading in India and China, In: A. Solimano, ed. *The international mobility of talent, types, causes and development impact*. Oxford: Oxford University Press, pp. 117–144.

Solimano, A. ed., 2008. *The international mobility of talent: types, causes, and development impact*. Oxford: Oxford University Press.

The African Union Commission, Directorate of Information and Communication, Press Release No396/2016, Dr. John Nkengasong named first director of Africa CDC. November 20, 2016. Website: www.au.int

Thorn, K. and Holm-Nielsen, L.B., 2008. International mobility of researchers and scientists: Policy options for turning a drain into a gain. In: Solimano A. ed. The international mobility of talent: types, causes, and development impact, Oxford: Oxford Scholarship, pp. 145–167

United Nations General Assembly, 2006. International Migration and Development. Report of the Secretary-General. [Online]. Available at: http://www.unhcr.org/uk/protection/basic/44d711a82/international-migration-development-report-secretary-general.html (Accessed December 2016).

United Nations. 2015. Transforming our world: The 2030 agenda for sustainable development [A/RES/70/1]. [Online. Available at: https://sustainabledevelopment.un.org/post2015/transformingourworld/publication (Accessed 29th November 2016).

United Nations Educational, Scientific, and Cultural [UNESCO] Institute for Statistics, 2014. Global Flow of Tertiary-Level Students. [Online]. Available at: http://www.uis.unesco.org/Education/Education/Pages/international-student-flow-viz.aspx (Accessed June, 2016).

United Nations Educational, Scientific, and Cultural [UNESCO] Institute for Statistics, 2016. Global Flow of Tertiary-Level Students. Available at http://uis.unesco.org/en/uis-student-flow (Accessed 10 Dec 2016).

United Nations Department of Economic and Social Affairs, 2013. International Migration Policies, Government Views and Priorities. New York: United Nations.

Uwaifo Oyelere, R., 2011. Brain drain, waste or gain? What we know about the Kenyan case. *Journal of Global Initiatives: Policy, Pedagogy, Perspective*, *2*(2), pp. 113–129.

Wang, H., 2013. China's return migration and its impact on home development. *UN Chronicle*, *50*(3), pp.34–36.

Yang, D., 2008. International migration, remittances and household investment: evidence from Philippine Migrants' exchange rate shocks. *The Economic Journal, 118*(528), pp. 591–630.

Zeleza, P. T., 2013. Engagements between African diaspora academics in the U.S. and Canada and African institutions of higher education: perspectives from North America and Africa. New York: Carnegie Corporation of New York.

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CHAPTER 12

Case Study: The Chinese Government Scholarship Program—the Brain Development Scheme That Illuminates a Vision Across 30 Years

Qiang Zha and Dongfang Wang

12.1 Introduction: What Rationale Is Behind the Organized Study Abroad Program Funded by the Chinese Government?

China's organized effort of sending students to study abroad can be traced to the early twentieth century, and it is always associated with China's self-strengthening ambition. The earliest program of this type in modern times might be associated with China's defeat by the Eight-Nation Allied Forces in 1900. As a result, then Qing Government of China had to pay the Western Powers 450 million Haikwan [Custom] Taels (an imaginary unit), payable in installments across 39 years, with an interest rate at 4% per year. The USA was the first state that acknowledged it had asked for "too much" from the indemnity, and as such, it announced

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in 1908 to return the excessive part, which was mainly used to initiate the Tsinghua School and to dispatch Chinese students to the USA. In total, over 1,000 Chinese students were supported by the USA remission funds to study in the USA from the 1910s to 1940s (Hunt 1972). Most of them eventually chose to go back to China, and helped introduce and establish a modern education system on Chinese soil. The USA remission-financed Tsinghua School evolved into the National Tsinghua University, which has remained as one of the top universities in China up to this date.

The next major scheme of this type occurred in the 1950s, when thousands of Chinese students were sent to then Soviet Union. Due to manpower needs for China's industrialization drive and the political alliance among socialist countries, China now set the Soviet Union as the destination for advanced study abroad. From 1951 to 1960, a total of 8,208 Chinese students were sent to study in the Soviet Union. Among them, nearly 70% were in programs of science and engineering fields relating to industrial production, construction engineering, and transportation technology (Miao 2010). China remodeled its entire higher education system based on Soviet patterns, that is, closely linking higher education institutions to economic sectors. In such patterns, most Chinese higher education institutions became sectoral institutions in areas such as agriculture, forestry, medicine, finance, law, language studies, physical culture, fine arts, and minority education. Each institution was narrowly specialized in its programs, and its role was to train personnel for its specific sector. After China split with the Soviet Union politically in the late 1950s, Chinese government reduced dramatically the number of the USSR-bound students and started transforming the higher education system along some indigenous ideas amid the Great Leap Forward Movement—an experiment to achieve self-reliance (Hayhoe and Zha 2006).

China's government-sponsored study abroad programs have been driven by its national development agenda with ups and downs as well as shifting priorities in terms of destinations, levels, and fields. The current reform era—since the late 1970s—has witnessed an unprecedented scale of study abroad in the modern history of China. Between 1978 and 2015, over 4 million Chinese students went to study abroad on programs of various levels, mostly in major Western countries, for example, the USA, the UK, Canada, Australia, Germany, France, and Japan. Among them, approximately 20% were supported by Chinese government scholarships. In the past decade, the Chinese Government Scholarship Program (CGSP) supported on average 30,000 students and scholars to study abroad per

year, which is beyond the scope of any other country. Behind such an extraordinary effort, what characterizes the contemporary Chinese Government Scholarship Program? What are the highlights, strengths, and attainments of the CGSP? And what have been the main drawbacks and challenges of the CGSP? These are the questions to be explored in the remainder of this chapter.

12.2 A Review of the Chinese Government Scholarship Program in the Reform Era: Prompting Brain Mobility in an Unprecedented Scale

This section is a detailed account of the CGSP since China adopted economic reforms and opening up to the outside world with accompanying changes in policy and strategies, in the late 1970s. Roughly, this era can be divided into three phases concerning government-sponsored study abroad: the policy emerging phase (1978–1982), the policy development and adjustment phase (1983–1992), and the policy blossoming phase (1993–present) (Miao 2010). Embarking on a journey of reform and opening up, China set sending students to pursue advanced study in the Western countries as one of the earliest policy initiatives aiming to modernize the country. In June 1978, then China's leader Deng Xiaoping explicitly expressed such an idea: "I am in favor of increasing the number of students studying abroad, mainly engaged in fields of natural sciences ...to thousands" (Miao 2010, p. 167). A month later, on July 11, 1978, China's Ministry of Education (MoE) reacted to Deng's idea and proposed to the CPC Central Committee and the State Council a plan to send 3000 scholars and students abroad per year for 5 years,[1] to be concentrated in the fields relating to natural sciences, including basic sciences (30%), engineering (35%), agriculture (10%), and medicine (10%). Social sciences accounted only for 15% in the plan. These scholarship beneficiaries were solely supported by Chinese government funds. By the end of 1978, the first group of 52 Chinese scholars landed on the soil of the USA, only days before the two countries established official diplomatic relations. They were mostly in their 40s, and, except for one, all returned to China 2 years later.

The government scholarship program initially focused on undergraduate students. Hence the distribution of the 3000 quota was: undergraduate students 60–70%, visiting scholars (those in-service university teachers who visit a host university abroad for a period of several months to 1 year, to

conduct their own research and engage with other professional development activities) 15–20%, and graduate students 15–20%. Such a plan went through heated debates, mostly relating to the high costs as well as the concerns over no-return associated with undergraduates. Indeed, statistics showed that, during the period 1979–1982, the number of undergraduate students who returned to China on time accounted for only 19% of the total of its kind, while the visiting scholars and graduate students showed higher return-rates for they were mature recipients with specific purposes for study abroad. As a result, the proportion of scholarships for graduate students rose from 1.6% in 1978 to 33.0% in 1982, and for undergraduates it dropped from 25.5% in 1978 to 7.6% in 1982 (Miao 2010). In sum, China's policy of supporting study abroad through government scholarship programs emerged during 1978–1982, and largely met the proposed goals in this phase. Figure 12.1 describes a trend of increasing government-sponsored study abroad in this period, though a small dip occurred in 1982 due to the categorical changes in the selection process, as described above. In the meantime, the number of returnees reached a peak in 1982, as many graduated from their study programs that year.

The second phase (1983–1992) was characterized by some ups and downs with respect to the policy supporting study abroad and concerning

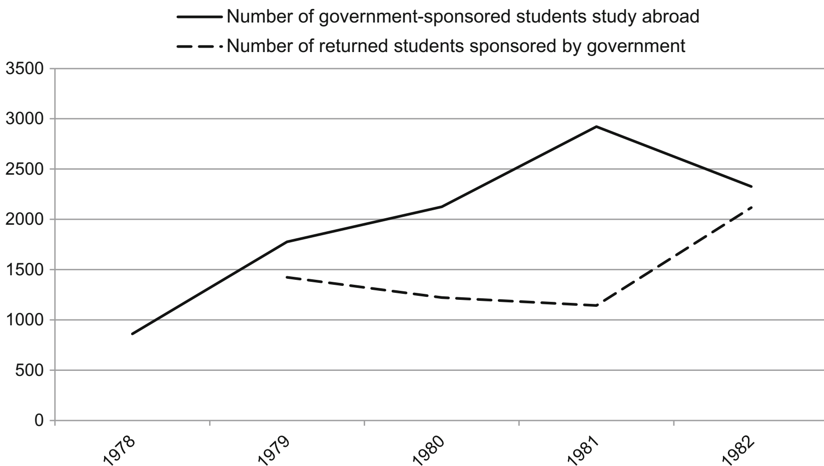

Fig. 12.1 Magnitude of Chinese government-sponsored study abroad and returnees to China: 1978–1982 (Source: Chen et al. 2003, p. 98)

the CGSP in particular. On the one hand, China's opening up to the outside world started to pick up the pace and widen its scope. So too were the needs to support study abroad, which now became an integral part of China's modernization drive. Hence, the CGSP grew steadily in size. The central government even delegated to local governments or institutions partial authority to examine and approve applications for the CGSP scholarships, while allowing and encouraging various social sectors to establish programs of "institution-sponsored study abroad" (danwei gongpai), that is, the institutions of higher learning and research made use of their own resources and sent their teaching and research staff to pursue advanced study abroad. As such, the visiting scholars now accounted for the largest proportion of Chinese studying abroad, taking up 70% of the total since 1987 (Miao 2010, p. 229), while the Chinese government started in this phase to select a few graduate students to pursue doctoral degrees abroad.[2] Meanwhile, there was a significant decline in the proportion of undergraduate students as the awardees. This also indicated that more importance was now intrinsically attached to the goal of ensuring and improving the rate of returnees. In two documents issued in 1986 and 1987 setting work principles for selecting and sending Chinese scholars and students abroad, it was emphasized that importance must be attached to the selection of visiting scholars. As a result, the quota for selecting government scholarship recipients in 1987 was set as: visiting scholars accounting for approximately 70%, graduate students for about 25%, and undergraduates (mainly language majors) for 5%. Understandably, visiting scholars were much more likely to return to China than undergraduate students. The same documents required the awardees to sign an agreement, which specified their length of stay abroad and obliged them to come back upon completion of study programs. Figure 12.2 shows a generally rising tendency in terms of number of returnees in this phase until 1989.

On the other hand, the political turmoil in the early summer of 1989 in Beijing led many Chinese scholars and students to seek permanent residence abroad, which was supported by the favorable policies set in place in their resident countries. For example, on April 11, 1990, President George H.W. Bush issued the Executive Order 12711, which waived the 2-year home country residency requirement for Chinese students, visiting scholars, and other Chinese nationals who had been in the USA between June 5, 1989 and April 11, 1990, and gave them employment authorization through January 1, 1994. It was then made permanent when the Chinese Student Protection Act was passed in 1992. The Act also allowed Chinese

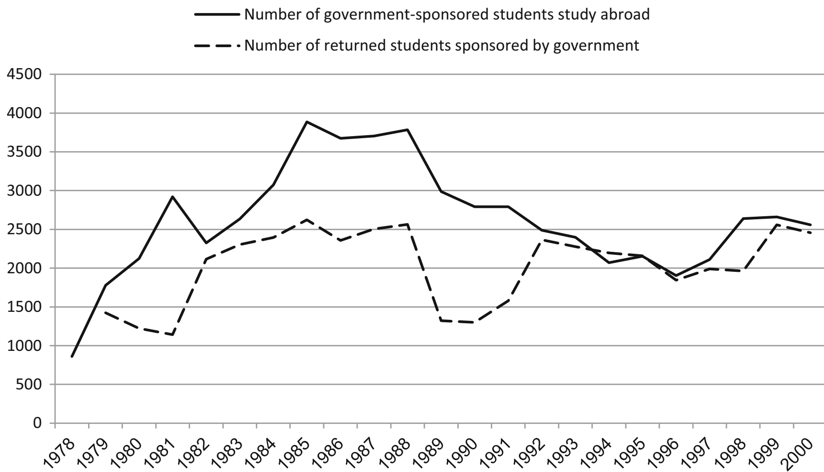

Fig. 12.2 Magnitude of Chinese government-sponsored study abroad and returnees to China: 1979–2000 (Source: Chen et al. 2003, p. 98)

nationals who entered the USA before the issuance of Executive Order 12711 to apply for permanent resident status. Consequently, more than 50,000 Chinese scholars and students obtained 'permanent residence' in the USA in the 1990s and early 2000s. The Australian government provided political protection as well, giving legitimate right of abode to approximately 36,000 Chinese students studying in Australia. The government of Canada announced likewise to give all the Chinese students in Canada 'the right of abode.'

Such actions resulted in a downturn in the number of returnees immediately after 1989, which didn't fully recover until the late 1990s. They also added urgency to the policy goal of attracting returnees. Thus, 1989 witnessed establishment of the Chinese Service Center for Scholarly Exchange (CSCSE) in Beijing, whose mandate was to provide employment services for the returnees. In addition, the Chinese government implemented other supportive strategies to lure back expatriate talent, which included creating centers for post-doctoral research (boshihou keyan liudong zhan) throughout the country. These centers were meant to assist the returnees at their initial stage in adapting to working and living conditions in China. The Chinese government also put aside a special fund (10 million *yuan* RMB per year, or USD 1.5 million, in this phase) to

support research activities of the returnees, and the National Natural Science Foundation of China (NSFC) now allowed overseas Chinese students who would graduate soon to apply for competitive research funds through their China-based employers even before they came back.

As discussed above, Fig. 12.2 presents a dip in the number of returnees in 1989–1990. The concomitant decline in the number of those being sent abroad continued until 1996. Notably, the inbound magnitude was always lower than the outbound, except for one specific year (1994). Often, the former was significantly below the latter during the 1980s and early 1990s, which indicates that a substantial portion of government scholarship awardees remained abroad. They helped form a Chinese expatriate talent pool in the West, and often made an elite core in the global pool of Chinese talent.

The most recent phase spanning the period from 1993 until now bears a robust growth of the CGSP. Deng Xiaoping's influential Southern Tour in 1992 reassured that China was to carry on reform and opening up, which in turn led to China's fast and steady economic growth. The economic prosperity ushered in escalating needs for study abroad, for the sake of preparing and supplying high-caliber human resources, and growing confidence in doing so—in the sense that the overseas Chinese students would go back for career opportunities. In 1996, the China Scholarship Council (CSC), a non-profit organization affiliated to China's Ministry of Education, was established. On behalf of the Chinese government, the CSC sponsors Chinese citizens to pursue study abroad and international students to study in China. The selection procedure therefore altered, from the previous one based on institutional recommendations, now to a more centralized one following the rule of "applying by individuals, review by experts, fair play, best first, contracting to be sent, and compensating for breach of contract" (geren shenqing zhuanjia pingyi pingdeng jingzheng zeyou luqu qianyue paichu weiyue peichang). Compared with practice in the previous period, the current procedure reflected the principle of open, competitive, merit-based scholarships, and it now carried the legal components that require the awardees to return to China upon completion of their study program. Arguably, such changes opened the door wider for academically able candidates across the country to the opportunity of study abroad and utilized legal binding procedures to maintain a high return rate.

The CSC undertook a series of reforms with respect to Chinese government scholarship program. This first was expanding the program, and increased the number of awardees dramatically twice, respectively, in periods of 2002–2008 and 2010–present, as shown in Fig. 12.3. Figure 12.3

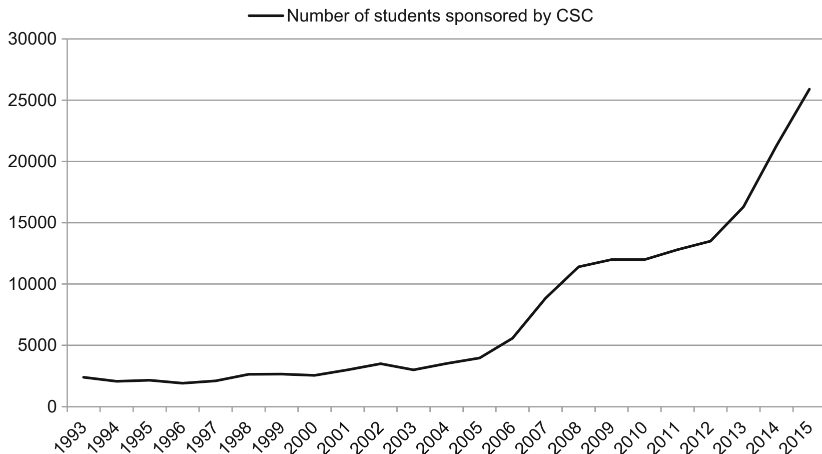

Fig. 12.3 Magnitude of Chinese government-sponsored scholars/students studying abroad: 1993–2015 (Sources: Chen et al. 2003, p. 98; Wang and Guo 2012, p. 8; MoE statistical bulletins re Chinese students studying abroad, 2003–2009 and 2011–2015)

clearly depicts a striking increase in sending magnitude in this phase particularly since 2003. In the "2015–2017 Action Plan for Overseas Study Work" (liuxue gongzuo xingdong jihua), the Chinese State pledged to further expand the size of government scholarship program. Such moves were clearly driven by China's talent needs in order to boost the country's R&D capacity and usher in a knowledge-based economy. By the same token, the second reform initiative was a shift of focus from sending visiting scholars to graduate students, in particular doctoral students as well as post-doctoral candidates.[3] Such an initiative, together with its magnitude, was unseen in the history of Chinese government scholarship programs. This initiative was launched in 2007, and until 2014, 44,000 graduate students were supported by the program to study in 48 countries. By June 2014, the program focused on supporting graduate students in fields of engineering (representing 44.6% of the total) and sciences (24.3%). So far, 16,768 graduate students studying abroad through this initiative have returned to China, including 2,051 studying for academic degrees and 14,717 from joint programs (PKU Graduate School of Education Research Team 2014). The CSC plans to send 29,000 such students abroad in 2016 alone. Third, and relating to the second reform initiative, the CSC now aims at achieving

'triple first-class,' pledging to select the first-class domestic students, and send them to study in the first-class universities and subject programs abroad, and to work with the first-class academic advisors.

12.3 Highlighting the Strengths of the Chinese Government Scholarship Program: Rendering a Process from Brain Drain to Brain Circulation and Brain Gain

Despite China's efforts to connect study abroad programs to the national development agenda, China suffered from a huge brain drain in the 1980s and 1990s, especially in the years immediately after the political turmoil in 1989. As of 1997, only 32% of the 293,000 students and scholars who had gone overseas since 1978 had returned to China, among whom 40% were those who had gone out as short-term scholars sponsored by the State (Zweig and Rosen 2003). In this circumstance, there were certainly heated debates regarding whether or not to continue the scholarship program. There was indeed a moment of retrenchment in the early 1990s, as shown in Fig. 12.2. Nonetheless, this policy was soon reassured in a 1992 MoE document bearing three key terms: to support study abroad, to encourage return to China, and to allow moving in and out at will [zhichi liuxue, guli huiguo, laiqu ziyou]. Later this expression entered a cornerstone document that set the orientation and path for China's reform initiatives, which was passed on November 14, 1993 at the 3rd plenary meeting of the 14th Central Committee of Chinese Communist Party (CCP) and indicated a consensus in the country's top leadership. Such a consensus also determined China's strategies for luring back expatriate talent, which provide an integral supplement to mirror the attainment of the Chinese Government Scholarship Program.

As indicated in Fig. 12.2, many recipients of Chinese government scholarships chose to stay abroad, which was quite significant until the mid-1990s, when the CSC put in place legal requirements for returning to China. Still, the brain drain continued to a lesser extent thereafter. Hence in 2001, China's Premier, Zhu Rongji, explicitly stated that China would leverage its economic performance and large sum of foreign-exchange reserves[4] to lure back expatriate Chinese talent. He said that "henceforth China would change the emphasis of the open policy from attracting foreign capital to attracting human talent and technology" (Miao 2010, p. 888), in line with a pivot toward a knowledge-based economy. Around the turn of

the century, China launched a number of global talent recruitment programs, pledging to reverse the direction of brain migration. In 1998, the MoE launched the Cheung Kong Scholars Programme (changjiang xuezhe jiangli jihua) to attract expatriate Chinese scholars to teach part time in China-based universities, and join research programs such as the "Start-up Fund for Returnees" (liuxue guiguo renyuan keyan qidong jingfei).

While the Cheung Kong Scholars Programme is financed by foreign funds, essentially by a Hong Kong-based tycoon Li Ka-shing, the talent programs that followed have been purely supported by government funds, including the 100 Talents Program (bai ren jihua) introduced by the Chinese Academy of Sciences (CAS) in 1999, and the National Natural Science Foundation's Distinguished Young Scholars Program (jiechu qingnian jihua) initiated in 1994 but operated in full scale since China's 10th Five-Year Plan (2001–2005). Under the former, awardees receive 2 million *yuan* RMB (equivalent to over USD 300,000) to buy equipment, fund a laboratory, and supplement the returnee's salary (by 20%). In the latter case, awardees receive 800,000 to 1 million *yuan* RMB (approximately USD 120,000–150,000) to pursue their research projects. At the same time, the decision in the late 1990s to invest in developing 'world-class' universities in China also helped bring back expatriate talent. Furthermore, China's domestic market, which offers significant returns to technology transfer, has encouraged many people to return.

Although the Chinese government may well be the most assertive government in the world in introducing policies targeted at triggering a reverse brain drain, such efforts in the first couple of years into the twenty-first century had modest or little impact on the top talent overseas (Cao 2004, 2008). For example, the CAS 100 Talents Program, in spite of its prestigious status, brought back mostly recent PhDs or, at best, postdoctoral fellows (Zweig and Wang 2013). Many Chinese students studying in the West were not keen to return to China,[5] let alone established scholars. As such, in May 2002, the CCP Central Committee and the State Council jointly promulgated the "2002–2005 Outline for Building the Ranks of Nationwide Talent" (quanguo rencai duiwu jianshe guihua gangyao) with its "strategy of strengthening the country through human talent" (rencai qiangguo zhanlue). The guiding principle was to accord returnees "complete trust," and swiftly carry out studies "to determine concrete methods for selecting highly talented returnees to take up leadership positions" (Miao 2010, pp. 889–890).

While the CCP had always been responsible for developing leadership talent within the Party and government sectors under its role in "managing cadres" (dang guan ganbu), a new guiding principle was set in place in late 2002 that hereafter the CCP should also manage research talent (dang guan rencai). In June 2003, the CCP Politburo established the Central Coordinating Group on Talent (CCGT) (zhongyang rencai gongzuo xietiao xiaozu), which was led directly by the Organization Department of the CCP Central Committee with members from a dozen other relevant ministries. The group's main responsibilities all related to guiding and advising the CCP leadership on the affairs concerning supply and development of talent. With the Organization Department now playing a central role in managing research talent, lines of authority and the atmosphere surrounding the 'brain policy' altered. All key line ministries responsible for the reverse brain drain are members of the CCGT, but leadership rests with the Organization Department, which uses its higher authority to coordinate the competing interests and its political leverage to ensure the policy's success.

In 2008, the CCP launched the 1000 Talents Program (qian ren jihua), which heightened the efforts to bring about a major reverse brain drain. It manifests China's most important and prestigious global brain scheme, and has aimed to bring back 2,000 highly talented people over the next 5–10 years. Fundamentally it endeavors to recruit the top brains who could make breakthroughs in key technologies and serve as leading researchers to bring forward emerging fields. Specifically, the program seeks four types of talent: (1) experts and scholars with a professional career and title equivalent to professors in prestigious Western universities and research institutes; (2) senior technical and management professionals working in well-known international corporations; (3) entrepreneurs who own proprietary intellectual property rights or 'core technologies,' with overseas experience as entrepreneurs and familiarity with international practice; and (4) other urgently needed high-caliber innovative and entrepreneurial talents. (Zweig and Wang 2013) Such candidates are almost exclusively among those who went abroad in the 1980s and 1990s, and many were supported by the Chinese government scholarships. Once selected, the incumbents are in principle free to settle in any Chinese city of their choice, and entitled to a one-time subsidy of 1 million *yuan* RMB (approximately USD 150,000) as well as medical and social insurance. They also receive housing and food allowance, subsidy for home leave,[6] and a children-education allowance. Their salary, through mutual consultation,

would often be equivalent to their previous salary overseas (Miao 2010; Zweig and Wang 2013). The 1000 Talents Program provides incentives for institutions as well. If a university brings in a candidate who is approved at the national level 1000 Talents Program—regardless of whether he or she returns full-time or part-time—it gets 12 million *yuan* RMB (around USD 1.8 million), and while the incumbents get the bulk of the funds for their own research, their employer institutions may redistribute some funds to others, making the award a positive event for the whole community. Reportedly, universities with locally approved 1000 Talents incumbents[7] receive 8 million *yuan* RMB (equivalent to USD 1.2 million), of which they can keep some funds as well (Zweig and Wang 2013).

More has been or is being done for the sake of recruiting business entrepreneurs, as local governments strive for new technologies to boost local economic growth. Over 150 incubators have been set up for overseas entrepreneurs in 'high tech' zones in cities all over China. Many cities offer various incentives, such as tax-free purchases of new equipment and vehicles, free floor space in the incubator and, in some cases, investment in the start-up by the zone's management company. Due to such an intensive effort, the 1000 Talents Program lured back 2,263 high-caliber talents as of 2012, exceeding not only the original quota of 2,000 but also the equivalent in the 30 years prior (Wang and Guo 2012). Among the returnees, many went abroad on Chinese government scholarships in the 1980s and early 1990s, and then established their successful careers in the host countries before ultimately deciding to return to China.

China's organized effort to support study abroad through the CGSP, despite the ups and downs discussed above, ultimately achieved a shift from brain drain toward brain gain. Essentially, they are two sides of the same coin. In the twenty-first century, the returnee inflow is of historic proportions, and no doubt the largest influx of high quality talent over such a short period of time in China's history. Such an inflow couldn't be possible without the existence of an expatriate talent pool started and maintained through the CGSP since the late 1970s.[8] Through its policy initiatives, the Chinese government has created a positive cycle of brain circulation: supporting talent to go abroad to increase the value of their human capital and then competing with other countries in the global marketplace for now enhanced talent.[9] The success was initially limited in terms of attracting the top Chinese expatriates, which led the Chinese Communist Party (CCP) to become directly involved in the search for overseas talent in more recent years—a move that in turn boost the return rate, as shown in Fig. 12.4. The

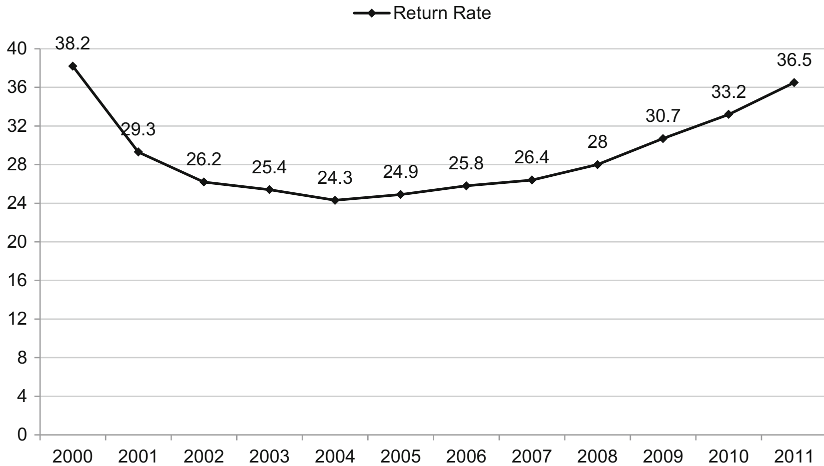

Fig. 12.4 Return rate of Chinese students studying abroad (%): 2000–2011 (Source: Wang and Guo 2012, p. 127)

return rates in Fig. 12.4 represent both government-sponsored and non-government-sponsored returnees, though the government-sponsored type contributes a large portion to—if not dictates—the increase in rate. The "2015–2017 Action Plan for Overseas Study Work" (liuxue gongzuo xingdong jihua) pledges to maintain the return rate of government scholarship holders at 98% or higher, and attract a total of 1 million returnees by 2017.

12.4 The Drawbacks and Challenges to the Chinese Government Scholarship Program

Despite the fact that the CGSP serves as a main pipeline for devising and forging a process of brain circulation, China struggles still with a number of drawbacks hindering its global talent ambitions and strategies (Zha 2014). First and foremost, political control over the university (though under different guises) remains in place in China, albeit after three decades of reform and decentralization (Zha and Yan 2013). The Chinese model for social development, which certainly applies to the higher education sector, features a central role of the State, that is, strong nation-state policy drivers

and close state supervision and control owing foremost to the Confucian tradition that closely articulates academia and state management.

Such a model could make for a double-edged sword. On the one hand, it exhibits enormous advantages pushing for efficiency and rapid outcomes, exemplified by China's enormous effort to focus public subsidies on creating world-class universities and attracting global talent (Marginson 2011; Zweig and Wang 2013). On the other hand, it often causes Chinese scholars and knowledge institutions to be particularly vulnerable, compared with their Western counterparts, to changing social and political milieus (Zha 2012). Such paradoxes may cause dilemmas for China's global brain schemes, and condition those brain schemes largely for the purpose of capacity building—as discussed in Chap. 10 of this volume—rather than the development of social change leadership. Furthermore, only places that offer an open and 'tolerant' environment can arguably appeal to and accommodate the best talent. Otherwise, much of their connection to China will mirror Saxenian's (2006, cited in Zweig and Wang 2013) 'brain circulation' (synonymous with brain mobility) rather than reflect a genuine reverse brain drain. Put succinctly, expatriate global talent is more likely to remain mobile between China and wherever the political and academic climate may be more appealing. Notably, while the Cheung Kong Scholars Programme and the 1000 Talents Program initially accepted only full-time returnees, they now sign up more and more part-time participants, as they were unable to maintain such standards and still get enough talented people.

Second and more relevant to the theme of this chapter, the academic culture in China has been cited as an impediment for its higher education system to reach a leading status in the world (Yang 2016). Academic culture might be defined as the attitudes, beliefs, and values held by academics toward their professional norms and behavior. In this regard, academic misconduct is a serious issue in China. What concerns potential and actual returnees most may be their misfit with the broad academic culture in China, for example, decisions regarding resource allocations and actions toward building the academic community. The story of two prominent returnee scientists Rao Yi and Shi Yigong exemplify such a misfit. Rao Yi used to be a professor of Neurology at Northwestern University in the USA. He returned to Peking University in 2007 to take up the position of Dean of the College of Life Science. Shi Yigong was the Warner-Lambert/Parke-Davis Professor of Biophysics at Princeton University. In 2008, he resigned his position at Princeton and started pursuing his career at Tsinghua

University, as the Dean of Life Sciences. They are among the very few top-flight talents lured back by the 1000 Talents Program. However, in a co-authored article published in *Science*, Shi and Rao (2010) openly claimed that China's current research culture "wastes resources, corrupts the spirit, and stymies innovation" (p. 1128). Specifically, they cited the bureaucratic approach to deciding research funding as something that "stifles innovation and makes clear to everyone that the connections with bureaucrats and a few powerful scientists are paramount." As such, "[T]o obtain major grants in China, it is an open secret that doing good research is not as important as schmoozing with powerful bureaucrats and their favorite experts" (Shi and Rao 2010, p. 1128). They felt frustrated to observe that such a problematic research culture "even permeates the minds of those who are new returnees from abroad; they quickly adapt to the local environment and perpetuate the unhealthy culture."[10] Should it last, such a problematic academic culture would certainly place the efficiency and effectiveness of China's brain schemes in jeopardy.

12.5 Conclusion: The Chinese Model for Development Finds Its Expression in the Chinese Government Scholarship Program

In this chapter, we place the discussion of the CGSP in a broad context of sociopolitical reform and globalization, and in particular within China's successful transformation of brain drain into a process of brain circulation and then brain gain. Both the phenomena of study abroad and brain gain are meant to form a necessary equilibrium in a given society; thus they are better examined together in a holistic picture. Essentially, the former is meant to give rise to the latter, with both serving the national development agenda. For half of the years since the late 1970s, China was among the top countries suffering from brain drain. Hence, only focusing on China's effort to support outflow may not depict the entire picture of China's real effort and ambition. Rather, it needs to be combined with China's global brain strategy and talent schemes since the mid-1990s. Put succinctly, without the brain migration in the 1980s and 1990s, there couldn't possibly be the current brain circulation and brain gain. A key factor in this scenario is the existence of a Party-State in the Chinese society, whereby the Party-led state is able to mobilize all possible means and resources to attain a

specific goal, be it to develop higher education (Marginson 2015) or to render return migration and brain gain (Zweig and Wang 2013).

A central characteristic in the Chinese model for social and economic development is the key role played by the State. This holds true for the CGSP. The State mobilizes all the resources and efforts to send Chinese scholars and students abroad and then lure them back after they complete their study programs or even establish their careers successfully. Such an approach varies significantly from most advanced countries that rely on market forces and head-hunters to bring back their best talent studying or working abroad. Over the past 30 years, the Chinese State leveraged its efficient planning tools, took advantage of a long-range vision, and successfully enabled a process of brain circulation and brain gain that hugely benefitted the country's modernization ambitions. Arguably, the CGSP served as a key catalyst pushing for reform and change as early as in the 1980s. With China now being the second largest economy in the world, the Chinese State has become increasingly confident of employing the CGSP as a strategic tool to serve purposes extending from human capital development to social justice and even public diplomacy. For instance, the Chinese government launched in the twenty-first century a "Special Programme for Developing Talent in Western China" (xibu diqu rencai peiyang tebie xiangmu), which funds academics from China's underdeveloped western provinces to study abroad and improve their teaching and research capacities. Thus, the CGSP is now being employed to promote regional development and narrow regional disparities. More recently, the Chinese government launched a new scholarship program that aligns with China's 'Belt & Road' initiative and serves to build collaborations with countries along the Silk Road and Maritime Silk Road trading routes—through funding study abroad for Chinese students and inbound students from those countries.[11]

Acknowledgement We are grateful to Professor Leiluo Cai of the Graduate School of Education, Peking University, for her assistance and direction in data collection.

Notes

1. This quota was already unprecedented in contemporary Chinese history. Even during those peak years in the 1950s, the number of Chinese scholars and students sent to the USSR was 2,000 each year at maximum.
2. In 1988, the State inaugurated the policy of "Sino-foreign Joint Training of Doctoral Students" (zhongwai lianhe peiyang boshi yanjiusheng), which

meant to draw international academic resources for the sake of training doctoral students at home; in 1990, China implemented the policy of "Deliberate Selection of a few Graduate Students for Pursuit of PhD Degree Abroad" (jing xuan shaoshu yanjiusheng chuguo gongdu boshi xuewei), in which the policy goal of "ensuring quality and returnees" (bao zhi bao hui) was explicitly stated and emphasized for the first time.

3. The CSC included master's students in its scholarship program in 2009, initially at a scale of around 400 per year, and has insofar supported 4,600 master's students to study abroad. Since 2013, undergraduates are included as well, with a quota of approximately 3,000 per year. (Engberg et al. 2014, p. 15) Such development indicates a return toward the very original intention of the CGSP, that is, to boost raising top-notch talent from a young age.
4. China's foreign exchange reserve approached 200 billion USD in 2000. Joining the World Trade Organization (WTO) in 2001 contributed to China's rapid growth in international trade, and its foreign exchange reserve soared thereafter. By 2014, China's foreign exchange reserve stood at close to 4 trillion USD, far ahead of any other countries.
5. A 2002 research study indicated 92% USA-educated Chinese PhD graduates in the sciences and engineering fields remained in the USA 5 years after graduation, compared with 81% of Indian students, 55% of Canadian students, 43% of Taiwanese students, 33% of Japanese students, 32% of Mexican students, and 7% of Thai students. More recently, a US Department of Energy research study in 2011 found 85% of Chinese students awarded doctoral degrees in sciences and engineering areas stayed in the USA, while China's own study in 2013 generated a figure of 87%.
6. Many incumbents are on a part-time basis, as explained later in this chapter, and they exhibit a similar career/life pattern to the "Two Bases Program" described in Chap. 11.
7. Some provinces and municipalities have established their own "1000 Talents" schemes at a local level.
8. When China suffered from a severe brain drain in the 1980s, and many awardees of Chinese government scholarships chose not to return, then CCP leader Hu Yaobang, said: "It doesn't matter; people who stay abroad will be patriotic overseas Chinese in the future." His successor Zhao Ziyang said even explicitly: to "store brain power overseas." This is indeed the case, some 20 years later.
9. See Chap. 11 in this volume for more successful examples in the global competition for talent.
10. This may add a piece of evidence to the discussion in Chap. 9 with respect to conditionality or restrictions of initiating social change on the part of returnees.
11. China has been heavily leveraging government scholarship programs to pull inbound students, which is another important function of the CGSP,

however beyond the scope of this chapter. According to information released by China's Ministry of Education, in 2015 10.2% of inbound students were on government scholarships, among whom 89.4% were on degree-bound programs.

References

Cao, C. (2004), *China's Efforts at Turning "Brain Drain" into "Brain Gain."* Singapore: National University of Singapore East Asian Institute.

Cao, C. (2008), China's brain drain at the high end: Why government policies have failed to attract first-rate academics to return. *Asian Population Studies*, 4(3), 331–345.

Chen, X. et al. (2003), *Liuxue jiaoyu de chengben yu shouyi: woguo gaige kaifang yilai gongpai liuxue xiaoyi yanjiu* [Costs and returns: a study on the efficiency of government-sponsored overseas education since 1978]. Beijing: jiaoyu kexue chubanshe [Educational science press].

Engberg, D., Glover, G., Rumbley, L. and Altbach, P. (2014), The rationale for sponsoring students to undertake international study: an assessment of national student mobility scholarship programmes. The British Council and DAAD. Available at: https://www.britishcouncil.org/education/ihe/knowledge-centre/student-mobility/rationale-sponsoring-international-study (Accessed 9 Dec 2016).

Hayhoe, R. and Zha, Q. (2006), China. In: J.F. Forest and P.G. Altbach (eds.), *International Handbook of Higher Education*. Springer International Handbooks of Education Volume 18. Dordrecht, Netherlands: Springer, pp. 667–691.

Hunt, M.H. (1972), The American Remission of the Boxer Indemnity: A Reappraisal, *Journal of Asian Studies*, 31(3), pp. 539–559.

Marginson, S. (2011), Higher education in East Asia and Singapore: Rise of the Confucian model. *Higher Education*, 61, 587–611.

Marginson, S. (December 2, 2015), China: a rapidly evolving university system. [online] *Times Higher Education*. Available at: https://www.timeshighereducation.com/world-university-rankings/china-a-rapidly-evolving-university-system (Accessed June 28, 2016).

Miao, D. (2010), *Chuguo liuxue liushinian* [Studying abroad program across 60 years]. Beijing: Zhongyang wenxian chubanshe [Central Party Literature Press].

Peking University (PKU) Graduate School of Education Research Team. (2014), *Guojia jianshe gao shuiping daxue gongpai yanjiusheng xiaoyi fenxi baogao* [An analytical report on efficiency of government scholarship program for graduate students of national key universities to study abroad] (Unpublished research report). Beijing: PKU Graduate School of Education.

Saxenian, A. (2006), *The New Argonauts: Regional Advantage in a Global Economy*. Cambridge, MA: Harvard University Press.

Shi, Y. and Rao, Y. (2010), China's Research Culture, *Science*, 329(5996), p. 1128.

Wang, H. and Guo, J. (2012), *Zhongguo liuxue fazhan baogao (2012)* [Annual report on the development of Chinese students studying abroad (2012)]. Beijing: Shehui kexue wenxian chubanshe [Social sciences academic press].

Yang, R. (2016), Toxic Academic Culture in East Asia, *International Higher Education*, No. 84 (Winter 2016), pp. 15–16.

Zha, Q. (2012), Intellectuals, Academic Freedom, and University Autonomy in China, In: Hans G. Schuetze, William Bruneau, Garnet Grosjean (eds.), *University Governance and Reform. Policy, Fads, and Experience in International Perspective*. New York, NY: Palgrave Macmillan, pp. 209–224.

Zha, Q. (2014), Will China Excel in the Global Brain Race? *International Higher Education*, No. 75 (Spring 2014), pp. 15–16.

Zha, Q. and Yan, F. (2013), Oscillations and Persistence in Chinese Higher Education Policy: a Path Dependence Analysis, In: Paul Axelrod, Roopa Desai Trilokekar, Theresa Shanahan and Richard Wellen (eds.), *Making Policy in Turbulent Times: Challenges and Prospects for Higher Education*. Montreal/Kingston: McGill-Queen's University Press, pp. 317–338.

Zweig, D. and Rosen, S. (2003), How China trained a new generation abroad. [online] *SciDev.Net*. Available at: http://www.scidev.net/global/migration/feature/how-china-trained-a-new-generation-abroad.html (Accessed July 12, 2016).

Zweig, D. and Wang, H. (2013), Can China Bring Back the Best? The Communist Party Organizes China's Search for Talent, *The China Quarterly*, 215, pp. 590–615.

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PART IV

Understanding Outcomes

CHAPTER 13

Magnitudes of Impact: A Three-Level Review of Evidence from Scholarship Evaluation

Matt Mawer

13.1 Introduction

International scholarship programs have considerable longevity, in some cases now measured in centuries (Pietsch 2011), yet attention to the outcomes of these programs is a relatively recent phenomenon. As late as the end of the 1980s, there appeared to be no clear approach to evaluation among any of the major donors and little published research (Strömbom 1989). Whilst this situation improved progressively throughout the 1990s and early millennium, it is only in the last decade that research on scholarships has become routine. During this period, donors and administrators have increasingly sought to publish evaluation findings, impelled variously by the desire for program improvement, pressure to demonstrate the outcomes of funding, and transparency requirements within public institutions.

In this chapter I offer a commentary on the results from evaluation research—both independently conducted and commissioned by scholarship administrators—published between 2006 and 2016. My critique focuses on funding offered for academic study outside of the recipients' country of residence ('home country'): most usually, although not exclusively, hosted in the country of the donor organization or government. The analysis

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primarily concerns full-degree mobility, although some reference is made to credit mobility within academic programs and to non-academic exchange programs (e.g. military exchanges).

Inevitably the quality of evidence varies tremendously, with the variety of approaches, instruments, and indicators as numerous as the studies themselves. This chapter is quite deliberately referred to as a 'review of evidence' and not, for instance, a meta-analysis or a synthesis. As others have commented, synthesis is not currently possible within such a varied evaluation evidence base (e.g. Nugroho and Lietz 2011). Instead, the present chapter approaches the findings of evaluation studies as a literature review addressing the three levels of classic sociological enquiry: micro, meso, and macro. In the context of scholarship programs, these levels map onto:

- **Micro:** individual outcomes for scholarship recipients
- **Meso:** organizational and institutional effects
- **Macro:** societal impacts

Major themes within each level are examined in turn, concluding with final thoughts on the current state of research evidence concerning the outcomes of scholarship programs. A small minority of topics routinely addressed in evaluation studies are intentionally excluded to avoid duplication: discussion of 'return rates' and the reintegration experience is omitted here, but has been discussed extensively in Chaps. 9, 10, and 11.

13.2 Micro-level Effects

At a fundamental level, scholarships help recipients to overcome the widespread difficulty of access to funding for international study. The accessibility of scholarships in comparison to other funding for international education has thus received some attention, primarily as a means of answering the criticism that scholarships are prone to supporting only socioeconomic elites. Where evidence is available, it tends to show that scholarships provide recipients with a means to study that would otherwise have been either entirely unavailable or have involved substantial informal (i.e. not state-backed) debt. Recipients of UK Commonwealth Scholarships, for instance, overwhelmingly reported that it was very unlikely they could have pursued the same degree program without scholarship funding (Mawer 2014). For those that felt they would have other means of accessing

study abroad, the anticipated funding was most frequently a different scholarship and not a self-funding option (Mawer 2014). The availability of scholarship funding is also an important influence on study location, particularly in relation to high-cost destination countries with Europe and North America (DAMVAD 2012).

Yet claims about supporting access need to be framed carefully. Most scholarship recipients must have already accessed and navigated their domestic higher education system to qualify for international scholarship programs: it is access to *international* higher education specifically that is facilitated. Funding international education within high-tuition systems—notably the USA—is likely to be beyond the reach of many societal groups, including those not necessarily marginalized within their home country. We should thus be cautious of treating self-reported evidence about the affordability of international education as a proxy of elite status. There is surprisingly little detailed analysis of the 'access' and 'social mobility' dimensions of international scholarship programs. Individual programs typically have a detailed appreciation of their recipients' socioeconomic background, but this data is not widely shared—with a few exceptions, such as the MasterCard Foundation Scholars Program (see Burciul and Kerr in this volume)—and nor is it commonly examined as a potential correlate of post-scholarship trajectory and impacts.

13.2.1 Individual Capacity and Disposition

Study-level outcomes from scholarship programs are broadly excellent. The degree completion rate for scholarship recipients is near-universally high (e.g. World Bank Institute 2008), with only rare exceptions (e.g. Němečkova and Krylova 2014). Research from the UK, Australia, and Germany has also indicated that a noteworthy minority of each master's degree cohort continues to doctoral study, building on the skills gained during their scholarship (DAAD 2013; Grigg 2016; Mawer 2014). Delayed return in favor of more advanced study can be a positive or problematic outcome depending on the program aims and the long-term effect of further study abroad. The most frequent scenario seems to be that individuals delay returning to their home country to undertake additional study in the scholarship host country (DAAD 2013), but there is limited research examining the compound effect of scholarships and subsequent further study against the original aims of the scholarship program.

Conversely, evaluation research has offered clear evidence that those who participate in scholarship-funded studies believe they gain greatly in what might loosely be described as 'knowhow': methodological competence, theoretical knowledge, and the sensitivity to bridge these domains. One example can speak for many: several years of survey data from over 2000 Commonwealth Scholarship recipients has found extensive self-reported gains in knowledge, analytic skills, and technical skills; greater confidence to introduce innovations in the workplace; and, to a lesser extent, improved management skills (Mawer et al. 2016). Assessing whether self-reported views from alumni are shared by peers at home is difficult. Attempts at developing a more holistic account of outcomes through surveying the employers of alumni, for instance, have often yielded poor response rates (e.g. Nuffic 2009). Staff turnover can also mean that employing institutions are themselves unable to provide a holistic assessment. Yet when evaluators have managed to reach employers, their perspectives have tended to reinforce the self-report evidence. Employers of German Academic Exchange Service (DAAD) scholarship recipients, for instance, felt their employees '... had broadened their knowledge in their field and had more understanding of methodology after completing their scholarships, as well as being able to work autonomously' (Raetzell, et al. 2013, p. 34).

Another dimension to individual outcomes concerns the disposition, intercultural competency, and perspectival impacts on the recipient. Catalyzing understanding and sympathy for host country values is a central aim of many scholarship programs (Atkinson, 2015). Even within programs with a developmental focus, the role of international education in building networks abroad has been emphasized: 'Winning partners for the future has been one of the guiding principles behind the postgraduate course programme from the very beginning' (DAAD 2013, p. 49). Evaluation studies have routinely generated evidence of positive attitudes toward host countries and, to a lesser extent, intercultural gains. Research on the Chinese Government Scholarship Program, for instance, has suggested that over 90% of research participants were positive about the likely promotion of long-term friendship between China and their home country (Dong and Chapman 2008). Analyses of German scholarship programs have yielded similar results. From survey respondents on development-related postgraduate courses funded by DAAD, 96% were positively disposed toward future cooperation with German organizations, 95% similarly disposed toward

closer contact with German individuals, and 83% reported that they would work for a German organization that had an office in their country (DAAD 2013). Chalid's (2014) research with Indonesian scholarship recipients has indicated that the intercultural dimensions of study in Australia were as important to post-scholarship trajectories as the academic content of study. These dimensions included traditional 'soft skills' such as language learning but also extended to new perspectives on governance and society, shaped by primary experience with Australian civic institutions and democratic process (Chalid 2014).

Understanding how and when such dispositional and intercultural gains materialize is complex because influences on individual attitudes are not commonly analyzed in scholarship evaluation. Research by Dong and Chapman (2008) has suggested that three important factors are the frequency of interactions with faculty, the cultural and intellectual engagement of the recipient, and the personal effort invested in the study experience. Interestingly, greater interaction with other *students* was not a significant factor in shaping positive disposition for the participants in Dong and Chapman's research (2008). Whether this finding is robust across other scholarship programs has not been established, but its implications are significant for program design since integration with peers is often one of the more challenging components of the study experience (see DAMVAD 2012).

Another potential difficulty is that interpreting dispositional outcomes without comparative data can be potentially misleading. Comparative evidence of any kind has been largely absent from scholarship evaluation and thus it is difficult to ascertain whether the attitudes of scholarship recipients differs from self-funded peers, although program administrators have reasonably assumed such an effect. Similarly, lack of baseline data on the disposition of scholarship recipients can create ambiguities about whether positive dispositional outcomes—such as large proportions of respondents well-disposed to future collaboration with the host country—are best described as 'gains' from scholarships or simply a description of those who were selected to receive funding. Sometimes this interpretation is made more complex by differing dispositions among applicants to scholarship. Evaluation of US scholarships in Latin America and the Caribbean (LAC), for instance, found that recipients' sentiment toward their host nation had become substantially more positive from baseline to post-scholarship (Chesterfield and Dant 2013). On comparison to the attitudes of non-recipients, however, a much *lower* proportion of recipients had a positive disposition

toward the USA before their scholarship: most of the effect observed was the recipient group making up the gap between their initial disposition and that of the non-recipients. Over the same time period, non-recipients' attitudes had become more negative, but only slightly (Chesterfield and Dant 2013). Scholarships may positively shape opinion, but this could still imply only limited gains *overall* if the differing starting point of applicants is taken into account.

13.2.2 Career Prospects

Analyzing improvement in scholarship recipients' career prospects has both straightforward and complex dimensions, depending on how the concept of 'improvement' is framed. There is widespread recognition that international education can yield important 'positional advantage' within home country labor markets (e.g. Mellors-Bourne et al. 2015; Sin 2009), both where skill shortages are severe and where the domestic system lacks either capacity or prestige. Structural constraints on career progression in certain organizations are also closely tied to qualifications: the importance of gaining a doctorate in the career development of academic staff is a pertinent example. Consequently, a credible contribution to career prospects can be garnered both through accrued positional advantage from international education generally and the instrumental value of qualifications specifically.

There is much strong evidence that the professional position of scholarship recipients *does* improve in this way. Two examples from differing scholarship models can illustrate. In tracer survey results for Asian Development Bank (ADB) scholarship recipients, 87% reported that their careers had been advanced by gaining a degree though the program: through promotion either within the same organization or at a different organization (ADB 2007). These findings are echoed across DAAD's various scholarship programs. For DAAD scholarships to Kazakh recipients, for instance, 80% of survey respondents agreed that their professional position had improved because of the experience they gained in Germany (Raetzell et al. 2013).

Not all types of advancement are equally forthcoming. The World Bank Institute (2008) has suggested that salary gains may be the least frequently experienced professional impact because many scholarship recipients return to public sector institutions with inflexible salary progression. This expectation is borne out to a lesser or greater extent in various analyses of career trajectories, depending somewhat on the socio-economic and political system of the home country. For instance, only around half of Atlantic

Philanthropies—University of Queensland Scholars returning from Australia to their employment in Vietnam received a salary increase, but by 12 months' post-scholarship, over three quarters had received some form of promotion and associated new responsibilities (Grigg 2016). In Cambodia, alumni of Australian government scholarships secured income through additional employment outside of their primary civil service posts: few remained committed to their pre-scholarship careers within the public sector (Webb 2009).

Despite the broadly positive tenor of evidence on career advancement, findings from tracer studies are rarely able to offer a rigorous and compelling commentary on career prospects. In general, career outcomes are likely to become more favorable as time elapses and recipients have more years of experience to progress in the labor force. This 'normal growth' can be a problem for one-off evaluation studies because career progression is correlated with years of workforce experience for *both* scholarship recipients and non-recipients. The most important and widespread deficit, however, is the absence of comparison to employment patterns within home countries. The proportion of recipients currently employed, for instance, is often used as a basic indicator of career outcomes and is near-universally high (e.g. SIU 2015). Yet because this data is not benchmarked against employment statistics for similarly skilled workers within home countries, it is difficult to establish what, if anything, employment rate statistics tell us about scholarship outcomes. Country-wise benchmarking in evaluation studies is often difficult because of limited statistical data, but two potential alternatives have been used: counterfactual comparisons and comparisons within study cohorts. The most recent evaluation of the US LAC Programs, for instance, demonstrated that recipients were more likely to be in professional leadership roles and to aspire to own or run a business than their non-recipient peers (Chesterfield and Dant 2013). A cognate finding by DAAD indicated that 70% of scholarship-funded alumni currently held management responsibilities, compared to 59% of self-funded students on the same postgraduate courses (DAAD 2013). More generally, however, both comparative research examining differential outcomes between scholarship recipients and non-recipients, and baseline to follow-up comparisons for recipients, has been critically scarce.

Finally, the early-career experiences of recipients have attracted attention within evaluation studies; difficulties in this period can reduce the impacts of scholarship programs. DAAD (2013), for instance, has observed that some scholarship recipients found their home university infrastructure to be

unconducive to continuing sophisticated research. Researchers from the Asian Development Bank (2007) have described this in terms of the 'absorptive capacity' of organizations to productively integrate new expertise from returning scholarship recipients. A useful extension on this concept can be drawn from Kalisman's (2015) historical analysis of scholarship students at the American University of Beirut. Absorption of new knowledge and practices is not only constrained by instrumental or interpersonal factors, it is also predicated on a common epistemic basis for change. This latter foundation is not guaranteed when scholarship recipients undertake study grounded within radically different social, civic, and economic systems. Scholarship recipients advocating teaching methods grounded in Deweyian thought, for instance, found significant philosophical resistance in the early twentieth-century mandate governments of Iraq and Palestine (Kalisman 2015).

These theorizations illustrate the extent to which career impacts are contingent outcomes and must be assessed within a broader context. A plausible case for the contribution of scholarships must account both for the impact of the degree and support network gained during international education, and influential exogenous factors, such as the structure of labor markets, the consequences of future mobility, and so forth. To comment on these factors, it is necessary to raise our focus to meso-level effects on organizations.

13.3 Meso-level Effects

Not all scholarship programs describe their aims in terms of improving the capacity of institutions, but almost all desired outcomes are reliant on individuals shaping institutional development and outlook. Institutional capacity improvement through funding individuals is an outcome contingent both on the efficacy of those individuals to instigate change and on the responsiveness of the home country institutions to incorporate change (the 'absorptive capacity' noted above).

Evaluation research to date has reported many compelling cases in which institutional capacity has been greatly enhanced by the actions of a scholarship program. It has also made relatively strong arguments for the virtues of clustering scholarships to achieve synergistic effects, although largely in absence of, rather than in superiority to, a contrary argument. Research is less clear, however, on how institutional capacity gains are achieved by individuals within organizational systems, what common situational factors

are present when best effects are realized, and how, if at all, funders can offer post-scholarship support to their alumni which will help to enhance organizational impacts. Examining these points in detail requires exploration of two issues: (1) the relevance of programs studied and (2) the relationship between institutional capacity, individual mobility, and critical mass.

13.3.1 Relevance to Employers

The perceived alignment between scholarship-funded study and employers' needs is relevant both to individual career prospects and to the organizational impacts of scholarships. The most widely available evidence of the latter is through workplace application of the skills gained by recipients whilst on scholarship. Nearly all participants in an evaluation of the ADB's Japan Scholarship Program (JSP) felt that the knowledge and skills gained through their studies were relevant and useful in their organization (ADB 2007). Similarly, 77% of DAAD scholarship holders reported a close match between the content of their academic studies and their current occupation, compared to only 63% of self-paying students that undertook the same courses (DAAD 2013). As with other comparative evidence, these results should be considered indicative, rather than conclusive. The researchers do not offer an explanation for the reported discrepancy, but a plausible supposition is that DAAD scholarship holders have been more successful in securing employment related to their studies than their self-funded peers. A different explanation, however, is that fewer self-funded students on the same courses elect to remain in employment sectors linked to their field of study, as distinct from being 'forced out' by lack of meaningful job opportunities. Expanding analysis to examine and theorize the differences between scholarship-funded and self-funded students would be a productive next step for the cases in which such differences have been identified.

Although published evidence is very limited, organizational participants in sending countries have tended to espouse views about the relevance of scholarship programs that support the evidence from individual recipients. Comments from a review of the Japan-IMF Scholarship Program for Asia (JISPA) are representative: 'Of the 24 sending agencies that responded to the survey, all considered the program to be meeting their capacity building needs, and said that they would in the future either encourage or strongly encourage junior staff to participate...' (Nijathaworn et al. 2009, p. 4). Research on the Netherlands Fellowship Program has found that both scholarship applicants and their employers were motivated by similar

prospects: skill development, improved quality of services, and innovation at the institution (van der Aa et al. 2012). Interestingly, the same evaluation indicated that scholarships would not be the preferred capacity-building instrument for many employers, but they felt compelled to support applications to not hinder an employee's career opportunities (van der Aa et al. 2012). Organizational needs may thus not wholly explain why employers support scholarship programs.

Nor are organizational needs static. The JISPA review indicated that, after running for almost two decades, the training needs of participating countries—especially the 'transition economies' of the early 1990s—had changed considerably (Nijathaworn et al. 2009). Norad (2009) has raised a similar point at the institutional level, commenting that there was strong feeling among some universities that investments needed to shift away from activities the university itself could now routinely manage and toward contemporary concerns, such as doctoral training. Questions of relevance are thus bound up with the responsiveness of policy-making organizations to the needs of their target groups, although an additional complexity is that there is no guarantee that the aims of governments, organizations, and individuals will necessarily be aligned.

For the scholarship programs that aim at building technical skills, there is ample evidence that expertise is usually relevant to the organizations to which alumni return. The skills later applied in home country institutions also extend beyond subject expertise and include a variety of soft skills and non-disciplinary competencies. As one Commonwealth Scholarship recipient remarked: 'There are many things that I gained, apart from the academic side of the programme – running of departments, running of facilities and, in general, running of the school – which have been of great use to me' (Hinz et al. 2013, p. 28). Some questions remain unanswered about the capacity of organizational systems to integrate recipients with highly specialized knowledge. Evaluation of DAAD's educational cooperation programs, for instance, concluded that funding advanced scientific study in Germany facilitated access to expertise and technology unavailable in home countries (Raetzell et al. 2013). In doing so, however, some individuals began advanced scientific research in Germany that they could not continue upon returning to their home country because they still lacked the available expertise and resources. Providing access to equipment, expertise, and advanced scientific practices can thus have unforeseen consequences: scholarships may be relevant as tool to offer access to

resources, but they may also build skills that are largely unusable in the home country context.

13.3.2 Institutional Capacity, Individual Mobility, and Critical Mass

Institutional impacts from scholarships are also tied closely to recipients' decisions about the organizations for which they choose—or are mandated—to work. In Chap. 9, Campbell has discussed the complexities of such decisions in detail. Indicative of the variation observed is the range of 13% to 81% of Commonwealth Scholarship recipients between 1960 and 2012 that returned to their prior employer, depending on their previous circumstances and route into the scholarship program (Mawer 2014). Many scholarship recipients have also subsequently moved organizations to advance their career (SIU 2015). Within some programs—especially those funded by European governments—scholarship recipients are middle managers, not entry-level staff, and so departure by these employees may be particularly troublesome for organizations (DAAD 2013). Even when recipients do return to their home country, or intra-country region, they do not necessarily return to the same employer (Chesterfield and Dant 2013). The function of scholarships to widen individual career options can thus cut both ways for programs also aiming at institutional capacity development.

Concerns about individual mobility apply primarily if institutional capacity is conceived at the level of specific organizations, but not necessarily at the level of the broader sector. Van der Aa et al. (2012) found that the loss of trained employees to other institutions could limit institutional development for the original employer, but since they typically stayed within the home country, there was still a net gain from scholarship recipients. A similar argument could also be made for cases in which recipients have left (or never returned to) their home country, but are highly active in diaspora links to home country institutions (see Chap. 11). Individual mobility does not necessarily act to diminish institutional capacity improvement at a systemic level unless the outcome of institutional capacity building is conceived in terms of impacts on specific organizations. This is not, however, an unreasonable or uncommon goal, particularly when working with civic institutions such as the police force or other public administration officials. In these cases, scholarship recipients who leave to work in higher education or the private sector would be unlikely to improve the institutional capacity

within the targeted civic institutions: these individuals would be leaving 'the system'.

A further systemic issue is the effect of diffusion and concentration of scholarship recipients across organizations, sectors, and countries. Following the premise that clusters of individuals may yield a critical mass that can work synergistically to achieve greater institutional impacts, some scholarship funders (e.g. DAAD; The World Bank) have sought to facilitate clustering and to build centers of excellence. The World Bank Institute has argued that '. . .the [Joint Japan/World Bank Scholarship Program] has created clusters of alumni who return home to work in the same institutions, thus helping to build a critical mass of well-educated staff and managers who can bring about institutional reform' (2008, p. 14). DAAD (2013) have made a similar case concerning their work with the College of Basic Sciences at the University of Nairobi, at which half of the staff had received qualifications through DAAD programs. Current discussions of critical mass tend to be focused on universities and the public sector. For many extant scholarship programs, this is readily explainable by recipients often having already established careers in the public sector or academia prior to their scholarships (e.g. Nijathaworn et al. 2009). Another explanation, ventured by Raetzell and colleagues, is the lack of collaborative support outside of higher education institutions: 'In the business and public sectors, DAAD alumni are usually lone warriors who receive little support from their managers' (2013, p. 42). Clustering of scholarships varies by program, and thus the same thesis may be advanced, mutatis mutandis, for public, private, non-governmental, or even academic sectors in differing circumstances.

Critical mass might also be conceptualized as the influence of alumni networks within geographical spaces, rather than of alumni clustered within specific institutions. Campbell (2016) has explored the role of such networks in Georgia and found that they can provide a dynamic resource for both intellectual and practical collaboration. As Campbell puts it: '. . .alumni networks embodied a "critical mass" that was leading change in the country, with alumni organizations serving as activity hubs' (2016, p. 10). Considered in this way, critical mass may still be created among 'lone warriors' if alumni networks are sufficiently vibrant and the socio-political environment facilitative. Yet there is limited evidence that alumni networks reliably fill this role across the broader landscape of scholarship programs. In the same study, for example, Campbell (2016) found that collaboration among scholarship program alumni in Moldova was widely desired, but little

realized: potentially due to the relatively low return rate of Moldovan scholarship recipients.

The impact of such individual mobility trends on attempts to create clusters is not well researched. At the institutional level, two hypotheses are plausible: (1) individual mobility away from institutions erodes critical mass by dispersing talent across a wider range of institutions or (2) individual mobility facilitates critical mass formation because highly regarded centers (e.g. the College of Basic Sciences) attract scholarship recipients and others to join them. Insufficient evidence is currently available to support either hypothesis. In practice, it is difficult to compare outcomes from clustering and diffusion of scholarship funding. The difficulties faced by 'lone warriors' (Raetzell et al. 2013) may be variously symptomatic of failure to adequately provide post-scholarship support to consolidate gains and (or) the inherent difficulties of the pioneering role that leaders often assume. Both hypotheses above also leave open the possibility that critical mass can be either planned or serendipitous: envisioned by program designers or an emergent outcome within certain socioeconomic contexts. Whether designing critical mass at the program level ultimately yields greater net gains for institutional development than supporting lone pioneers to generate their own critical mass is not currently clear, suggesting this may be a fertile topic for further research.

13.4 Macro-level Effects

Measuring the societal impacts from scholarship programs is a tremendously complex exercise. Even the definition of 'social impact' is a subject of considerable theoretical and practical complexity, as Joan Dassin and David Navarrete explore in the next chapter. Claims regarding impacts within societies or on international relations tend to be the most susceptible to problems of attribution: a difficulty of 'aggregating up' from the level of individuals to much broader social levels. Some evaluation studies (e.g. van der Aa et al. 2012) have distanced themselves from analysis on societal-level outcomes for lack of a sufficiently rigorous evidence base. Most research, however, has attempted to provide commentary on societal impacts, focusing primarily on intermediate outcomes around employment trajectories and using illustrative examples of how these may 'spill-over' into broader impacts. The types of macro-level topics on which evaluators have typically sought to offer comment are twofold: (1) socio-political, economic, and civic development within home countries and (2) impacts on international relations and public diplomacy. This section will consider each in turn.

13.4.1 Socio-political, Economic, and Civic Impacts

Much of the research on scholarship outcomes has shown that the work in which alumni are involved is often either directly or indirectly related to the social and economic development of their home country. Many unambiguously beneficial outcomes have been generated by idiosyncratic initiatives in home communities, as the array of compelling case studies in Mansukhani and Handa's (2013) analysis of the Ford Foundation International Fellowship Program (IFP) in India illustrates. Scholarships are demonstrably effective in these situations because they empower individual pioneers who generate catalytic effects on an ad hoc basis. Assessing whether these are normative program outcomes is more complex, both because counterfactual research is scarce and because idiosyncratic 'pioneering' activities are difficult to compare across the contexts in which they emerge.

More systematic evidence available tends to be positive, but lacking in analytic depth. Almost 85% of respondents in a World Bank Institute (2008) study indicated that at least half of their regular work was related to the development of their home country. Mawer et al. (2016) reported that around a third of survey respondents believed they had influenced government policy, whilst approximately two-thirds had influenced socioeconomic activity. The Norwegian Centre for International Cooperation in Education [SIU] (2015) has also found similar experiences among Norwegian scholarship recipients, with policy-making contributions reported at international, national, and local levels. Even those in the diaspora can be contributing in this way: Marsh and colleagues' (2016) research on African alumni of US colleges indicated that approximately one quarter of alumni currently living outside of Africa were nonetheless employed in positions relating to African development. Notwithstanding these findings, it is difficult to establish whether recipients have made useful and sustainable contributions to their home countries without detailed analysis, usually only available through relatively limited country-level studies (e.g. Penny and Teferra 2010).

To understand the full scope for societal impacts it is helpful to map out the mechanisms through which they may be generated. Wilson (2015) has argued that scholarship programs have two main pathways to yielding broader impacts:

1. Either the individual recipient goes on to be disproportionately powerful in a personal capacity (e.g. as an elected official or senior administrator),

2. Or they otherwise exert a disproportionate influence on public opinion and the actions of others (e.g. as a teacher, journalist, or through public advocacy)

The first pathway is termed the 'elite multiplier' by Wilson (2015, p. 9): the second might reasonably be termed the 'catalytic multiplier'.

There has been ample evidence that scholarship alumni routinely hold leadership positions. In the most recent study of IFP alumni (Martel and Bhandari 2016), 79% of survey respondents held a senior leadership role in their employment or within volunteer work. Similarly, SIU (2015) reported that around 60–75% of graduates from two Norwegian scholarship programs now worked at ministry or other national-level appointments. Atkinson (2015) has noted that, in 2013, 20 alumni of a single US military exchange program were army or defense chief in their home countries, which included developing countries in South and Southeast Asia, Africa, and the Middle East. Holding high office does not guarantee influence on societal-level outcomes, but it may provide greater opportunity to influence policy and implementation. Helping alumni into leadership roles is not merely a prestige outcome for program donors. As Raetzell and colleagues' (2013) have observed, in some countries, it is difficult to lead change from the 'bottom-up' because organizational decisions are rarely taken by individuals, but rather at systemic level by, for instance, government ministries.

Spilimbergo (2008) has argued that elite leaders can positively influence democratic development if well exposed to democratic institutions during international study. A variant of this thesis, ventured by Atkinson (2010), is that reform of basic human rights may be less threatening and more likely to succeed if instigated by elites than when challenged by 'outsiders'. These are arguments for the importance of the 'elite multiplier' in the action of scholarships within social and civic reform. Conversely, there is evidence that civic impacts concerning democratization and engagement with political processes may be driven by the 'catalytic multiplier' as easily as the 'elite multiplier'. Pfutze (2012), for instance, has found a relationship between higher emigration within Mexican municipal regions and greater likelihood of a breakthrough opposition party victory in elections. Similarly, Chauvet and Mercier (2014) offer evidence both for a positive impact on the electoral process (e.g. participation, competitiveness) in Mali from migrants returning from non-African countries, and for the transfer of political norms to other (non-mobile) residents. These are examples of diffusion effects that fit with the 'catalytic multiplier' for broader impacts. It is difficult, however,

to isolate the specific role of scholarship funding, beyond contribution to the general trends linked with mobility and civic social change.

Notwithstanding Atkinson's (2010) argument, there is no guarantee that home country governments would be amenable to socio-political interventions by scholarship recipients. Kalisman's (2015) account of scholarship recipients at the American University of Beirut becoming increasingly politicized and, in some cases, viewed as a subversive force by their sponsor government is a vivid illustration of such socio-political vagaries. We can at least say with some certainty that the socio-political structure of the host and the home country is likely to shape the kinds of societal effects that emerge from scholarship programs (Scott-Smith 2008).

13.4.2 International Relations and Diplomatic Impacts

International relations and political ties are similarly complex, making analysis of impacts from scholarship programs difficult to define and detect. There are too many contingencies to claim a *decisive* political effect for scholarship programs (Scott-Smith 2008). Rather—and the like socio-political, civic, and economic impacts—we can reflect on the weight of any supporting evidence for the two primary mechanisms through which diplomatic impacts may accrue: the 'signaling' of goodwill through the establishment of a program and the activity of the program and its alumni.

Signaling goodwill through the creation of a scholarship scheme is effective, if at all, at the inception of a program: further investment—unless very substantial—is unlikely to increase its political impact (Wilson 2015). Retrenchment or winding up, on the other hand, has the potential to generate significant negative signaling and, perhaps for this reason, public diplomacy-oriented programs are frequently some of the longest running. Few, if any, analyses have been conducted on the signaling impacts of scholarship schemes, and it is not clear how they could be measured. One potential tool may be to gauge the political fallout from non-renewal of scholarship programs. In recent incidences, however, winding-up of scholarship programs has tended to be either as the result of a planned endpoint (e.g. IFP) or has been followed by reinvestment in new schemes with much the same participants. The withdrawal of Australian and Canadian support for the Commonwealth Scholarship and Fellowship Plan (see Kirkland), and expansion and retrenchment of Australia Awards in Latin America (see Kent), however, are relatively current case studies in which the impact on international relations has been understudied.

Recipients' activity during and after scholarship programs is the second major pathway to influencing international relations. Individual alumni, for instance, readily report forming and maintaining persistent ties with their host country (e.g. Nuffic 2009), and counterfactual evidence suggests they are more likely to maintain international contacts than non-recipients (Chesterfield and Dant 2013). Soft power-oriented scholarship programs also frequently claim significant impact from shaping well-disposed future leaders, given the potential for those individuals to influence diplomatic, trade, and military agenda (Kent 2012).

Beyond citing lists of famous alumni, scholarship research has done little to evidence this link, and nor does the relationship appear to be straightforward. Dreher and Yu (2016) have investigated the dual influences of 'affinity' with former host countries and the need to demonstrate political 'allegiance' to home countries among internationally educated leaders of 'non-industrialized' countries. Examining voting patterns at the United Nations General Assembly (UNGA) between 1975 and 2011, Dreher and Yu (2016) show that the leaders were *less likely* to vote concordantly with their former host country, but *more likely* to vote in line with other industrialized countries generally. Forthcoming elections at home also influenced leaders toward voting *less* concordantly with their former host country (Dreher and Yu 2016), suggesting that, at least in this highly public arena, concerns about demonstrating political allegiance can trump feelings of affinity. The impact of internationally educated leaders on economic ties is similarly complex. Using data on foreign direct investment flows, Constant and Tien (2010) have demonstrated that an internationally educated leader is positively associated with higher foreign direct investment for African countries, but only when such flows are already relatively high: there was no effect of internationally educated leaders for countries with low existing investment. Although the absence of clear evidence does not imply the absence of an effect, we should certainly treat claims about the impact of scholarships on high-level political relationships and 'trendsetting' effects on trade as tentative.

More generally, expecting individual ties to shape international relations requires heavy reliance on Wilson's 'elite multiplier' since those individuals would need to be in influential positions domestically. Most scholarship recipients—even given the evidence on leadership activities (see Chap. 9)—are unlikely to be able to shape diplomacy directly, especially at the level of fora such as the UNGA. Given the limitations of personal relationships and direct action by alumni, it may be useful to distinguish between the

connections formed by organizational participants and by individual recipients. Among organizations participating in the JSP, for instance, 79% reported that scholarships had contributed to stronger partnerships between Japan and developing countries (ADB 2007). Institutional partnerships can be important both for their signaling effect and the opening of alternative avenues for dialogue and collaboration, outside of the official foreign policy space.

A similar thesis also underpins science diplomacy—the influence of channels of scientific exchange and cooperation on political dialogue—which shares a common history with scholarship programs: the influence of cold war academic exchanges (see Tsvetkova 2008) is one of several examples. Fostering ties between host and home country academics has generally been more successful than between corporations or government departments (Raetzell et al. 2013), and tangible academic outcomes—primarily joint research and publications—have been reported by some scholarship programs (Mawer 2014). However, evidence on the efficacy of such research partnerships is not always conclusive. Partnerships between Norwegian institutions and institutions from Quota Scheme-eligible countries increased during the program, for instance, but DAMVAD (2012) found that increases were concentrated at institutions that tended to nurture such relationships anyway and the Quota Scheme had relatively little additional effect.

As might be expected, the evidence-base for scholarships shaping international relations is somewhat more a charting of pathways for *possible impacts* than an accounting of *actual impacts*. In this domain, perhaps more than others, we need to temper our expectations of detailed evidences. The signaling impact of scholarships as traditional diplomatic tools is very difficult to establish. Academic connections potentially contributing to science diplomacy are more readily assessed, but their impact at the level of international relations is nearly impossible to quantify. Finally, the influence of powerful individual alumni—heads of state, for instance—is more straightforward to demonstrate, but ascertaining the contribution of a scholarship (perhaps decades prior) to actions whilst in office is highly problematic.

13.5 Final Comments

What, then, do these findings tell us about the overall impact of international scholarship programs? The evidence that recipients experience personal development and professional success is abundant. This is perhaps

most clear where there are structural constraints to progression, such as the need for a doctorate to gain promotion in a local higher education institution. Whilst these outcomes are rarely the headlines of evaluation reports, scholarship programs are almost invariably successful at helping individuals to overcome such constraints because completion of a formal qualification is the main (or only) requirement. In other instances, scholarships facilitate professional advancement by building technical expertise, generating positional advantage for the recipient, or both.

Whether scholarship programs can offer these benefits perpetually is unclear. As recipient country education systems become more well-resourced, and well-regarded, it is likely that some proportional erosion of the positional benefits gained from studying abroad will be observed. Research with South African doctoral graduates, for instance, has indicated that it is the high caliber of the candidates attracted to prestigious foreign PhD programs that is most influential on their future outcomes, rather than a quality difference between the courses studied at high-tier local and foreign institutions (Barnard et al. 2016). It is also important to consider that positional advantage is zero-sum: scholarship recipients hold positional advantage to the detriment of others. When recipients are selected from under-represented or marginalized groups, the effect is rebalancing, but if scholarships are targeted at elites, there is a significant danger of further entrenching existing inequities. One quandary with which ethically sensitive program designers must contend is establishing the balance between influencing change within and through elites, while not simultaneously perpetuating social and economic exclusion.

Evidence on *what* outcomes are achieved by scholarship recipients is often much clearer than on *how* they are achieved. At the individual level, the pathways from funding to positive outcomes are relatively more clear and the evidence-base stronger. Alongside these pathways are greater ambiguities, such as how individual capacity and career progression is embedded in systemic institutional impacts, and how individuals with a positive disposition generate soft power outcomes and stronger bilateral relations. The transfer of individual benefits to the broader levels of institutions and societies is widely hinted at, but rigorous evidence is scarce. Institutional outcomes are more varied than individual outcomes, and contingent factors play an important role in mediating the impacts of scholarships. The 'absorptive capacity' of institutions themselves is crucial, and the results of clustering scholarships within institutions with high absorptive capacity have frequently been encouraging. Yet pioneering social change will not always

be possible within the elite structures of high-prestige research centers or government departments, and thus the efficacy of clustering is likely of more interest to technical capacity-building programs than social equity-focused programs.

From a broader view, both evaluation research and advocates for scholarship schemes have convincingly argued that recipients often undertake subsequent works of public importance. These activities span governance, social and private entrepreneurship, and human development in nearly all fields of endeavor. Additionally, some potentially profound impacts have received less attention than they merit. The influence of the scholarship period on the family of sojourners, for instance, is rarely considered in evaluation. Scholarships to parents of school-age children regularly immerse future generations in the educational milieu and associated socio-cultural perspectives of the host nation (Atkinson 2015; Purdey 2015). This widening of the 'unit' of activity—from individual scholarship recipient to their family and children—routinely goes unstated in evaluation research and may be one of the more important 'hidden' effects of programs.

Ultimately, scholarship programs may lay credible claim to many successes, but discussion concerning which outcomes are idiosyncratic and which are normative remains nascent. The accounts of individual alumni frequently included in evaluation reports are, almost by definition, the exceptional cases: it is unclear to what extent evaluators believe (or should believe) these 'star performers' are illustrative of the broader outcomes of the program. This is perhaps the most significant shortcoming of the research field at present. Like all public policy tools, it is imperative to understand what we should expect from international scholarship programs and what outcomes, however beneficial or impressive, should be considered unintended consequences. The state of research on scholarship outcomes provides a basic evidence-led framework for those expectations, but *only* a basic framework: detailed commentary on complex questions about scholarship outcomes has frequently been beyond the purview of evaluations commissioned for single programs. If it is to address some of these complexities, then scholarship research *must* evolve beyond its foundations to include sustained, comparative, and detailed attention from a community of researchers. The impact of scholarship programs is not solely the calculus of efficiency and effectiveness for individual grant-making bodies; it is a common heritage from decades of public policy implemented in almost every country of the world.

References

Asian Development Bank [ADB]. (2007). *ADB's Japan funds: Japan Scholarship Program,* Manilla: Asian Development Bank.

Atkinson, C. (2010). Does soft power matter? A comparative analysis of student exchange programs, 1980–2006. *Foreign Policy Analysis,* 6(1), pp. 1–22.

Atkinson, C. (2015). The role of U.S. elite military schools in promoting intercultural understanding and democratic governance. *All Azimuth,* 4(2), pp. 19–29.

Barnard, H., Cowan, R. and Müller, M. (2016). *On the value of foreign PhDs in the developing world: Training* versus *selection effects,* UNU-MERIT: Maastricht.

Campbell, A. (2016). International scholarship graduates influencing social and economic development at home: The role of alumni networks in Georgia and Moldova. Current Issues in Comparative Education, 19(1), pp. 76–91.

Chalid, M.N.H. (2014). Soft skills, intercultural competency and transnational education: An Australian-Indonesian case study. *International Journal of Arts and Sciences*, 7(1), pp. 359–373.

Chauvet, L. and Mercier, M. (2014). Do return migrants transfer political norms to their origin country? Evidence from Mali. Journal of Comparative Economics 42 (3), pp. 630–651.

Chesterfield, R. and Dant, W. (2013). *Evaluation of LAC Higher Education Scholarships Program: Final report,* North Bethesda, MD: JBS International.

Constant, A. and Tien, B. (2010), African Leaders: Their Education Abroad and FDI Flows, IZA Discussion Paper no. 5353. IZA, Bonn.

DAAD. (2013), *Knowledge – Action – Change Three alumni surveys in review 25 years of DAAD postgraduate courses,* Bonn: Deutscher Akademischer Austauschdienst [DAAD].

DAMVAD. (2012). *Evaluation of the Quota Scheme 2001–2012 Assessing impact in higher education and development*, Oslo: DAMVAD.

Dong, L. and Chapman, D. (2008). The Chinese Government Scholarship Program: An effective form of foreign assistance?. *International review of education,* 54(2), pp. 155–173.

Dreher, A. and Yu, S. (2016). The Alma Mater Effect – Does Foreign Education of Political Leaders Influence Foreign Policy? CESifo Working Paper Series No. 5871. Munich: CESifo.

Grigg, T. (2016). *The Atlantic Philanthropies-University of Queensland Vietnamese Scholarship Program 2000–2006: Assessing the Impact*, Queensland, Au: Carisgold Pty.

Hinz, S., Scurfield, K., Barabhuiya, F. and Day, R. (2013). *Evaluating Commonwealth Scholarships in the United Kingdom: Assessing impact in environmental sustainability,* London: Commonwealth Scholarship Commission in the UK.

Kalisman, H.F. (2015). Bursary Scholars at the American University of Beirut: Living and Practising Arab Unity. *British Journal of Middle Eastern Studies*, 42 (4), pp. 599–617.

Kent, A. (2012). *Australian Development Scholarships and their place within diplomacy, education and development.*, University of Melbourne: Unpublished Dissertation.

Mansukhani, V. and Handa, N. (2013). *Opening doors: Ten years of the Ford Foundation International Fellowships Program in India,* New Delhi: Ford Foundation International Fellowships Program.

Marsh, R., Baxter, A., Di Genova, L., Jamison, A., and Madden, M. (2016). *Career Choices, Return Paths and Social Contributions: The African Alumni Project, Full Report*, Toronto: The MasterCard Foundation.

Martel, M. and Bhandari, R. (2016). *Social Justice and Sustainable Change: The impacts of higher education,* New York: Institute of International Education.

Mawer, M. (2014). *Trajectories and impact of UK Commonwealth Scholarship and Fellowship Programme alumni: Interim quantitative analysis,* London: Commonwealth Scholarship Commission in the UK.

Mawer, M., Quraishi, S. and Day, R. (2016). *Successes and complexities: the outcomes of UK Commonwealth Scholarships 1960–2012,* London: Commonwealth Scholarship Commission in the UK.

Mellors-Bourne, R., Jones, E. and Woodfield, S. (2015). *Transnational education and employability development,* York: Higher Education Academy.

Něměckova, K. and Krylova, P. (2014). The Czech government scholarship programme for students from developing countries – Evaluation findings and policy reflections. *Evaluation and Program Planning,* 43, pp. 83–92.

Nijathaworn, B., Semblat, R., Takagi, S. and Tsumagari, T. (2009). *Final report of the committee to review the Japan-IMF Scholarship Program for Asia (JISPA),* Washington, DC: International Monetary Fund.

Norad. (2009). *Evaluation of the Norwegian Programme for Development, Research and Education (NUFU) and of Norad's programme for Master Studies (NOMA),* Oslo: Norad.

Nuffic. (2009). *NFP tracer 2009: Final report,* The Hague: Nuffic.

Nugroho, D. and Lietz, P. (2011). *Meta-analysis of AusAID surveys of current and former scholarship awardees,* Melbourne: Australian Council for Educational Research.

Penny, A. and Teferra, D. (2010). *Country evaluation Ethiopia,* Brussels: VLIR-UOS.

Pfutze, T. (2012), Does migration promote democratization? Evidence from the Mexican transition. Journal of Comparative Economics 40 (2), pp. 159–175.

Pietsch, T. (2011). Many Rhodes: Travelling scholarships and imperial citizenship in the British academic world, 1880–1940. *History of Education,* 40(6), pp. 723–739.

Purdey, J. (2015). Investing in good will: Australia's scholarships programs for Indonesian tertiary students, 1950s–2010. In: A. Missbach and J. Purdey, eds. *Linking people: Connections and encounters between Australians and Indonesians.* Berlin: Regiospectra 2015, pp. 111–132.

Raetzell, L., Stern, T., Plutta, K. and Krämer, M. (2013). *Programme area evaluation: Educational Cooperation with Developing Countries,* Bonn: Deutscher Akademischer Austauschdienst [DAAD].

Scott-Smith, G. (2008). Mapping the undefinable: Some thoughts on the relevance of exchange programs within international relations theory. *The Annals of the American Academy of Political and Social Science,* 616(1), pp. 173–195.

Sin, I.L. (2009). The aspiration for social distinction: Malaysian students in a British university. *Studies in Higher Education,* 34(3), pp. 285–299.

Norwegian Centre for International Cooperation in Education [SIU]. (2015). *Graduate tracer study: Norad's Programme for Master Studies (NOMA) and Norwegian Programme for Development, Research and Education (NUFU),* Bergen: SIU.

Spilimbergo, A. (2008). Democracy and foreign education. *The American Economic Review,* 99(1), pp. 528–543.

Strömbom, M. (1989). Evaluation of fellowships awarded to developing countries: What do studies tell?. *Higher Education,* 18(6), pp. 707–724.

Tsvetkova, N. (2008). International education during the cold war: Soviet social transformation and American social reproduction. *Comparative Education Review,* 52(2), pp. 199–217.

van der Aa, R., Willensen, A. and Warmerdam, S. (2012). *Evaluation of the Netherlands Fellowship Programme, 2002–2010: Final report,* Rotterdam: Ecorys.

Webb, S. (2009). *Australian scholarships in Cambodia: Tracer study and evaluation,* Canberra: AusAID.

Wilson, I. (2015). Exchanges and Peacemaking: Counterfactuals and Unexplored Possibilities. *All Azimuth,* 4(2), pp. 5–18.

World Bank Institute. (2008). *Joint Japan/World Bank graduate scholarship program: Tracer study 8,* Washington, DC: World Bank.

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CHAPTER 14

Tracing the Spark that Lights a Flame: A Review of Methodologies to Measure the Outcomes of International Scholarships

Mirka Martel

14.1 Introduction

International scholarship programs in higher education serve an important purpose in shaping the personal and professional pathways of their recipients. An increase in the availability of international scholarships worldwide has furthered interest in learning how these programs measure the outcomes of their interventions (Creed et al. 2012; Mawer 2014). Donors and academic institutions that invest in international scholarships are interested in understanding the potential returns—financial, political, social, or otherwise—on their investments. Recipients of international scholarships, and those interested in applying, would like to know how the opportunity will enhance their lives. Finally, policymakers and researchers in the international education sphere are eager to study whether an investment in an individual scholarship could have a ripple effect that produces impacts beyond that individual.

This chapter provides an overview of evaluation methodologies to measure the effects of investments in international higher education

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scholarships. In writing this chapter, I reviewed a variety of methodologies used to measure scholarship outcomes. Just as international scholarship programs are diverse in their design, the conclusion of my research is that there is no "one size fits all" approach to scholarship evaluation. Methodologies are complex and need to be chosen in a deliberate manner, taking into account important factors, including the program being evaluated and the time and resources available for evaluation. I reviewed over 30 evaluations of existing and former programs worldwide completed in the past 15 years (2001–2016). While most evaluations referenced are of international higher education scholarships that have an academic degree as an outcome measure, several non-degree programs, and secondary education programs, are mentioned for their innovative techniques. I present an overview of methodologies using several analytic lenses: understanding the theory of change; choosing the unit of analysis; the timeline for evaluation; and approaches to data collection. The chapter concludes with the importance of relaying evaluation outcomes to key audiences to improve programs and influence research in the field. There is still much that can be done to publish findings about the added value of programs and how they benefit recipients and their surroundings. Evaluations that are rigorous and transparent in nature provide important evidence to improve policymaking in international higher education and access to innovative and effective scholarships.

14.2 Mapping a Theory of Change

What is the void that international scholarship programs seek to address in higher education and how is this need being fulfilled? And what is the hypothesized change within scholar recipients, as well as other potential beneficiaries, that are affected by these programs? These two questions serve the basis for defining the theory of change of international scholarship and fellowship programs, a necessary first step for determining program outcomes. The theory of change is a detailed narrative of a program's intended change and how it takes place, a methodological tool to trace the desired outcome (Center for Theory of Change 2016). Each international scholarship program serves a purpose; whether it is to provide students with professional skills that will enhance their future careers, open their eyes to the surrounding world through mutual understanding of other cultures, or learn the value of volunteerism and giving back to their communities (Perna et al. 2014). These purposes can be mapped to a theory of change that details how the program will make a difference in the individual's life. For

example, if we posit that an international scholarship program can develop one's professional skills, then the theory of change hypothesizes that the skills ascertained will contribute to one's professional growth and career choices.

Programs that have a well-defined theory of change understand their program's place in the field of international education, and the need that their scholarship addresses. From this point the evaluation methodology outlines *how* the program intends to address this need, whether through changes in the primary beneficiary, the recipient of the scholarship, or secondary beneficiaries, the individual's surroundings. The theory of change enables programs to see a variety of complex relationships between the student that pursues an international scholarship and his or her spheres of influence: the home and host institutions, peers, and the home and host community. Conventionally international scholarship programs that have an individual focus center the theory of change on the individual, as he or she is the primary beneficiary of the program intervention (Boeren et al. 2008); Dassin and Navarette posit alternatives to this approach in the next chapter.

14.2.1 Defining Outcome and Impact Measures

While a theory of change provides a bird's eye view of the transformation that a program sets to achieve, the evaluation methodology specifies the outputs, outcomes, and impacts of the program intervention. In 2012, the Institute of International Education (IIE) conducted a review of foundations and non-profit organizations in the United States that administer large-scale international fellowship programs.[1] We compiled and examined published reports and study methodologies conducted by a variety of social science research institutions. The consensus was that most programs do not have a coherent strategy for tracking and measuring outcomes or impacts over time.

To date, most evaluations of international scholarship programs focus on the scholarship process and short-term outputs, such as rates of completion and program satisfaction (Creed et al. 2012). Although this data is useful to understand the short-term effects of a program, evaluations lack a more focused examination of the medium- and long-term pathways of scholarship recipients. The timing of evaluations is key in determining what effects can be measured (See Fig. 14.1). Since most evaluations occur at one time, usually as a program is finishing or has finished, these cross-sectional

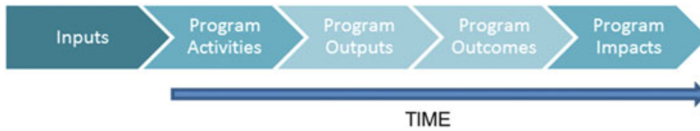

Fig. 14.1 A pipeline graph depicts the progression of program activities to outputs, outcomes, and impacts over time

assessments cannot estimate change over time and instead provide a very limited, one-dimensional view of program outcomes.

14.3 Causality and Contribution

With the theory of change as a first step in defining a program's goal, evaluators next face the methodological quandary of proving that the stated program intervention is causing the intended outcome or impact. Particularly in complex social systems, the difficulty of attribution is a real one: the extent to which a program is able to prove, with a level of certainty, that the intervention was the cause of change in a recipient's outcomes is often limited. Given that international scholarship programs at the tertiary level involve scholars who are young or mid-level professionals, the issue of external validity is pertinent, that is, the ability to show that external factors are not influencing the scholarship recipient in combination with, or in lieu of, the program itself (Bamberger et al. 2011). Two methodologies that attempt to address issues of causality in complex systems are counterfactual and contribution analyses.

14.3.1 Counterfactual Approaches

Discussion of anticipated change from an international scholarship program necessitates consideration of the counterfactual: What would have been the pathway of the scholar had he or she *not* received the scholarship? Evaluation methodologies that employ a counterfactual design, such as randomized control trials (RCTs), can definitively measure the change related to the program intervention (Gertler et al. 2011; Jadad and Enkin 2007). In international education, counterfactual studies have mostly been implemented in basic education programs, in which randomized education interventions among students at the primary level are compared to counterparts who do not participate in the treatment (see, e.g., Banerjee et al. 2005).

These interventions isolate the program intervention on a clearly determined quantitative outcome variable, such as subsequent test scores.

In international scholarship programs, these types of studies have been very rare due to two limitations. First, most international scholarship programs choose students because of various criteria that span academic, professional, and social distinctions, and as such very few recipients are randomly chosen. Thus, it is difficult to identify a cohort of students that can serve as a comparison group that would be identical to the recipients' characteristics. Further, at the tertiary level most students already have extensive years of education and social conditioning that compel them to consider an international scholarship; it is difficult to determine that students who are chosen for a comparison group would have been interested in, or chosen for, the same scholarship program.

While noting these limitations, it is my belief that investments in comparative studies could yield important evidence about the advantage of scholarship programs. Several examples can illustrate the possibilities. In 2013, the US Agency for International Development conducted a retrospective evaluation of the SEED higher education program that compared recipients of the scholarship to individuals who had applied to the program but were unsuccessful (Chesterfield and Dant 2013). The unsuccessful applicants chosen had the closest individual profile to scholarship recipients and thus were comparative to the trajectories of scholarship recipients. In 2008, AFS conducted a study to measure the long-term impacts of their study abroad programs by comparing program alumni to their peers 25 years following their study abroad experience (Hansel and Chen 2008). Even earlier, in 1993, IIE conducted a study of the Japan-US Fulbright program and compared differences between Fulbright recipients from Japan and the US and their non-program colleagues (Uyeki 1993). These evaluations demonstrated the positive outcomes of program participants *in comparison* to plausible counterparts.

All three of these evaluations have one major caveat: the comparison group was constructed retrospectively, meaning *after* the program finished. To improve the precision of the evaluation, the counterfactual should be constructed along with the program from its inception. IIE's Higher Education Readiness (HER) Program in Ethiopia, for example, created a quasi-experimental design to compare scholarship recipients to non-participants (Valuy and Martel 2016). The selection process included two phases. First, the scholarship applicants were screened for eligibility to ensure that all study participants met the criteria of the scholarship. Thereafter the top

candidates were chosen for the intervention, while all others were included in the comparison group. A baseline survey was conducted to capture academic differences between the two groups prior to intervention. IIE conducted a quantitative difference-in-difference analysis to reveal variation in academic outcomes between scholarship recipients and the comparison group. Counterfactual program designs are also being implemented by the MasterCard Foundation Scholars Program and the Commonwealth Scholarship Commission in the UK, though these studies are ongoing and have not published full findings.

Evaluations that employ a counterfactual analysis in international scholarship programs will likely increase in the future, given the focus on and interest in this type of research. These methodologies will need to grapple with the limitations of scholarship design and selection, as well as the external factors that may influence recipients over time.

14.3.2 Contribution Analysis

Debates over whether randomized control trials are a valid methodological option in complex social environments have led some researchers to consider alternative approaches to studying program outcomes (Cook et al. 2009; Mawer 2014). One such approach is contribution analysis, which focuses on the additive value of a program without discounting the effect that external factors may have on the beneficiaries. As a leading advocate of contribution analysis has noted: *In assessing attribution, contribution analysis does not use a counterfactual-based argument, but rather builds a case for reasonably inferring causality, recognizing that in many situations one cannot prove causality in the positivist tradition* (Mayne 2011, p. 6). Its use in international scholarship programs has been limited, as discussed by Mawer (2014). The United Nations handbook for evaluations mentions the methodology, though no examples of the methodology being used in practice were found (Rotem et al. 2010). Contribution analysis was also used in a hybrid evaluation approach to two international education programs in the Netherlands: the Netherlands Programme for Institutional Strengthening of Post-secondary Education and Training Capacity (NPT) and the Netherlands Initiative for Capacity development in Higher Education (NICHE) (Ramboll Management Consulting 2012).

The importance of clearly defining a methodology for measuring the program theory of change in any evaluation cannot be overstated. Contribution analysis is an approach that could be studied further in this regard.

While some evaluations I reviewed could be considered examples of contribution analysis, no evaluations save one (NPT and NICHE) mentioned the methodology outright. As a result, this type of analysis warrants more research and evaluations that employ the approach to measure their program outcomes.

14.4 Setting a Unit of Analysis

Evaluations that set out to measure program change must adequately trace the outcomes of an international scholarship opportunity to the program activities. The goal of most graduate scholarship programs is to enable the participant to increase his or her potential in the workforce, the community, and ultimately society. There is an added dimension of *international* programs: some programs posit that the intervention is meant to increase mutual understanding, while others have a broader goal to influence development impacts in the host or home communities (Boeren et al. 2008). Many program implementers share a desire to document impacts that go beyond the individual experience.

14.4.1 Measuring Outcomes at the Individual Level

A majority of international scholarship evaluations focus on individual recipient outputs and outcomes. The evaluations reviewed demonstrated a spectrum of rigor. Methodologies that study change in the individual usually focus on (1) scholarship completion and satisfaction, (2) change in academic and professional attributes, and (3) change in personal attitudes or beliefs. All these methodologies have in common that the primary purpose is to measure the benefits of the scholarship to its recipient.

- **Scholarship completion and satisfaction:** Most scholarship programs have ample statistics about the completion rates of their students, and this quantitative data is often used to justify program success. Unfortunately, program completion rates offer a very limited look into the outcomes of the scholarship. While all recipients may successfully complete their scholarship, the program may lack information about the recipients' reflections on the scholarship. For this reason, many organizations have also employed methodologies that survey students at the end of the scholarship to rate their satisfaction with their program. Further, these surveys are useful program

management tools, as programs can adjust and improve their implementation in consequent cycles (Kusek and Rist 2004).

- **Change in academic and professional attributes:** Methodologies that go beyond program satisfaction offer a more detailed look into the recipient's experience. However, these evaluations require more time and resources. Methodologies with the most advanced approach employ a pre-post design, surveying recipients at the beginning and end of their scholarship opportunity. For example, the USAID LOTUS Scholarship Program in Egypt requires scholarship recipients to take English proficiency tests at the beginning and end of their scholarship to measure language improvements (Institute of International Education 2016). The Boren Awards, sponsored by the National Security Education Program (NSEP), provide language learning opportunities for US students abroad. The program recently published a rigorous 15-year study of oral proficiency gains among its scholars (Mason et al. 2015).
- **Change in personal attitudes or beliefs:** Scholarship programs that have an international component expose the scholar to an environment other than his own. Some programs, particularly those sponsored by governments, are interested in increasing mutual understanding and measure impact related to citizen diplomacy (Bhandari and Belyavina 2011). Programs are interested in understanding whether scholarship recipients have changed their views of cultures other than their own. US Department of State programs (e.g., Visiting Fulbright Student Program, Benjamin A. Gilman International Scholarship Program) include survey outcomes related to scholars' cultural exposure and feelings of mutual understanding (SRI International 2005; Research Solutions International 2016). The Erasmus Mundus program, sponsored by the European Union, reports on changes in mutual understanding as well (PPMI 2012).

Methodologies that explore individual change may also focus on thematic elements. For example, many scholarship programs have a leadership component and focus on emerging leaders as their primary beneficiaries. These programs evaluate change in leadership through pre- and post-program assessments that use indices specified by the donor or implementing organization. Leadership assessments have been carried out in evaluations of IIE's Higher Education Readiness (HER) program (Valuy and Martel 2016), PACT International's Girls Youth Development in

Action (CARE 2009), and the Gates Foundation Millennium Scholars Program (Amos et al. 2009).

14.4.2 Measuring Outcomes Beyond the Individual

The importance of measuring outcomes beyond the individual is to understand how a scholarship program with an individual focus may contribute to effects in the scholar's spheres of influence. In the short term, programs may have evidence that a student will finish his or her degree after scholarship completion, return to his or her country, and obtain employment post-graduation. Beyond this, however, few programs delve into key questions: "What did beneficiaries do with their scholarship success?" or "How did scholarship recipients use their knowledge gained to bring about social change?" To answer these questions practitioners must explore methodologies that define and measure change from the individual to the communal.

Kirkpatrick Model
A useful methodology that maps individual to communal change comes from a revised model of Donald Kirkpatrick's (1979, 1994) Four Levels of Evaluation. Kirkpatrick's model describes the levels of impact that measure change resulting from an academic experience, ranging from a short-term training to a full-degree program. The model outlines levels of change starting from the individual and proceeds to measure change at the institutional level. Adaptations of the Kirkpatrick model have been used in evaluations of several international scholarship programs, including the USAID ATLAS/AFGRAD program (USAID 2004) and the Canadian Francophone Scholarship Program (CIDA 2005). The USAID program evaluation was the first to add a fifth level to measure *impact that may occur beyond institutional boundaries, for instance, in a sector, or at the national, regional or international level* (p. 87). A recent IIE publication of the International Fellowships Program (IFP) tracking study includes a graphic representation of the revised Kirkpatrick model with this fifth level of impact that measures broader societal impact (Martel and Bhandari 2016) (Fig. 14.2).

As noted earlier, the theory of change often stems from the individual experience and maps outcomes on the organization or community. Kirkpatrick's methodology is useful in that it de-emphasizes the individual as the only possible change outcome. Many studies end at Kirkpatrick's level one or two, assessing the impact solely at the individual level. Kirkpatrick, rather, focuses on the application and behavioral transfer of knowledge to

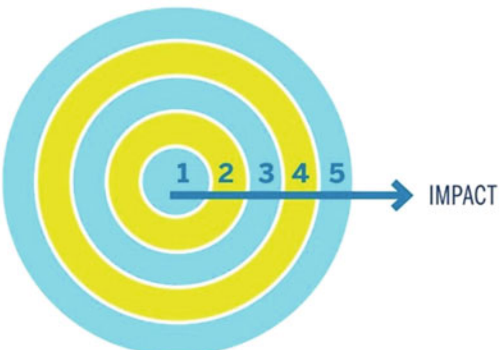

Fig. 14.2 A revised version of the Kirkpatrick model focuses on two levels of potential impact beyond the individual: organizational and external (societal)

one's environment or secondary beneficiaries. Further, Kirkpatrick's model is *goal based*, meaning that the model identifies the intended goals of the intervention, but does not necessarily evaluate the processes to achieve those goals. This is different from a system-based approach, where each goal is examined based on the process by which one achieves it. Therefore, the model allows the flexibility to approach program success based on outcomes.

Kirkpatrick's levels generally follow the progression of program outputs, outcomes, and impacts over time. The crux of the Kirkpatrick model for assessing wider impacts comes in level three: the *application* of the scholar's new knowledge in his or her surrounding environment. This level is a necessary channel for transfer from the individual to the communal. If the scholar does not apply what he or she has learned as a result of the scholarship, then program outcome ends at the "individual level" (levels one and two). If application takes place, we can analyze the scholar's pathways through various prisms: how the scholar's actions lead to change at the organizational, communal, or societal levels.

Social Network Analysis

Students who participate in a scholarship program are introduced to various networks during their program experience. These networks can be analyzed further to understand how the relationships of the scholar deepen over time and how they enable changes in his or her choices after the scholarship. Networks are a resource for scholars to apply and share their knowledge, and therefore networks map to the Kirkpatrick model. Further, the effect of scholarship networks has a causal relationship to the program intervention. In other words, the scholar would not have exposure to these networks were it not for the scholarship opportunity. As a result, methodologies that explore these networks can conclude that the impact of the network is solely attributed to the scholarship.

Social network analysis (SNA) is a methodology that can be used to study how program recipients are leveraging their networks. SNA is a tool in modern sociology to identify the links between individuals in various social systems (Scott and Carrington 2011). It can also be used in monitoring and evaluation to probe deeper into the power of social interactions. Using SNA, programs are able to measure and depict how well the program supports development of scholar networks (see Fig. 14.3). Through qualitative analysis, programs can also analyze how current scholars and alumni use networks for change (Tvaruzkova 2012).

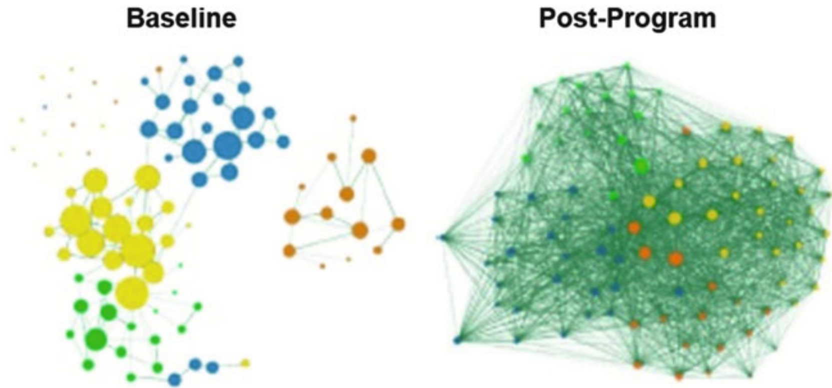

Fig. 14.3 A sociogram depicts the social networks among scholars before and after a scholarship program. Circle size is larger for scholars with more connections. Each line is a connection between two scholars

There are many different types of networks that are associated with an international scholarship. First, the participants of a scholarship program, and alumni of that program, constitute a primary program network. For example, the Fulbright Program has an extensive program network that is comprised of current scholarship recipients and thousands of alumni. All these students and scholars together share a common characteristic (receipt of a Fulbright scholarship) and can be analyzed based on their network's properties. Scholarship recipients that study internationally also have a new network in their host community, whether academic or social. Students visit international campuses and meet host students, faculty, and families, all of whom participate in a new network for the scholarship recipient. Finally, the various stakeholders of the scholarship program, including the donors, home academic institutions, and home communities can also include key networks.

The influence of networks can be measured in various stages. A program that focuses on networking, such as the Seattle International Foundation's Centroamerica Adelante Program (Valuy 2016) can measure how participants are interacting with each other, how many of the relationships are reciprocal, and which relationships are stronger than others. Information about networks can then be contextualized to understand how effective networks are, whether they lead to a potential for collaboration or joint projects. Several programs have been able to show that program networks lead to significant outcomes and new collaborations among its recipients

and alumni (Martel and Bhandari 2016; Marsh et al. 2016). Ideally, programs use both quantitative methods to measure the networks created and qualitative methods to analyze the significance of these networks, areas for collaboration, and network sustainability.

14.4.3 Outcomes for Multi-country Programs

International scholarship programs in higher education include recipients and scholars from many different countries and contexts; evaluations of these programs need to consider how any methodology may be implemented in the international context. Bamberger (1999) and Bamberger et al. (2011) have discussed the challenges of conducting cross-cultural evaluation. Two considerations addressed are the extent to which various stakeholders are involved in the evaluation methodology, and the close attention evaluators should be paying to local customs and values. Large-scale programs that employ a global evaluation methodology may find that practices and methods used in one context may be largely inappropriate in another. Evaluators must consider cultural sensitivity, and while the overall methodology has a "global" face, the "local context" must not be understated. Above all, multi-country evaluations must take into consideration cross-cultural sensitivity in data analysis (Chouinard and Cousins 2009). As a result, most evaluators advocate for a mixed methods approach in multi-country evaluations, in order to sequence and present outcomes that are cross-cutting without losing more in-depth information about local experiences and outcomes (Bamberger et al. 2011).

14.5 A Timeline for Evaluation

Evaluations of international scholarship programs take place at different times, based on when they are commissioned, the financial resources that are at their disposal, and the extent to which monitoring and evaluation is considered in the program design. Many current evaluations are one-time assessments at the end of the program funding cycle. This is understandable, as these types of evaluations require the least time and resources. Further, donors are often eager to learn early the short-term outcomes of the program. However, as already mentioned, these evaluations are frequently limited in their design and rigor. Most importantly, they are not able to measure adequately the outcomes and impacts of international scholarship programs over time. I advocate for a more nuanced approach to

international scholarship evaluation, specifically in considering the timeline for evaluation.

14.5.1 *Retrospective Alumni Study*

An augmentation to the conventional, post-program evaluation is to conduct an impact study several months, or years, following the participant's program experience. Most program outcomes and impacts are linked to change that will take place over time after the program has completed, and thus evaluations that take place immediately at the end of the program cycle simply cannot measure these outcomes. At most, evaluators can capture data on what alumni intend to do with their scholarship experiences; however, there is no opportunity to learn whether these intentions come to fruition. Retrospective alumni studies allow programs to study the potential impact of the program intervention beyond the individual. The Schlumberger Foundation, for instance, conducted a 10-year retrospective evaluation of its Faculty for the Future Program (Institute of International Education 2015). The program dispersed scholarship opportunities to women in science and technology in developing countries. An evaluation ten years later provided evidence about the impact of the program participants in teaching and publishing in their home countries, mentoring students in science and technology, and inspiring the next generation of women scientists. The value of both assessments in conducting data collection after program intervention was that the evaluators were able to trace program alumni pathways home and discuss potential outcomes and impacts on the home communities of scholars.

While the scope of this type of evaluation is comparable to a post-program evaluation, the timing and resources may be more complex given that the evaluation takes place when alumni are no longer associated with the program. Additional resources may be required to track alumni. This is further exacerbated when the program concludes and no one maintains contact with the alumni. These types of evaluations should account for ample time and resources to track alumni prior to data collection and should consider incentives for alumni to participate in data collection.

14.5.2 *Longitudinal Study*

A further level of rigor is to collect data on international scholarship outcomes and impacts at various points in time; in this chapter I will focus on

longitudinal studies that take place after a program has finished. Longitudinal studies aim to systematically analyze the lasting or significant changes—positive or negative—in people's lives brought about by a given action or series of actions. A longitudinal study of international scholarships focuses on the program participants and their pathways over time. This type of study offers a detailed view of the changes in the scholars' lives during and after the program, and the extent to which the program intervention may have contributed to these changes. Further, longitudinal studies allow programs to anchor outcome measures over time. Evaluators can gather data on program outcomes at various points in time in a comparable way, with the potential to have baseline data prior to the program intervention.

As Creed et al. (2012) have indicated, longitudinal tracking studies are not common in international scholarship programs in higher education. The financial burden of conducting a longitudinal study often makes this an unwelcome choice for donors. Since longitudinal studies take several years before data is available, the high costs and time investment required can make them unattractive to funders and program implementers alike. As a result, most programs resort to one-time assessments and evaluations. The second difficulty of measuring program impact longitudinally is related to the question of causality, that is, the ability to attribute long-term impacts to the initial scholarship experience. If a student volunteers at an organization 10 years after their initial scholarship experience, can one attribute this decision back to the scholarship opportunity? In the 10 years, it is undoubtedly true that other external factors may have influenced the participant and his or her opportunities and choices.

Despite these challenges several studies have implemented longitudinal designs on a large scale. IIE's work conducting a 10-year tracking study of the Ford Foundation International Fellowships Program (IFP) has given us the opportunity to study long-term impacts on over 4300 alumni worldwide (Martel and Bhandari 2016). The first findings of the study collate survey outcomes from all 22 countries where the program was implemented. The next phase of the evaluation includes a qualitative approach in which local researchers are conducting case studies in select countries. This mixed approach allows for the combination of global perspectives (quantitative) and local applications (qualitative). The MasterCard Foundation is also conducting a rigorous, 10-year study of the MasterCard Scholars Program (Cosentino et al. 2015). This longitudinal study is taking place during the program's implementation and uses a counterfactual design to measure differences over time between program participants and

non-participants. Early results point to significant differences between the two groups, though these results are based on very small sample sizes (MasterCard Foundation 2016).

Both IIE and the MasterCard Foundation are using innovative approaches in longitudinal studies to collect mixed methods data over long periods of time. The two studies focus on the participants of the program and their personal trajectories, and the extent to which the program interventions may contribute to life choices and opportunities. Both programs have also integrated opportunities for participant and alumni engagement, whether through networking events or alumni awards, as effective ways to maintain interest among alumni beyond the fellowship or scholarship. These techniques address the limitations of engaging with large samples of beneficiaries over time in data collection.

14.6 Data Collection Methods

Data collection methods are the means by which evaluators collect information from various evaluation participants, including scholarship participants, their peers, institutional partners, and various other stakeholders. Each evaluation should use the data collection methods that are most suitable for exploring the study's methodology. To date, most evaluations simply use data collection methods that are readily available and used often, such as surveys and interviews. While there is no doubt these methods are useful, ideally researchers should have the time to consider the evaluation methodology and which methods will best explore the outcomes and impacts of a program. This will ensure that each program evaluation identifies the best methods suitable for its purpose.

It cannot be underestimated that the choice of data collection methods is also strongly influenced by the time and resources available for evaluation. For example, online surveys are a timely and relatively inexpensive method to collect large amounts of data. On the other end of the spectrum, oral histories or narratives, or ethnographic research, can take years and significant resources to collect. Ideally, each program should take into consideration the time and resources available for evaluation, and based on this determine most appropriate methods.

14.6.1 Quantitative Methods

Web-based and paper surveys continue to be the most prevalent method used to collect data about international scholarship participants. Most programs conduct surveys because they are relatively low cost and can be collected across different countries, cohort years, and various mediums. Surveys are most suitable when evaluators are interested in collecting cross-sectional data from large numbers of evaluation participants. As international scholarship programs often include scholars from various countries, surveys are an ideal tool to collect information across multiple locations. Most surveys include specific questions that probe for outcome and impact measures. Some program evaluators also construct matrices to measure outcomes for character attributes or opinions.

Surveys have two limitations that evaluators should anticipate: selection bias and self-reported findings. The first is an issue of survey response. Most surveys conducted to measure social outcomes and impact take place after a program has ended and the survey participants are no longer associated with the program. Even if a sampling scheme is in place, survey participants still participate in surveys on a voluntary basis. Self-selection bias stems from the possibility that some scholarship alumni could be disproportionately more likely to respond to the survey. A particularly common concern is that participants who had a particularly positive or negative experience may be more likely to respond than those who had less “extreme” experiences. In analyzing program outcomes, evaluators must keep this limitation in mind. A further limitation of surveys is that respondents self-report their answers. It is difficult to verify the information provided by respondents, especially when they are the sole source of data collection. When possible, it is preferable to collect data from more than one source, and from more sources than just the program scholars, so as to triangulate and confirm program outcomes and impacts from various different stakeholders.

Impact beyond the individual is difficult to measure without information from secondary sources, other than the program participant. One method being used to mitigate self-reporting bias in the case of alumni working in research and academic roles is bibliometric analysis. This type of analysis aims to quantitatively measure the impact of published academic writing. A recent evaluation of the National Science Foundation’s Partnerships for International Research and Education (PIRE) Program, for instance, conducted a bibliometric analysis to compare the relative impact of PIRE projects and other similar projects (Martinez et al. 2015). The evaluators

were able to compare field- and journal-specific impact of academic writing without relying only on self-reported data. However, this method has its limitations. Bibliometric analysis is limited to the reference library used in the citation search; reference libraries may not readily include all published sources worldwide, particularly journal articles written in regions outside the Western Hemisphere, and work completed in languages other than English.

14.6.2 Qualitative Methods

Interviews, focus groups, and case studies provide deeper understanding of the change that take place resulting from an international scholarship learning opportunity. While surveys can help practitioners understand comparable outcome measures, qualitative methods allow evaluators to delve deeper to understand the context of the anticipated and actual change among program participants and their spheres of influence. Qualitative research is time and labor intensive, and as such is less prevalent. However, several qualitative evaluations have highlighted the outcomes and impact of scholarship programs by exploring in depth the trajectories of program participants.

Innovative techniques are being used in qualitative methods to expand on outcomes and impacts beyond the individual scholarship experience. Participatory action research has been used to understand how the individual change among scholarship recipients can lead to collective change (Hofmann-Pinilla and Kallick Russell 2009; Chen et al. 2010). Scholarship recipients participate in a series of workshops to express the change they have undergone as a result of their opportunity and in groups (or otherwise) discuss the larger impacts of the program intervention. This method allows evaluators to collect data not only from individual participants, but also from groups of scholarship recipients who participate in the workshop together. Participatory action research advocates for alternatives to traditional question-answer methods, using modes such as drawing to allow participants to express their transformation. This powerful tool can guide scholarship recipients through the transformative process of documenting change from the individual to the communal.

Many program evaluations have combined quantitative and qualitative methods in some way, collecting data from surveys and interviews to satisfy specific purposes. The IFP alumni tracking study is deliberately sequencing quantitative and qualitative collection to allow the research team to collect

more broad, cross-cutting data first, followed by more in-depth qualitative data collection (Martel and Bhandari 2016). Mixed methods are a worthwhile tool in scholarship evaluation, but these methods should be used in a deliberate manner: simply using quantitative and qualitative methods in one evaluation does not constitute a rigorous mixed methods study. Evaluators should consider how to employ quantitative and qualitative methods, in what order, and how one set of data will inform the other. The most rigorous mixed methods studies clearly articulate how quantitative and qualitative data is integrated (Hesse-Biber 2010).

14.7 Conclusions: Analyzing Data for Meaningful Outcomes

The outcomes of an evaluation are not only important to the accountability and transparency of a program. They are also valid tools for learning, both for the program itself and other practitioners in the field. The last section of this chapter advocates for the necessary exposure of evaluations to key audiences for the purposes of learning. Evaluations can enable donors, practitioners, programs, and their participants to improve policy and practice over time. While measuring outcomes and impact is but one domain of inquiry, the field remains severely limited due to the inability of evaluations in international scholarship programs to contribute to learning and ongoing improvement of practices. As such, evaluators and practitioners must continue to advocate for methodologies and evaluations that are public and widely available, and that are used for furthering the field.

Too often evaluations of international scholarship programs are completed and remain for internal use of donors only. In conducting research for this chapter, I came across several evaluations of major international scholarship programs that remained internal documents. It is important to emphasize that donors are not the *only* viable audiences for evaluation outcomes. As desire for measuring outcomes of programs increases among researchers, practitioners, and scholar participants, these audiences are equally eager to learn the outcomes and impacts of evaluations.

- **International higher education scholarship practitioners**: Evaluations can allow programs to learn ways that they can improve the program experience: the overall program design and its implementation. It can also provide recommendations for how to improve the

measurement of outcomes and impacts on scholars. Finally, evaluations have a valuable function for validating the hard work of program staff, the dedication of a program to make changes that contribute to scholars and their home and host communities.

- **International higher education donors**: Another key audience for evaluations are other program donors in the field. Evaluations provide concrete evidence that allows practitioners in the field to learn about the advantages of certain program interventions, and challenges and pitfalls of others. This can allow programs to work together to learn from each other, and avoids programs repeating mistakes. Evaluations can build a community around the shared value and importance of international higher education scholarship programs.
- **Researchers and evaluators:** At the onset of the chapter I discussed the potential of evaluation to expand the research field of inquiry around the value of international scholarships. The value of public evaluations means that credible research is developed on international scholarship practices. While the methodologies mentioned in this chapter vary in their rigor, one continuous thread throughout is that they rarely build on each other, meaning there is a lack of collaborative learning in the evaluation community. As a result, a key audience for expanding evaluation methodology is a community of learning among evaluators of these types of scholarship programs. There is also a key desire to connect the research done on these types of programs to international education more broadly.
- **Scholarship and evaluation participants:** Scholars participating in scholarship programs or interested in a scholarship program can benefit from learning the findings of evaluations to understand the potential benefits and challenges they may face in pursuing an international scholarship program. Scholars currently enrolled in a scholarship program are the participants surveyed or interviewed for data collection. It is important to consider the ethical responsibility that evaluators have to these participants, not only in having their voice heard in an accurate, responsible way but also in allowing them to learn the results of the evaluation once it is finished. More evaluators should make this commitment both with sponsors and participants, as it allows evaluation participants to read the outcomes of the evaluation and confirm that their opinions were adequately captured. This holds sponsors and evaluators accountable to pursuing an evaluation that is reflective of respondents, and not biased to client-driven outcomes.

Evaluators of international scholarship programs in higher education have an ethical responsibility to their respondents to accurately portray the evaluation findings. As such, these researchers must continuously ask themselves what purpose the evaluation serves and whose voice is being included or discounted. This is particularly important in scholarship programs that are aiming to increase equity and access to higher education. Equity-focused scholarships must be matched with evaluations that underscore the importance of transparency and accountability in evaluation. This will allow practitioners and evaluators to learn from findings and find appropriate solutions and policies to increase opportunities for international scholars in the future.

Note

1. While the report conducted by IIE was internal, the topics that emerged were discussed in a roundtable held at the Institute in December 2012 and were outlined on IIE's blog: http://www.iie.org/Blog/2012/December/Alumni-Tracking#.V-CODc6cHIU

References

Amos, L.B., Windham, A, de los Reyes, I.B., Jones, W., and Baran, V. (2009). *Delivering on the promise: An impact evaluation of the Gates Millennium Scholars Program*. Washington, DC: American Institutes for Research.

Banerjee, A., Cole, S., Duflo, E. and Linden, L. (2005). *Remedying education: Evidence from two randomized experiments in India*, No. w11904, National Bureau of Economic Research. Available at: http://www.nber.org/papers/w11904.pdf (Accessed 23 Jan 2017).

Bamberger, M. (1999). Ethical Issues in Conducting Evaluation in International Settings. *New Directions for Evaluation*, 82, pp. 89–97.

Bamberger, M., Rugh, J. and Mabry, L. (2011). *RealWorld evaluation: Working under budget, time, data, and political constraints.* Thousand Oaks, CA: SAGE Publications, Inc.

Bhandari, R. and Belyavina, R. (2011). *Evaluating and measuring the impact of citizen diplomacy: Current status and future directions.* New York: Institute of International Education.

Boeren, A., Bakhuisen, K., Christian-Mak, A.M., Musch, V. and Pettersen, K. (2008). *Donor policies and implementation modalities with regard to international postgraduate programmes targeting scholars from developing countries.* Brussels: Vlaamse Interuniversitaire Raad.

CARE. (2009). *Girls' leadership development in action: CARE's experience from the field*. Available from: http://www.care.org/sites/default/files/documents/EDU-GE-2012-Girls-Leadership-Development-in-Action.pdf (Accessed 1 August 2016).

Center for Theory of Change. (2016). *Center for Theory of Change home page*. Available from: www.theoryofchange.org (Accessed 1 September 2016).

Chen, P., Weiss, F. L., Nicholson, H. J. and Girls Incorporated (2010). Girls Study Girls Inc.: Engaging Girls in Evaluation through Participatory Action Research. *American Journal of Community Psychology*, 46(1–2), pp. 228–237.

Chesterfield, R., and Dant, W. (2013). *Evaluation of LAC higher education scholarships program: Final report*. Washington, DC: U.S. Agency for International Development.

Chouinard, J.A. and Cousins, J.B. (2009). A Review and Synthesis of Current Research on Cross-Cultural Evaluation. *American Journal of Evaluation*, 30 (4), pp. 457–494.

CIDA. (2005). *Evaluation of the Canadian Francophone Scholarship Program (CFSP), 1987–2005*. Quebec: CIDA.

Cook, T.D., Scriven, M., Coryn, C.L. and Evergreen, S.D. (2009). Contemporary thinking about causation in evaluation: A dialogue with Tom Cook and Michael Scriven. *American Journal of Evaluation*, 31(1), pp. 105–117.

Cosentino, C., Rangarajan, A., Sloan, M., Fortson, J., Moorthy, A., Humpage-Liuzzi, S. and Thomas, C. (2015). *Monitoring, Evaluation, and Learning Design for The MasterCard Foundation Scholars Program*. Washington, DC: Mathematica Policy Research.

Creed, C., Perraton, H and Waage, J. (2012). *Examining development evaluation in higher education interventions: a preliminary study*. London: London International Development Centre.

Gertler, P.J., Martinez, S., Premand, P., Rawlings, L.B. and Vermeersch, C.M. (2011). *Impact evaluation in practice*. Washington, DC: The World Bank.

Hansel, B. and Chen, Z. (2008). *AFS long term impact study, 20 to 25 years after the exchange experience, AFS alumni are compared with their peers, Report 1*. New York: AFS International.

Hesse-Biber, S.N. (2010). *Mixed methods research: Merging theory with practice*. New York: Guilford Press.

Hofmann-Pinilla, A. and Kallick Russell, J. (2009). *Evaluation of the Leadership Development for Mobilizing Reproductive Health Program, Final Report Executive Summary*. New York: Research Center for Leadership Action.

Institute of International Education. (2015). *Schlumberger Faculty for the Future: Program impact study*. New York: Institute of International Education.

Institute of International Education. (2016). *LOTUS Annual Progress Report FY2016*. Cairo, Egypt: IIE Cairo.

Jadad, A.R. and Enkin, M. (2007). *Randomized controlled trials: questions, answers, and musings* (2nd ed). Malden, MA: Blackwell Publishing.

Kirkpatrick, D.L. (1979). Techniques for evaluating training programs. *Training and Development Journal,* 33 (6), pp. 78–92.

Kirkpatrick, D. L. (1994). *Evaluating training programs: the four levels.* San Francisco: Berrett-Koehler.

Kusek, J.Z. and Rist, R.C. (2004). *Ten steps to a results-based monitoring and evaluation system: A handbook for development practitioners.* Washington, DC: The World Bank.

Marsh, R., Baxter, A., Cliff, R., Di Genova, L., Jamison, A. and Madden, M. (2016). *Career choices, return paths and social contributions: The African alumni project, Abridged report.* Toronto: The MasterCard Foundation.

Martel, M. and Bhandari, R. (2016). *Social Justice and Sustainable Change: The Impacts of Higher Education, Ford Foundation International Fellowships Program Alumni Tracking Study Report No. 1.* New York: Institute of International Education.

Martinez, A., Epstein, C. and Parsad, A. (2015). *Evaluation of the National Science Foundation's Partnerships for International Research and Education (PIRE) Program, Volume 1: Final report.* Cambridge, MA: Abt Associates.

Mason, L., Powers, C. and Donnelly, S. (2015). *The Boren Awards: A Report of Oral Language Proficiency Gains during Academic Study Abroad.* New York, NY: Institute of International Education.

Mawer, M. (2014). *A study of research methodology used in evaluations of international scholarship schemes for higher education.* London: Commonwealth Scholarship Commission in the United Kingdom.

Mayne, J. (2011). Addressing cause and effect in simple and complex settings through contribution analysis, in Forss, K., Mara, M., and Schwartz, R. (eds), *Evaluating the complex: Attribution, contribution and beyond.* New York: Transaction Publishers.

Perna, L., Orosz, K., Gopaul, B., Jumakulov, Z., Ashirbekov, A., and Kishkentayaeva, M. (2014). Promoting human capital development: A typology of international scholarship programs in higher education. *Educational Researc*her, 43(2), pp. 66–73.

PPMI. (2012). *Interim evaluation of Erasmus Mundus II (2009–2013)*, Brussels: European Commission Directorate-General of Education and Culture.

Ramboll Management Consulting. (2012). *Final report: Evaluation of NPT and NICHE.* Berlin: Ramboll Management Consulting.

Research Solutions International. (2016). *The Benjamin A. Gilman International Scholarship Program Evaluation Report.* Washington, DC: U.S. Department of State, Bureau of Educational and Cultural Affairs.

Rotem, A., Zinovieff, M., and Goubarev, A. (2010). A framework for evaluating the impact of the United Nations fellowship programmes. *Human Resources for Health*, 8(7). Available at: https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-8-7 (Accessed 23 Jan 2017).

Scott, J., and Carrington, P. J. (2011). *The SAGE handbook of social network analysis*. Thousand Oaks, CA: SAGE publications.

SRI International. (2005). *Outcome assessment of the visiting Fulbright Student Program*. Washington, DC: U.S. Department of State, Bureau of Educational and Cultural Affairs.

The MasterCard Foundation. (2016). *Education in Support of Social Transformation: Learning from the First Five Years of The MasterCard Foundation Scholars Program*. Toronto: The MasterCard Foundation.

Tvaruzkova, M. (2012). *Evaluation: Advances in measuring the effectiveness of networks*. Paper presented at the Global Leadership Consortium, December 11, 2012, Washington, DC.

USAID. (2004). *Generations of quiet progress: the development impact of US long-term university training on in Africa from 1963–2003, Report prepared by Aguirre International*. Washington, DC: USAID.

Uyeki, E. (1993). *As Others See Us: A Comparison of Japanese and American Fulbrighters*. New York: Institute of International Education.

Valuy, E. and Martel, M. (2016). *HER initiative to lead change: The power of education*. New York: Institute of International Education.

Valuy, E. (2016). *Centroamerica Adelante Final Report*. New York: Institute of International Education.

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CHAPTER 15

International Scholarships and Social Change: Elements for a New Approach

Joan R. Dassin and David Navarrete

15.1 The Ideology of Social Impact

International scholarships and social impact have been linked in policy and practice for more than a century. An example is the Rhodes Scholarships, the West's oldest and arguably most prestigious international scholarship program. Since 1903, high-achieving students from around the world have used their Rhodes scholarships to pursue postgraduate degrees at the University of Oxford. Throughout the twentieth century and into the twenty-first, the Rhodes program has supported "leaders for the world's future"—men and women with "intellect, character, leadership and commitment to service" (The Rhodes Trust 2016, p. 1).

This narrative of leadership and service—adapted to national priorities for diplomacy and development, diverse political and economic contexts and shifting international alliances—appears throughout the promotional literature of a wide variety of international scholarships. Of particular

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concern are scholarships that benefit individuals with the ultimate aim of producing social change in the recipients' home countries. These scholarships may be destined for outbound or inbound students, or for those who study partially at home. They may be privately or publicly supported, and focused more on individual academic achievement than social transformation per se. Yet insofar as international scholarship programs in general—and those designed to produce "social change agents" in particular—presuppose a link between individual agency and collective benefits, they pose a series of perplexing questions.

The first question is how beneficial effects are created for both the home and host countries. For sending countries, principally in the developing world, international higher education has long been seen as a capacity building strategy. In the early years of the twentieth century, colonial powers used scholarships for overseas study to train administrative elites. In the Cold War era, host governments awarded individual scholarships for advanced study in the West—or East— to win the hearts and minds of aspiring developing country leaders (Perna et al. 2014). Today, economic rationales prevail across global divides, couched in the language of producing human capital, particularly in scientific and technical fields. The view that well-educated elites will enable their countries to gain from the benefits produced by the global economy is widely shared (Schwab 2013).

A second question concerns the extent of this "social impact" ideology. An article published in *Educational Researcher* in 2014 provides a typology of international scholarship programs, focusing on national government programs that support foreign study to "promote human capital development" or "advance other societal goals within a particular national context" (Perna et al. 2014, p. 65). The study excludes privately supported programs, as well as those supported by local governments, NGOs, intergovernmental agencies and bilateral and multilateral organizations. The authors identify 183 programs in 196 countries that meet their criteria. International scholarships jointly funded by the United States and home nations' governments under the Fulbright Program account for nearly half the set (84 out of 183 programs) (Perna et al. 2014).

Despite diverse characteristics, the programs included in the study share the assumption that international scholarship programs produce social benefits, especially for the sending countries. Three quarters target post-graduate level

degree study; 85% restrict the destination country and limit the choice of study field; 60% require recipients to return home after completing their studies. These features enhance the likelihood that trained individuals will make direct contributions to their home countries' priorities. Although the Fulbright programs operate under more of a 'public diplomacy' framework, in contrast to non-Fulbright programs that stress human capital formation, none of the major government-supported scholarship programs reviewed for the typology exclusively promotes professional or personal advancement for individual recipients (Perna et al. 2014).

Such individual gains inevitably occur but as a secondary by-product of other primary objectives for national governments. Developing countries, in particular, use international scholarships to improve international relations, build human resources and increase international resources for local universities, thereby creating incentives for teaching and research and promoting administrative reform (Altbach and Engberg 2014). Indeed, the very fact of sponsorship, especially by public entities, shifts the desired outcomes of international scholarships to the societal, public realm, as opposed to the private domain of individual choice.

Actual funding trends are mixed. In the U.S., self-financed students accounted for 60% of the growth in international students between 2003/2004 and 2013/2014 (Ortiz et al. 2015). Yet, during the same period, the number of international students receiving scholarships from governments or universities outside the U.S. quadrupled, while those receiving support from their employers increased nearly fivefold (Ortiz et al. 2015). In recent years, countries as diverse as China, Brazil, Russia, Saudi Arabia and the United Arab Emirates have invested in large-scale scholarship programs, sending thousands of students abroad for foreign study (University of Oxford 2015). It remains to be seen how these trends will affect the rationale for international study. Will increased numbers of self-funded students place greater emphasis on narratives of individual achievement and agency? Will this shift, in turn, lead to an erosion of the "social impact" ideology still prevalent among governments and international agencies that finance international study? Alternatively, will the significant presence of emerging economies and high income, non-Western countries as major government investors reinforce rationales based on increased economic competitiveness for the sending countries?

Whatever the outcome, the association of individual international scholarships with generalized social benefits is not likely to disappear any time soon. Although this association has persisted for more than a century, the evidence that individual scholarships for foreign study produce demonstrable and long-lasting collective impacts remains tenuous. One reason claims may be overinflated is that despite substantial financial investments, international scholarship programs—defined as named programs and exclusive of private sponsorship for individuals—still support only a minority of globally mobile students. Orders of magnitude, even among well-funded government scholarship programs, are in the thousands over a period of years or even decades, as compared to millions of self-funded mobile students who travel abroad each year.[1] As impressive as these numbers are, it is rhetorical overreach to claim that even thousands of individual scholarship holders will garner sufficient power and influence to transform whole societies. While a counter-argument can be made that individuals are not expected to transform societies directly but to influence institutions that, in turn, can promote social change, evidence of such "catalytic" impacts is also far from solid.

The relationship between higher education—of which foreign study and the international scholarships that support it is a small subset—and societal impacts is similarly equivocal. A rigorous research review published in 2014, *The Impact of Tertiary Education on Development*, screened 6677 prior studies, eventually winnowing them down to 99. The studies focus on five indicators: "individual earnings; economic growth; productivity; technological transfer; capabilities; and institutions". Based on a conceptual framework informed by "theories of human capital development, endogenous development, capabilities and institutional growth," these "multiple potential pathways to impact" were identified as the most effective conduits to demonstrate the "extent and nature of the impact of tertiary education (TE) on development," especially in "low- and lower-middle income countries" (LLMICs) (Oketch et al. 2014, p. 5). The strongest and most consistent evidence of impact was found on the earnings of individual graduates in LLMICs. Evidence of macro-economic impacts was based on fewer studies and was less conclusive. For example, the evidence that tertiary education leads to economic growth in LLMICs was rated as "strong and consistent," although it was based on just over half the number of studies establishing a relationship between higher education and higher earnings of individual graduates. The evidence of TE's impact on productivity and technology transfer—two of the most desired impacts of international

scholarships intended to spur innovation through sponsorship of advanced study in STEM fields—was based on even fewer studies and considered "inconclusive" and "limited" (Oketch et al. 2014, p. 6).

More robust and consistent evidence points to impacts of TE on graduates' capabilities and on strengthening institutions, particularly in "health, nutrition, gender equity, democratization and environmental studies." These impacts are relevant for international scholarships that target capacity building in these fields. Exhaustively documented, the study lends support to the position, long held by defenders of international scholarships, that tertiary education confers measurable benefits on individual graduates, strengthens institutions and trains professionals in key areas such as education and health care. These positive outcomes are produced by the high-quality education and training available in developed countries. However, the authors warn that the findings should be taken with "caution," since the studies analyzed were "dispersed across a broad range of different forms of benefit," requiring further research. In general, the authors conclude that the question of TE's impact on development is significantly under-researched, and that the "extent and nature of the impact of TE on development remains unclear" (Oketch et al. 2014, pp. 6–7).

The lack of disaggregated data on the socioeconomic characteristics of globally mobile students is a particular drawback for demonstrating international scholarships' broader social impacts. The experience of the Ford Foundation International Fellowships Program (IFP) confirms that international scholarship programs may *in themselves* generate significant social change. This impact is clearest in equity-based programs that select talented individuals from groups that are either underrepresented in higher education or have limited access to high-quality institutions. Because of these constraints, women in certain societies, ethnic, racial, religious, or linguistic minorities, residents of remote rural areas, or people with disabilities are often at a disadvantage when competing for prestigious international scholarships. Programs that aim to "level the playing field" by directing scholarships to these groups provide an educational platform for non-elites, especially at the international level. They enhance recipients' personal and professional social mobility and have the potential to heighten their ability to change the face (and often complexion) of dominant institutions. These individuals' achievements, in turn, belie stereotypes of marginalized groups and contest hegemonic ideas governing their societies.

Despite the potential impact of targeted programs, the question of who has access to high-quality international education is noticeably under-

researched (Dassin et al. 2014). Annual reports on global mobility from international organizations such as the Institute of International Education (IIE), the United Nations Education, Scientific and Cultural Organization (UNESCO) and the Organization for Economic Cooperation and Development (OECD) provide almost no information on this topic (IIE 2016a; UNESCO 2016; OECD 2015). In addition to IFP, programs such as the MasterCard Foundation's Scholars Program and the Gates Millennium Scholars Program, which aim to increase access and equity in higher education, provide information about income, race, ethnicity and gender, rural or urban origins and the educational levels of recipients' parents, among other socioeconomic indicators. However, with some exceptions for age, gender and regional origin, these data are not reported—and perhaps not even gathered—for more conventional "merit-based" programs. Moreover, except for greater emphasis on recruiting women in some cases, international scholarship programs do not typically prioritize access and equity. As a result, this critical dimension for producing social impacts through international scholarships remains largely unexplored (Marulanda 2008).

An appropriate response to these limitations is neither to dismiss claims of social impact as unsubstantiated and overinflated, nor simply to reaffirm them. The association persists because we infer its fundamental validity, despite the small percentage of international scholarship holders among the broader population of globally mobile students, the tenuous nature of connections between higher education and development and the lack of basic data about many programs and their alumni. The dearth of information about the recipients' social and economic backgrounds is especially limiting if the objective is to confirm that the opportunity to study abroad for certain groups promotes advancement not only for individuals, but may also help to redress deep structural questions of educational access and social inequality in diverse settings and contexts.

In the next section, we examine how various programs have assessed their immediate outcomes and longer-term impacts. This focus brings us closer to understanding how this issue has been approached in the past, and lays the groundwork for a new, more comprehensive approach to the question of scholarships and social change that we develop in the chapter's third and final section.

15.2 Assessing Social Change Outcomes

15.2.1 Internationally Sponsored Programs

An analysis of several program evaluations illustrates how international scholarship programs (or their evaluators) construct concepts and measure evidence of social change and/or social impact. Rather than the results per se, the indicators selected as proxy evidence of the program's societal impacts underpin our argument that the social benefits of individual scholarships are more axiomatic or assumed than conclusively demonstrated, even in rigorous tracer studies.

The 2010 *Tracer Study VIII* of the Joint Japan World Bank Graduate Scholarship Program (JJ/WBSP) is a case in point. The study presents data and analysis on over 3700 scholarship holders who held their awards over the 20-year period from 1987 to 2007. In line with the program's main objective, to "encourage and strengthen human resource development in developing countries," (World Bank Institute 2010, p. 5) support was provided for enrollment in development-related masters programs at leading universities worldwide. Most of the scholars came from Africa, East Asia, or the Pacific; 80% studied in five countries, including the U.S. the United Kingdom, Japan, the Netherlands and France, although in total the scholars attended 150 universities in 32 World Bank (WB) countries. Public policy and international development were the most popular study fields. The majority of the scholars were between the ages of 30 and 34; 75% worked in the public sector; and although 64% were men, the gender gap narrowed over time.

Based on extensive databases maintained by the program as well as quantitative and qualitative data gathered through surveys and interviews, the study examines the scholarship holders' post-study careers and measures the impact of their "enhanced knowledge and skills ... and contributions made to sustainable development" (World Bank Institute 2010, p. 5). It focuses on three key indicators: (1) degree completion; (2) post-study physical return to the home country or another developing country; and (3) employment. In view of the results for each indicator, the Bank concludes that the JJ/WBGSP is achieving its mission. It reports that "an overwhelming majority of scholars have attained their degree, returned to developing countries and gained employment in strategic positions to lead and influence public policy, *with positive impacts on the lives of thousands, if not millions, of people*" (World Bank Institute 2010, p. 5. Our italics). The

study concludes that the primary development impact of the former scholars was to "provide policy inputs, information/knowledge dissemination, management and services," and that the majority of them "…were in positions to lead and influence their countries' policy and development programs" (World Bank Institute 2010, p. 33).

The latter statement is based on 457 employed respondents, out of over 3733 individuals awarded scholarships in the 20-year period covered by the study—12% of the entire sample. Even accounting for the difficulties of address tracing and tracking alumni over time, as well as self-selection bias, this is a small number on which to base such a sweeping conclusion. In addition, the survey data were self-reported, while the alumni voices featured in highlighted boxes throughout the text are clearly selected to put a human face on the quantitative findings, not to contest or contradict them. Most important, the study offers no independent verification or corroboration of the findings by third parties such as supervisors or employers. No information is offered about the content or substance of the policy and development programs put into place by the scholars or their agencies, making it impossible to determine whether they produced positive development impacts. In short, management and leadership authority do not guarantee positive results but depend on numerous factors, such as the relative size, capacity and efficacy of the public sector in a given country.

Other program evaluations attempt to correct these shortcomings. In 2013, the Institute of International Education (IIE) began a 10-year tracking study of the Ford Foundation International Fellowships Program (IFP). The IIE study seeks to identify the program's impact on the selected Fellows, and, in turn, the Fellows' impact on their home communities. The latter are critical results for IFP, which offered international postgraduate study opportunities to members of marginalized social groups—many with a long history of social activism—with the expectation that the education would enhance the Fellows' ability to foster social change in their home countries and communities.

The first published IIE survey builds substantially on conventional impact indicators. In addition to degree attainment, return rates and employment, the survey also asks IFP alumni questions about whether the program provided them with "greater opportunities to create social change," whether it "increased their commitment to social justice," and whether it "empowered" them to confront issues of injustice. To establish the Fellows' impact on their communities, the survey tracks how many IFP alumni have "created new programs and organizations"; made "improvements in their organizations

where they work or volunteer"; created "products and forms of outreach related to social justice"; and collaborated with other alumni "on various social justice issues and initiatives."

Based on highly positive responses, the study concludes that: "... over 90% of alumni are contributing to social justice in one way or another, either in their home country or internationally. ... IFP alumni are now better positioned than ever to address poverty, various forms of discrimination, and improve access to health and education" (IIE 2016b, p. 3).

However, some important limitations remain. Only 43% of all Fellows responded, less than half the program population. Futhermore, the data about social impacts are self-reported, and lack independent verification. While innovative, impact indicators such as new programs or social justice products are simply counted, not contextualized, reflecting the limitations of a global survey. And while the IIE study proposes two rounds of "qualitative fieldwork," in 2016/2017 and 2019/2020, respectively, it does not, at this stage, provide clear information on how external perspectives on the value and impact of alumni activities will be gathered and interpreted (IIE 2016b, p. 5).

15.2.2 Nationally Funded Programs

Similar approaches to evaluation and impact assessment are found for several major outward mobility programs funded by national governments in Latin America. In recent decades, almost all countries in the region have embarked on internationalization of their higher education systems, partly in response to the challenges and pressures brought about by globalization. In 2008, 6% of all global international students came from Latin America, according to data from UNESCO (Brunner 2011, p. 178). Although this percentage compares modestly with other regions, the number of students enjoying overseas study opportunities increased by an average of 2% per annum during the first decade of this century, due to the dynamic performance of the region's economies, the growth of the middle classes who aspire to a better education for their children and the internationalization of national universities. Economic and political crises have recently affected some major government scholarship programs in the region, such as the "Science without Borders" program in Brazil (see Case Study 1). Nevertheless, the internationalization of higher education remains at the core of the region's long-term educational goals, suggesting that the outflow of Latin American students overseas will continue to increase.

It is against this backdrop that the governments of Chile and Mexico have funneled substantial investment into their flagship scholarship programs, reflecting a remarkable commitment to international student mobility as a tool for stimulating domestic development.[2] These programs also meet the demands of university students for new learning opportunities, as well as satisfying the preference shown by many Latin American employers for candidates with qualifications from foreign universities. In recent years, the number of Chilean students studying overseas has risen by 25.5%, from 7120 in 2008 to 8937 in 2013. During the same period, the number of Mexican students pursuing overseas studies rose from 25,608 to 27,118, an increase of 5.9% (UNESCO 2016).

The *BECAS Chile* (Chile Scholarships—BCP) program, which was launched in 2008 with funding of USD $6 billion, is an integral part of a broader long-term higher educational reform implemented by the Chilean government. The BCP aims to promote overseas technical, professional and postgraduate education in order to enhance the quantity and quality of the country's human capital.[3] The promotion of international cooperation and linkages are two additional key goals. At its outset, the program expected to support a total of 30,000 students by granting 3300 scholarships per year, aiming to include 20% of the Chilean postgraduate community in the program.

An in-depth study carried out by a team of experts from the OECD and the World Bank (WB) in 2010 referred to the BCP as a big and bold initiative "that will undoubtedly have a significant impact in Chile" (OECD/WB 2010, p. 14). The study provides information and analysis on 2397 of the scholars selected for the first two rounds. Public policy, environment, health and education were the most popular study areas. The main destination countries chosen by students were, in descending order, the U.S., Spain, the U.K., Australia and Canada.

The evaluation of the BCP was carried out at an early stage of the program and therefore does not provide impact measurements. Nevertheless, the assessment criteria used by the OECD/WB and the recommendations made to the Chilean government to secure the program's future development are revealing. For example, the 2010 assessment mentions that goals and actions were incorporated to increase the participation of students from disadvantaged backgrounds (e.g. women, indigenous populations, disabled people, people with low incomes and people from peripheral regions). However, the *overall* process for selecting scholars indicates that just 10% of the final selection score was based on indicators

relating to social marginality, far lower than the weight given to other criteria such as academic performance and work experience (40%) and the quality of the intended institution and program of studies (25%) (OECD/WB 2010, p. 67).

The 2010 study also fails to provide data on scholars' social and economic backgrounds, a key indicator necessary for measuring progress toward equity goals. Instead, the evaluation team focuses on conventional indicators such as fields of study, age ranges and destination countries. Improvements in economic growth and competitiveness are at the center of the evaluation. The program's projected impact is measured in terms of its contribution to national research and innovation needs, to improved capacity in public policy and administration and to the country's enhanced ability to meet an increasing demand for a highly trained labor force in both the public and private sectors. Similar to conventional international scholarship programs, return rates and employment are seen as two key indicators to track the program's success.

The evaluation research carried out in 2008 by the Argentina-based Centro Redes on Mexico's flagship postgraduate scholarship program (CONACYT Scholarship Program) is similar (CONACYT 2008). The study was commissioned by the National Science and Technology Council (CONACYT)—the program's sponsoring body—and the World Bank to evaluate outcomes in training and developing "top-level" human resources to meet the country's needs in the period from 1997 to 2006.[4] As in the case of BECAS Chile, the CONACYT Scholarship Program forms part of the government's strategy and actions for dealing with the demand for highly trained human resources to increase the country's scientific and technological capabilities and to raise the capacity and competitiveness of the domestic productive sector.

The study assesses the status of a limited sample of the 10,209 students awarded scholarships to study abroad during the decade mentioned above. The main academic areas were engineering and social sciences. Most of the scholars pursued their studies in the U.S., the U.K., France and Spain. The main criterion for success of the program was the scientific, technological and productive performance of postgraduate students on their return to Mexico. Consequently, the evaluation examines former beneficiaries' involvement in research, development and teaching activities, as well as their intellectual production (e.g. participation in conferences, in books and journal articles, production of laboratory equipment and prizes and awards). The scholars' contributions to the productive sector are

examined using indicators such as increases in the competitiveness and innovation of private sector companies where graduates were employed after returning to the country.

Along the same lines as other evaluations reviewed here, one key variable used to measure the program's benefits is the job situation of former scholars (e.g. employment rate, sectors and activities worked in, income level, relationship between current employment and previous international education). However, unlike conventional program assessments, this study touches on the theme of equity, finding that a significant percentage of those benefitting from the program are women (47% in 2005) and students from families with low levels of education (30% in 2008). This is a key finding from a social mobility perspective.

The inclusion of this point in the analysis can be attributed to the evaluation team, since the CONACYT Scholarship Program did not (and does not) have as a key aim any direct impact on equity.[5] This is a good example of the contribution that impact studies can have on furthering the social goals of conventional international scholarship programs, as they document and bring to light outcomes in relation to social change (equity and social mobility in our case), which can and should be addressed even though they were not factored into the original program design. This is particularly true for highly segmented and unequal societies in Mexico, Latin America and many other countries. Despite this advance, the CONACYT evaluation exhibits the same limitations as other studies reviewed here. The findings on the career paths of the postgraduate students surveyed are essentially drawn from information obtained directly from the program's beneficiaries without independent verification, and conclusions are based on a small sample size.

15.3 Discussion

Based on these illustrative cases, an idealized trajectory emerges. Scholarship recipients from developing countries, in particular, use their period of study abroad to hone their knowledge and skills. Once qualified, they return home and occupy top managerial and leadership positions in research, teaching or public service, thereby helping to build capacity in their countries' key economic and social sectors. Program evaluations assume this idealized trajectory when they track indicators such as graduation and repatriation rates and post-scholarship employment. Adhering to this narrative, the information gathered by a wide variety of programs is curiously similar. Another

similarity is that the evaluations tend to rely on self-reported survey data and small individual "cameo" portraits. Even large-scale surveys typically draw conclusions from a small percentage of respondents, and fail to correct for a self-selection bias.

We propose a different approach: first, de-constructing the global vision of social impact; and second, developing evaluation strategies based on a view of scholarship holders as social, rather than individual actors.

15.3.1 De-constructing the Global Vision of Social Impact

After completing his Master's degree in Management and Conservation of Tropical Forests and Biodiversity at CATIE[6] (Costa Rica), Albert Chan—an IFP Fellow—immediately re-joined the Regional Indigenous and Popular Council of X'pujil (CRIPX), a community-based organization in Calakmul, south of the Yucatan Peninsula in Mexico (Chan 2012). He became the head of local and international projects for natural resource management and conservation. In parallel, to help solve problems that affect biodiversity in Calakmul—where the largest tropical rain forest reserve in America after the Amazon is located–Albert established a natural research area with CRIPX's support to monitor recovery in deforested zones. He also began working as an independent advisor for ecotourism development projects in indigenous immigrant communities. Lastly, Albert recounts that in his hometown, together with his brothers and other relatives (all with a university education), he founded a civil society organization to improve conditions for the region's marginalized groups through environmental education and biodiversity management.

The story of Saúl Miranda, an IFP Fellow who graduated in 2011 with a Master's Degree in Community Psychology from the University of Chile, reflects a different reintegration experience. Like Albert Chan, Saúl expresses a high level of satisfaction with his studies abroad, stating that "the scholarship changed my life." However, almost two years after his return to his native state of Puebla, in central Mexico, Saúl's professional aspirations had not been realized. On the contrary, he suffered from "a serious labor reintegration problem," which he attributes to the reduced availability and precariousness of employment in his home region, his over-qualification for the positions available at both a municipal and state level, the reluctance of officials and local employers to consider proposals aimed at producing changes and the lack of interest "in our community development issues" (Miranda 2012). Faced with this situation, Saúl proposed a strategy he

calls "labor autonomy" to create alternative collective forms of action and organizational spaces focused on socially relevant problems, which he believes will gradually gain the attention of employers and government officials.

These cases show that significant differences in career paths can occur among graduates who return to their home countries after concluding their studies abroad. Both Albert and Saúl agreed that the scholarship met their expectations. It provided them with the opportunity to study in high-quality post-graduate programs, successfully conclude their studies, strengthen their professional knowledge and skills and reassert their commitment to social change. They returned to their home country with similar skills and attitudes, yet experienced significant differences in their initial reintegration stage. In the first case, enabling factors facilitated Albert's smooth reintegration and career advancement, while these same factors were absent in Saúl's case: professional connections and relevant family networks; the existence of a solid collective organization working in his field; demand of local development projects for highly qualified specialists; and available resources for independent professionals to carry out self-managed projects. Another relevant factor is that Albert's field, environment and biodiversity, is particularly critical for the immediate priorities in the Mayan region. In contrast, Saul's specialization in community psychology appears to have been less well recognized in his home state.

These two cases show the complexity and multi-causality of reinsertion experiences into the same country—much less in distinct countries—and the need for a broad and systematic perspective from which to analyze them.[7] The geopolitical context, the socioeconomic origin and the post-graduation social status of scholarship recipients are dimensions that require documentation and study. These factors are extrinsic to the scholarship itself but must be accounted for if social change is the program objective. For example, in some countries the triple condition of being a woman, of indigenous origin and having advanced to university-level study can cause suspicion and rejection in conservative environments, both in the workplace as well as in the community and family.[8] These factors do not prevent advancement but may limit the individual and collective achievements of indigenous women and other social groups that earn advanced degrees yet continue to experience discrimination.

To properly trace and comprehend these specificities, and their meaning for social change impacts, detailed field research in each country or region should be conducted with the support of local researchers, including former

scholarship holders. Their contributions are particularly valuable for understanding the difficulties facing newly credentialed professionals in many developing countries, such as limited and precarious labor markets, the pauperization of the countryside and endemic corruption, often within environments marked by political instability and armed violence.

Two additional perspectives deserve mention. As the studies in this chapter show, donors and evaluation bodies typically formulate the criteria for evaluation and impact studies. While beneficiaries' opinions are included, usually as aggregated survey data or in the form of short individual life stories, we lack more extended analysis of the ways that beneficiaries themselves conceive of the benefits of international education and assess their contributions to collective projects and causes. Concern for their home communities is especially evident among fellows of equity-based programs, where social commitment is an important criterion for granting the scholarship.

Finally, greater attention should be paid to "unsuccessful" reinsertion trajectories, which deliver important information and present highly revealing perspectives about factors that limit the impact of international scholarships. For instance, while the "brain drain" literature refers to scarce employment opportunities as an important "push factor" influencing scholarship holders to remain abroad,[9] less is known about alumni who may return home but fail to advance professionally. In fact, scholarship programs tend to equate returning home with professional success and social impact, a conflation reflected in the emphasis on return rates as a standard evaluation metric. This binary, "stay or go" perspective shortchanges the contributions of alumni who remain abroad and become active participants in diaspora communities (Marsh et al. 2016).

15.3.2 Individuals as Social Actors

This chapter suggests that much remains to be done to go beyond the historical—and typically vague—association of individual scholarships and social change. To bridge the gap, some creative approaches are needed. First and foremost, individual recipients should be seen not as lone actors but as members of certain (and at times overlapping) social groups. Group identity and the specific circumstances under which individuals begin their educational and professional journeys, and the context to which they return, should be part of evaluation frameworks. While neither limiting nor enabling conditions are necessarily determinative, they frame an individual's experience, shaping the types of social roles they eventually play in their societies. Seeing

individuals as part of multiple social groups (e.g. women, rural dwellers, health professionals) will help to capture the social and collective dimensions of an individual's post-scholarship trajectory. This type of analysis would focus on outcomes such as changes in individuals' relationships *within* their families and social groups (e.g. personal empowerment); increased capacity to represent their groups *within the broader society* (e.g. as advocates for women, ethnic minorities, or persons with disabilities); and the impact of recipients' post-scholarship activities *on specific issues or social groups* (e.g. drafting and implementing women's rights legislation, generating employment and income for women).

Second, evaluations would benefit from more systematic comparisons among groups of beneficiaries. For example, assessing program outcomes through a gender lens—going beyond simply counting numbers and percentages of female and male scholarship holders—would shed light on the broader question of whether access to high-quality education enables female beneficiaries to break down gender-based barriers, as compared to their male counterparts, and also as compared to females without similar scholarship opportunities.

While establishing appropriate control groups may be a challenge, a study along these lines could ask whether a critical mass of qualified female scholarship holders coming home to occupy key positions in science and technology, or as innovative business leaders, leads to more female participation in these fields and, eventually, in the broader society. In other words, can a "pioneer" generation of female professionals in certain fields open doors for successive generations of qualified women? Studies informed by an underlying gender analysis could pose many questions—including looking at differences between female and male scholarship holders that affect their academic trajectories and professional success. Development research in general has long accepted the irreducible importance of gender analysis (Jackson and Pearson 1998).

A similar research strategy could be used to analyze the trajectories of ethnic or racial groups that are historically underrepresented in higher education, such as indigenous and Afro-descendent people in Latin America. Does access to international study enable students and professionals from these groups to overcome systemic discrimination and social exclusion? Is the "certification effect" sufficiently powerful to improve an individual's life chances? In this approach, an individual's trajectory is seen in relation to the trajectories of similar (or contrasting) social groups. It is especially important

to trace these trajectories over time, or compare graduates at different points in their careers, since the initial reinsertion period may be more difficult for members of certain groups. Location is also critical. Some individuals may actually be more competitive in global labor markets than at home, where social mobility remains limited, even for educated professionals.

A third approach would start not with social groups but with the communities, institutions and organizations where scholarship holders live, work and volunteer. If former recipients hold top management positions, are they effective leaders—not in their own view but as seen by their constituents? How, specifically, have they made a difference? It is insufficient to state that a former awardee has become a prime minister or president, or has run a key government agency. The more relevant questions for social change analysis would consider the outcomes of the beneficiaries' tenure in top positions, seen not by the recipients themselves but by the end users. Rather than relying on self-reported data, this approach requires multiple information sources (triangulation) and outcome indicators, similar to ethnographic, social network and other qualitative methods for documenting and analyzing complex processes of social change. It would also require baseline research to isolate the impact of specific policies or management decisions spearheaded by individual or multiple scholarship recipients on a given community or organization.

Finally, examining the social networks that emerge from international scholarship programs can help bridge the gap between individual beneficiaries and collective impacts. Enabled by social media platforms, networks of current and past awardees have strong potential to turn individual recipients into collective actors and more effective social innovators. This effect was pronounced in the case of IFP, as over 95% of alumni have reported remaining in touch with one another and collaborating on various projects and initiatives (IIE 2016b, p. 3). Similar evidence is provided in Marsh's (2016) pioneering study of African alumni of five universities in the U.S., Canada and Costa Rica, which shows the importance of alumni and professional networks, forged over time and based on their international university experiences, in the formation of transformative leaders (Marsh et al. 2016). However, further analysis is needed about the types of joint projects generated by alumni networks, and whether they result in tangible benefits for participants and for the broader society.

15.4 Final Remarks

It should now be clear that establishing the link between international scholarships and social change requires a new approach to evaluation and impact assessment. The individual scholarship holder cannot remain as the sole unit of analysis, nor can collective impacts be measured merely as the sum of individual results and achievements. Individuals need to be seen as social actors, working within families, communities, non-profit organizations and social movements, or from within the state or international agencies. Regardless of their professional role, effective change makers find ways to instigate and support social, economic and cultural change and environmental resilience from within as well as from outside the workplace.

We recognize that our call for an alternative approach to impact assessment may not seem practical but we deem it feasible and necessary. The world of scholarship evaluation is still dominated by standard narratives of success, both for individual scholarship holders and for the programs that support them. Indeed, conventional indicators such as fellowship completion, graduation and return rates are not likely to be abandoned any time soon. Similarly, it may be unrealistic to expect that donors will routinely require gender-based analysis of program outcomes, comparisons of recipients and non-recipients based on carefully selected control groups or studies that incorporate the views of constituents or end users, rather than relying on beneficiaries' self-reported information.

Nonetheless, fresh thinking is clearly needed to provide solid evidence and understanding of the specific ways and optimal conditions under which talented individuals can use their precious international education to foster much-needed social change in their home countries. Given continual crises unfurling around the world, from the negative effects of climate change to persistent poverty and increasing inequality, the urgency of this broader task should be self-evident.

Incremental steps can be taken to advance work in this area. Most important, researchers and former scholarship holders in developing countries should be encouraged to build new models and methodologies for impact assessment. This dimension is almost entirely missing from the existing literature and should be encouraged. One innovative example is a program of small grants to conduct research on IFP's extensive paper and digital records. Built by Columbia University's Rare Book and Manuscript Library with IFP funding, the archive has enabled young scholars, including IFP alumni, to study the Fellows' social justice contributions in detail. Former Fellows have

used the archive to analyze alumni contributions to social action and scholarship in Vietnam, South Africa and the broader Africa region. (Columbia University 2016). These studies highlight precisely the local factors and contexts critical for assessing the social impacts of international scholarships that we have advocated in this chapter.

Another strategy is to build an information base and infrastructure for academic and policy research on international scholarships. We have seen how information about even basic outputs of many international scholarship programs is at best limited. Similarly, despite ongoing efforts like the Donor Harmonization Group that brings together European scholarship agencies, communication and coordination among the numerous private donors, government agencies and independent organizations that administer scholarship programs remains limited. Universities, for their part, maintain their own data and typically have no input into the evaluation and design of scholarship programs, despite their first-hand experience with scholarship holders. The educational experiences of awardees are often a "black box" for international scholarship programs, which focus on selection and repatriation activities prior to and following the scholarship but primarily on administration during the actual grant period. Yet understanding the nature and impact of various educational programs on scholarship holders is fundamental for evaluating their post-study contributions and impact.[10]

More generally, this fragmentation indicates that international scholarships and their myriad social effects are still a largely unrecognized area for academic and policy research. Recognizing that these issues constitute a legitimate intellectual field—a major aim of this volume—draws attention to the need for the type of infrastructure and activities, such as archives and documentation centers, regular meetings to exchange evaluation results and funding opportunities, that could help to promote and develop this important area of research and practice.

Notes

1. For example, Saudi Arabia's King Abdullah Scholarship Program (KAUST) expects to fund 164,000 students mostly to the USA through 2020. Since 2007, the Chinese government has awarded 11,000 outbound scholarships per year, while the World Bank's flagship Joint Japan World Blank Global Scholarship Program (JJWBGSP) funded 3733 scholars between 1987 and 2007 (Altbach and Engberg 2014; World Bank Institute 2010).

2. Colombia and, more recently, Brazil have also rolled out major international scholarship programs. In 2015, there were 25,509 Colombians and 32,051 Brazilians studying overseas. Together with Mexico, they were the leading Latin American countries in this category (UNESCO 2016). Appropriate studies about the major government scholarship programs of Colombia and Brazil could not be found for the purposes of this analysis.
3. http://portales.mineduc.cl/index.php?id_portal=60. Such goals are commonplace in the leading programs of other global regions, for example, the King Abdullah Scholarship Program (KASP). As in the case of the Joint Japan/World Bank Graduate Scholarship Program (JJ/WBGSP), the three main factors for assessing eligible applications are academic excellence, professional experience, and relevance of the study program. Priority is given to those disciplines that have a high potential to affect development within the candidates' home country (Kholoud et al. 2015, p. 257).
4. The CONACYT scholarship program has been active since 1971. By 2007, the program had awarded 150,347 scholarships for study in Mexico and abroad (CONACYT 2008, p. 35).
5. In recent years, CONACYT has taken measures to directly support marginalized groups. For example, since 2012 it has funded the Indigenous Postgraduate Scholarship Program (PROBEPI). Sixty percent of PROBEPI scholars have studied overseas.
6. Tropical Agricultural Research and Higher Education Center.
7. See Baxter, Chap. 6, Campbell, Chap. 9, and Loerke, Chap. 10, in this volume for complementary perspectives on post-fellowship reinsertion issues.
8. See the testimonies of indigenous women who completed post-graduate studies funded through IFP scholarships in Mexico. *Aquí Estamos* 2009 (9).
9. See Marsh and Oyelere, Chap. 11 in this volume.
10. See Baxter, Chap. 6, in this volume.

References

Aqui Estamos. Mujeres indígenas profesionistas: voces en marcha 2009, no. 9, viewed 15 September 2016, http://ford.ciesas.edu.mx/downloads/Revista9.pdf

Altbach, P and Engberg D 2014, 'Global student mobility: the changing landscape. *International Higher Education,* no. 77, Fall 2014, pp. 11–13.

Brunner, J (ed) 2011, *Educación superior en Iberoamérica. Informe 2011*, Universia/World Bank, Chile.

Chan, A 2012, 'Retos y oportunidades: el antes y el después del Programa Internacional de Becas IFP', *Aquí Estamos, no.* 17, pp. 6–10, viewed 5 August 2016, http://ford.ciesas.edu.mx/downloads/Revista17.pdf

Columbia University Libraries 2016, 'Columbia University Libraries Launches Ford International Fellowships Program Digital Archive', *News & Events*, May 16, 2016, viewed 4 September 2016, http://library.columbia.edu/news/libraries/2016/2016-5-16_Ford_IFP_Archive.html

Consejo Nacional de Ciencia y Tecnología (CONACYT) 2008, *Evaluación de impacto del Programa de Formación de Científicos y tecnólogos, 1997–2006*, Unpublished study.

Dassin, J, Enders, J and Kottmann, A, 2014. 'Social Inclusiveness, Development and Student Mobility in International Higher Education: The Case of the Ford Foundation International Fellowships Program' in BT Streitwieser (ed), *Internationalization of Higher Education and Global Mobility*, pp. 73–86, Oxford Studies in Comparative Education, Symposium Press, Oxford.

Institute of International Education (IIE) New York 2016a. *Open Doors "Fast Facts"*, viewed 15 November 2016., http://www.iie.org/Research-and-Publications/Open-Doors#.V6ylY2V3bUI

Institute of International Education (IIE) New York 2016b. *Social justice and sustainable change: The impacts of Higher Education*, viewed 15 April 2016, http://www.iie.org/Research-and-Publications/Publications-and-Reports/IIE-Bookstore/IFP-Report-1#.WDiwIXeZMdU

Jackson, C & Pearson, R 1998, *Feminist Visions of Development: Gender Analysis and Policy*, Routledge, London, New York.

Kholoud, H, Scott, S, & Maadad, N 2015, 'The political, socio-economic and sociocultural impacts of the King Abdullah Scholarship Program (KASP) on Saudi Arabia', *International Journal of Higher Education*, vol 4, no 1, pp. 254–267.

Marulanda, N 2008, *IFP in the Market of Post-Graduate Scholarships,* Unpublished Study.

Marsh, R, Baxter, A, Di Genova, L, Jamison, A, and Madden, M 2016. Career Choices, Return Paths and Social Contributions. The African Alumni Project. Full Report. Toronto: The MasterCard Foundation.

Miranda, S 2012, 'Profesionales indígenas con posgrado. Rumbo a la autonomía laboral'. *Aquí Estamos,* no. 17, pp. 20–24, viewed 5 August 2016, http://ford.ciesas.edu.mx/downloads/Revista17.pdf

Oketch M, McCowan T & Schendel R 2014, *The Impact of Tertiary Education on Development: A Rigorous Literature Review*. Department for International Development, UK.

Organization for Economic Cooperation and Development (OECD) 2015, *Education at a glance 2015: OECD indicators*, viewed 1 March 2016, doi:10.1787/eag-2015-en.

Organization for Economic Cooperation and Development/World Bank 2010. Chile's International Scholarship Programme. OECD/The World Bank., viewed

1 March 2016, http://www.oecd-ilibrary.org/education/chile-s-international-scholarship-programme_9789264086425-en

Ortiz, A, Chang, L & Fang, Y, 'International Student Mobility Trends 2015: An Economic Perspective', *World Education News and Reviews*, February 2, 2015, p. 1.

Perna, L, Orosz, K, Gopaul, B, Jumakulov, Z, Ashirbekov, A & Kishkentayeva, M 2014. 'Promoting Human Capital Development: A Typology of International Scholarship Programs in Higher Education', *Educational Researcher*, vol 43, no. 2, pp. 63–73.

The MasterCard Foundation. 2016. Scholars Program Presentation. Unpublished presentation.

The Rhodes Trust 2016 The Rhodes Scholarships: Rhodes selection criteria. viewed 1 March 2016, http://www.rhodeshouse.ox.ac.uk/rhodesscholarship/about-the-rhodes-scholarships

Schwab, K. 2013, The global competitiveness report: 2013–2014, World Economic Forum, Geneva.

University of Oxford. 2015, International trends in Higher Education 2015, University of Oxford, United Kigdom.

United Nations Educational and Cultural Organization (UNESCO) Institute of Statistics, UIS Stat, viewed 1 March 2016., http://data.uis.unesco.org

World Bank Institute 2010, Joint Japan/World Bank Graduate Scholarship Program. Tracer study VIII. 2010, viewed 1 March 2016, http://siteresources.worldbank.org/INTJJWBGSP/Resources/Tracer_Study_VIII_2010.pdf

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CHAPTER 16

Case Study: Education in Support of Social Transformation—The Mastercard Foundation Scholars Program

Barry Burciul and Kim Kerr

16.1 Overview of the Scholars Program

The Mastercard Foundation Scholars Program is the largest private scholarship program ever implemented for African youth. The goal of the Program is to develop a cohort of next-generation leaders, who will support social transformation and economic growth, particularly in Africa. The Program targets academically bright youth with leadership potential from socioeconomically disadvantaged communities. Key Program elements include quality secondary or university education; holistic financial, social, and academic supports; training and mentorship that reinforces the core values of transformative leadership and a commitment to improving the lives of others; and participation in a network of like-minded young leaders committed to giving back to society. Over the next 10 years, the Program will reach more than 30,000 talented young people.

This case study will review the Mastercard Foundation's experience in the first years of the Program, focusing on our approach, early results, and

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learning to date in the areas of recruitment, leadership development, and post-graduation transitions. We will also situate the international components of the Program within the broader context of the Scholars Program, which is primarily of, in, and for Africa.

16.1.1 Program Origins

The Scholars Program was launched in September 2012 and was initially conceived as a 10-year USD 500 million commitment that would reach 15,000 youth. This enrolment target was exceeded early in the Program (2015) as additional implementing partners were brought on board and the Foundation has since decided to continue the Program indefinitely.

A key motivation for the Program was the desire to identify and develop value-driven leaders, capable of driving change in their communities, countries, the continent, and even globally. Early higher education partnerships with Ashesi University in Ghana and EARTH University in Costa Rica—institutions defined by a strong focus on value-based leadership and commitment to service—helped shape this approach. It was also informed by the Foundation's belief that all young people, no matter their circumstances, are deserving of a high-quality education, as well as the Foundation's belief in the transformative power of individuals as catalysts for broader change.

Participating organizations have worked together in the first years of the Program to develop and articulate a distinctive understanding of leadership—"transformative leadership"—which the Foundation defines as "the act of engaging others, in an ethical manner, to generate positive and lasting change". Transformative leaders are creative visionaries who exhibit courage, empathy, resilience, and a desire to contribute to society. Leadership is thus a bridge to social transformation. While the original Program design was intended to direct students to fields of study connected to growth sectors in Africa, in practice, we found Scholars have a diverse range of interests, passions, and life plans. As a result, the Program is agnostic with respect to the field of study and the employment sector that Scholars enter. Within the broad framework of transformative leadership, we challenge Scholars to identify their passion and develop their own vision of and journey toward social change.

The Scholars Program recognizes and draws attention to the need for increased access to quality, relevant secondary and university education in sub-Saharan Africa, where less than half of youth access upper secondary school and far fewer complete this level of education (UNESCO, 2016).

Likewise, at undergraduate levels of education, average enrolment stands at 8% (UNESCO, 2016), far less than other regions globally. Despite its size relative to most other scholarship programs, the Program is clearly not a scalable response to systemic issues of access. However, by recruiting and supporting promising youth from socioeconomically disadvantaged communities, the Scholars Program intends not just to provide opportunities to the scholarship recipients but to change education trajectories within their families and communities.

The Program and its accompanying evaluation and research agenda aim to contribute evidence around good policies and practices to the broader field and to support engagement with institutional and education systems leaders with a view to propagating these policies and practices in other contexts.

16.1.2 Program Design

The Program is implemented in four, interlinked components:

- **Recruit** talented young people from socioeconomically disadvantaged backgrounds, who share a deep personal commitment to improving the lives of others (the "Scholars").
- **Educate** Scholars, supporting them through high-quality academic and transformative leadership training that equips them to succeed in their future endeavors and to give back to their families, economies, and societies.
- **Prepare** Scholars for the next phase of their lives by connecting them with networks, resources, and opportunities, including industry mentorship, career counseling, internships, and community service.
- **Transition** Scholars to further education, entrepreneurship, and/or employment as they become transformative leaders.

The Foundation decided to implement the Program through a network of partner organizations rather than a single implementing organization. This allows the Program to leverage the unique strengths of each partner and gives partners autonomy to innovate and adapt within the framework of the Program while contributing their experience to the broader partnership. The partner network currently comprises 28 partners[1], including North American, European, and African universities, as well as NGO partners. Partners are responsible for recruiting Scholars and supporting them through

the Program. University partners host Scholars from across Africa (plus Latin America and the Middle East, in the case of two partners) as traditional degree students, who enroll in mainstream courses of study and who receive additional services (e.g., leadership development and mentorship) through the university and through centralized, Scholars Program-wide platforms and events. At the secondary education level, NGO partners work with networks of local secondary schools in a specific country, and these schools deliver most services directly to Scholars. The NGO partners assist in administering the Program and in delivering select components, such as annual leadership development events. Partners at both the tertiary and secondary education levels convene regularly through working groups on key Program-related themes (e.g., recruitment, Scholar well-being, internships, and school-to-work transitions) and through annual meetings. The robust partner network has become a distinctive feature of the Program.

16.1.3 Cohort Overview

Of the roughly 19,000 Scholars enrolled in the Program as of mid-2016, 10% were undertaking university studies (9% undergraduate and 1% graduate), with the remaining Scholars studying at the secondary education level. Since the Program's inception in 2012, the yearly intake of first-year university Scholars has grown from under 100 to more than 750 (for the 2015–2016 cohort), with graduate students comprising a growing share of first-year Scholars (from 3% in 2012 to 18% in 2015). The gender distribution of Scholars (depicted in Figure 16.1) reflects the Program's special focus on providing girls and young women access to high-quality educational opportunities (The Mastercard Foundation, 2016).

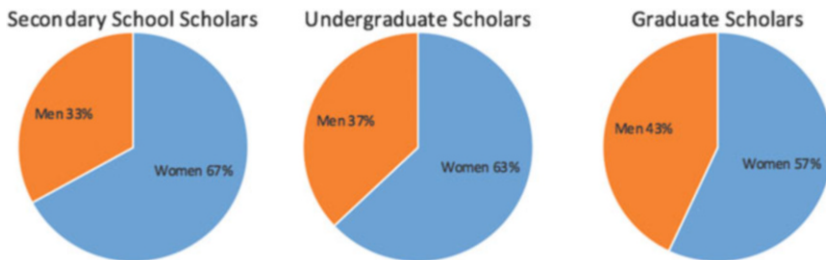

Fig. 16.1 Gender of Mastercard Foundation Scholars (mid-2016)

In 2016, roughly 57% of university Scholars were studying outside of Africa, and 15% had enrolled at an African university outside their country of origin.

By the end of 2016, a total of 5000 Scholars will have graduated, and at projected enrolment levels, we anticipate that 10,600 Scholars will have completed university by 2025. About 80% of these will have earned undergraduate degrees, and 20% will have graduated from master's programs. The proportion of Scholars studying overseas (i.e., in North America, Europe, and Latin America) will drop substantially over time, as African host universities—many of which have joined the Program recently—ramp up enrolment of cohorts that, in some cases, are much larger than those of their overseas counterparts. Scholarships outside of Africa now represent just 5% of the total number of scholarships currently committed under the Program. As the Scholars Program evolves, the composition of the overseas cohort is also likely to change, with a greater proportion of master's level Scholars studying abroad. This reflects a conscious shift in the Program's strategy, resulting from four factors: (a) the addition of African partner institutions that can provide high-quality, locally contextualized undergraduate education to large numbers of Scholars; (b) retaining talent and give back efforts in Africa; (c) a desire to improve the cost efficiency of the Program as a whole; and (d) evidence outside the Program—including from the Foundation-supported African Alumni Project (Marsh et al. 2016)—suggesting that African students who undertake graduate studies abroad are more likely to return to the continent than those who study at the undergraduate level.

However, not all international education takes place outside of Africa. We anticipate that the number of Scholars studying in African countries other than their home country will increase in the coming years, as partner institutions develop relationships that facilitate "upward" recruitment from the pipeline of youth who have completed secondary or undergraduate studies under the Scholars Program. We have also begun to add partnerships between North American and African universities to the Program. These will provide Africa-based undergraduate Scholars with brief study-abroad opportunities, exposure to visiting experts and peers, and satellite campus experiences.

16.1.4 Learning

When the Scholars Program was launched in 2012, the Mastercard Foundation had begun to integrate evaluation and learning within its programs through "learning partnerships", which are intentionally designed structures and processes that accompany a program throughout its lifecycle to help the Foundation and its partners leverage learning opportunities. Learning partnerships are intended to promote program quality improvement, to optimize strategic learning within and beyond the program partnership, and to amplify program impact through dissemination and stakeholder engagement.

The Foundation commissioned Mathematica Policy Research to facilitate the Scholars Program learning partnership. Mathematica helped create a monitoring, evaluation, and learning framework for the Program that includes a theory of change and a set of learning questions developed with input from Scholars Program partner organizations. These questions focused on how the Program was being implemented; its impact on Scholars' education, employment, and social "give-back" outcomes; and the extent to which the Program catalyzed broader change in the policies and practices of implementing partners. Since 2012, Mathematica has launched a rigorous impact evaluation of the Program; created learning briefs on recruitment, transformative leadership, and post-Program transitions; and studied the post-graduation pathways of the first two cohorts of graduates. Foundation-led activities under the learning partnership umbrella have included an annual convening of the presidents of our partner organizations and implementing staff to reflect on Program results and learning; working groups of partners that gather around core themes such as transformative leadership, transitions, and Scholar well-being; third-party research commissioned on various topics to inform programming such as Women's Transformative Leadership in Africa (The Mastercard Foundation, 2014); partner-led research on areas of particular importance, including collaborative research on past African alumni of several university partners (Marsh et al. 2016); and commissioning mid-term evaluations of the Program at several partners, which have informed planning for second-phase grants.

16.2 Challenges and Responses

16.2.1 Recruitment

The Scholars Program focus on serving a specific population—academically talented but socioeconomically disadvantaged youth with leadership potential and a commitment to giving back to society—poses challenges for partners (many of whom have not previously targeted this population) and for would-be Scholars (most of whom face daunting obstacles to accessing higher education). These challenges are particularly acute in the context of the elite North American and European Program partners, whose recruitment efforts have historically not been designed to meet the needs of youth from rural and poor communities in Africa. That said, early data indicate that the Program is successfully recruiting from the target demographic. Specifically, most university Scholars had scored in the top 10% of their secondary school class (78% and 66% in the 2013–2014 and 2014–2015 cohorts, respectively). Most Scholars also reported not having had an electric or gas stove at home—a strong indicator of poverty. At least two-thirds of Scholars had held a leadership position in an organized secondary school activity, and nearly all Scholars had participated in a community service or volunteer activity in secondary school. Once at university, Scholars as a group have been performing well academically and socially, and partners report very high levels of satisfaction with the quality of their cohorts.

Getting to this point required flexibility and adaptive management on the part of the Foundation and its university partners. At the Program's inception, partners outside of Africa were accustomed to recruiting from international schools and from other high-ranking schools in large urban centers. Reaching out to identify less advantaged students—and to verify their eligibility for the Program—required innovation and investment. Early in the Program, the Foundation had asked partners to define economic disadvantage in terms of household income falling within the bottom two quintiles of income distribution in a given country. This definition proved too rigid, difficult to measure, and impractical for partners to operationalize across countries. The Program later adopted a flexible and multifaceted definition of disadvantage, identified by a variety of markers in addition to household income, such as dwelling type and location, parental mortality, parental education level, family size, disability, and whether a student lives in

a conflict-affected area or is a migrant or refugee due to conflict or natural disaster.

In addition, many university partners have expanded their recruitment efforts to better meet the goals of the Program. In 2015, North American partners reported visiting more than 25 African countries to recruit for the Program, highlighting their commitment to creating pan-African cohorts. In contrast, African partners are split in their efforts to recruit outside of their home nations. While several partners do not tend to recruit outside of their countries (because most of their Program slots are explicitly reserved for country nationals), other partners report having expanded their recruiting efforts to additional African countries. The Scholars Program has facilitated these efforts by introducing university partners to headmasters at high-quality secondary schools outside of capital city regions and by encouraging university partners to recruit secondary-level Scholar alumni.

The Program has also grappled with a central tension between the core recruitment criteria, in that high levels of socioeconomic disadvantage can be associated with low levels of access to high-quality education, lower academic achievement, and fewer opportunities to express leadership and "give back" traits through "traditional" means (e.g., starting ventures, assuming leadership positions, and undertaking structured philanthropy). While conducting outreach in poor, rural regions and adopting a flexible selection rubric have helped to identify candidates who satisfy all Program criteria, the Program does not address systemic issues of access at scale, nor does it address the needs of those whose lack of access to quality primary education leaves them unable to access further education.

During recruitment and selection, the question of whether a candidate applying to a school overseas intends to return to Africa is usually approached not in isolation but through the broader question of how the would-be Scholar intends to contribute to society ("give-back", in the Program's parlance). In the words of one partner: "They need to want to make a difference in the world, and want to return home . . . once they pass the academic and socioeconomic hurdles, we're looking for a change they hope to create back home, or that they're already creating".

16.2.2 Post-graduation Transitions

Transitions are lifelong. The vision of the Scholars Program—leaders contributing to social and economic change—will be realized over time, as students take up careers and begin to give back to their communities and

societies. The Program's focus is on empowering Scholars with the information, skills, and networks they require to complete their schooling and successfully transition to further education, jobs, or entrepreneurship. Our experience during early implementation has pointed to some challenges in this respect, and the Program partnership is developing new strategies in response.

All Scholars receive some level of transition support, delivered primarily by Program partners and implementers within a university or secondary school setting. These services include career guidance and academic advisory services, internships, mentorship, community service projects, and connecting Scholars with networks. Through the Program, North American and African partner universities have expanded resources devoted to helping students find internships and jobs on the continent. In addition, a subset of Scholars receives bespoke internship, job-matching, and placement services through Africa Careers Network (ACN). ACN is implemented by African Leadership Academy (ALA) in South Africa and was initially established to enable return to the continent for Scholars studying outside of Africa (both Mastercard Foundation Scholars and ALA graduates studying at North American universities). Over time, demand from within the partner network for ACN support has grown. The Foundation is exploring ways to modify ACN's approach to matching Scholars with employment opportunities to an approach which is less resource-intensive, but has greater reach and potential for scale on the continent.

The Foundation has also recently supported the development of an online community for tertiary Scholars and secondary education graduates, called Baobab. The platform, developed in partnership with Arizona State University, provides robust resources for Scholars to enhance their peer and professional networks and to learn about opportunities for employment, scholarships, internships, fellowships, and a variety of other resources to enable Scholar transitions. Networking is critical in helping to prepare Scholars for internships and employment and fosters opportunities for volunteering, career advancement, and lifelong learning. All Scholars require more intentional opportunities to interact with role models and mentors in their prospective fields and to practice career networking. The Baobab platform is beginning to meet this need, and the Foundation is in the process of developing additional programming to complement partner efforts in this respect.

While the Scholars Program is in the early stages, survey results from the first cohorts of alumni (2014 and 2015) are showing promising results in terms of successful onward transitions. Data from the first cohort of secondary school alumni, for instance, show that 85% are pursuing higher education: a figure that far exceeds national averages in the countries where the majority of Scholars are concentrated. Most secondary school alumni are pursuing further studies in Science, Technology, Engineering, and Mathematics (STEM) fields. This is occurring at equal rates by men and women, suggesting that the Program is helping young women to overcome barriers in the sciences, mathematics, and computing.

Of current tertiary graduates surveyed, 56% are employed and 56% are continuing their education (this includes a small percentage that are both working and studying). Eighty-one percent found employment within two months or less after completing their studies. Just over half of these alumni are satisfied with their current jobs. Alumni report feeling empowered by their participation in the Program and are using their skills and knowledge to solve urgent problems in their home countries. Nearly all say that the Program prepared them to reach their educational (94%) and professional (89%) goals and 84% say it helped them to become effective leaders.

The way that the Foundation and its partners understand and express the theme of the Scholar's post-graduation return to Africa has undergone a subtle but important shift over the first few years of the Program. Initially, the concepts of "go-back and give-back" were tightly bound, with the former understood as a necessary precondition for the latter. Feedback from Scholars and partners, as well as external consultations and evidence, has led the Program to adopt a more nuanced approach. The Program focuses on motivating and equipping Scholars to return by widening and guiding their career paths, maintaining and strengthening their connections to Africa, and nurturing their desire and commitment to give back. This evolution recognizes that most Scholars want to return to the continent to live and work. It also reflects the substantial contributions to the continent of Africans living abroad, both professionally and in a personal capacity. Research with African alumni of North American higher education has further shown that many are globally mobile, moving back and forth between Africa and other regions, suggesting that a binary concept of returning or staying abroad is often no longer universally applicable (Marsh et al. 2016).

To date, a majority of tertiary Scholar alumni have returned, or intend to return, to Africa: almost half (47%) of tertiary Scholars from the first two

cohorts studying abroad returned home soon after graduation. The majority of those remaining abroad expect to return to Africa within 5 years. While these data are based on a small sample and further research is required to understand future trends, it appears that the Program's flexible definition and timeline for return to Africa, its focus on Scholar choice, and support to Scholars applying for internships and jobs on the continent are correlated with high intent-to-return rates.

Though most Scholars are transitioning successfully, many report gaps in school-to-work transition support. Lacking familiarity with the local job market was a recurring theme in alumni remarks about their transition experience. Tertiary Scholars require more country-specific information about the job market, including growth sectors and information about small, medium, and large enterprises. This is particularly true for Scholars studying outside of Africa, whose personal and professional networks may be less developed and for whom knowledge of the job market is less readily available. These Scholars could also benefit from expanded, personalized, Africa-focused career counseling and mentoring. Although most university partners provide Scholars with some form of entrepreneurship skill building, the content and quality vary significantly across the partner network. Scholars pursuing entrepreneurship pathways would benefit from improved quality and consistency in the delivery of entrepreneurial skills and linkages to financing and early-stage capital sources. Other Scholars are concerned about employment prospects in their home countries or face pressure from families to take up work opportunities in North America. Finally, some Scholars originate from conflict-affected countries or refugee communities and are concerned about returning home.

16.3 Conclusions and Implications for Programming and Research

During the first 5 years of the Program, the focus has been on building its foundations: creating appropriate criteria and processes for recruiting and selecting Scholars and partners, strengthening the partner network, and establishing a suite of support services for Scholars as they make extraordinary transitions at the academic, social, cultural, and professional levels. Program development efforts will now take on new challenges, some of which are outlined below.

The Foundation and its partners will recruit more Scholars from among groups still not represented in large numbers in the Program, including students with disabilities and students from underrepresented countries (including those in Francophone West Africa). More generally, the Foundation will develop further partnerships with leading African universities to strengthen the partner network in Africa and offer more opportunities for Scholars to study at quality institutions on the continent. A broader involvement of African universities will support more Scholars to study at the undergraduate level in Africa and allow international scholarships to be focused largely at the graduate level. In addition to recruiting additional African partners, the Program will seek new partnerships between North American, European, and African institutions through faculty and Scholar exchanges, joint programming, online courses, and conferences. The Program's international partnerships will also provide technical support to strengthen institutional capacity at African universities.

We also aim to develop additional transformative leadership content, resources, and curricula. Additional leadership courses with an explicit gender focus will be developed on the Baobab platform. Scholars will be provided with more opportunities to model transformative leadership (through group mentoring via the Baobab platform and with the support of teacher-mentors at secondary schools) and additional possibilities for practicing transformative leadership through service learning projects, leadership positions in school activities, and other efforts. We will connect our work on transformative leaders with the efforts of other individuals and organizations within and beyond Africa to advance transformative leadership across the continent.

To do more to help Scholars position themselves for success after the Program, the Foundation will continue to work with partners and Scholars to expand and enhance the Scholars' community. We will continue to evolve and grow the Baobab platform and will scale up existing efforts to bring university Scholars together in person. An alumni strategy will be developed that capitalizes on partner efforts to keep Scholars engaged post-graduation. We will work to expand internship opportunities for Scholars in Africa. To further support the large numbers of Scholars who will be graduating in coming years, the Foundation will focus on assisting secondary education Scholars in their pursuit of university and/or vocational studies and will provide short-term post-graduation bridge programming, focused on soft-skills development, digital literacy, and entrepreneurship training. For university Scholars, the Foundation will connect Scholars to

industry mentors and networks of employers and businesses in top fields of interest such as engineering, ICT, health, business, agriculture, and creative industries. We will strengthen demand for Scholars by building "talent pipelines" between Scholars and employers interested in attracting ethical young leaders. The Foundation will also explore opportunities to pilot and scale up education finance products and services that help students meet the costs of higher education.

Finally, the Foundation will continue to invest in its learning partnership, integrating further research and evaluation aimed at improving the Program, assessing its impact, and identifying and leveraging the strengths of its partners. Increasingly, these efforts will engage Scholars and implementing partners as active participants at key points in the learning cycle. As Scholars begin to graduate in large numbers, the focus of our impact evaluation efforts will shift from showing the effect of the Program on Scholars' short-term outcomes (e.g., enrolment, graduation, and employment) toward revealing the impact that the Scholars are having on their world. We are developing a rich agenda of longitudinal research that will track Scholars with a view to understanding their journeys as drivers of social change and economic growth. This research will benefit both from our prospective approach, including a rich set of baseline data, and from the considerable size of the overall Scholar cohort and sub-cohorts concentrated in specific countries and fields of work. The early planning and embedding of these measures should enable us to draw more robust conclusions than can usually be derived from tracking studies, particularly when combined with the triangulation of our findings with national data on employment and economic activity.

Analyzing the experiences and outcomes of female Scholars—and of Scholars who are active in key economic and social sectors (e.g., agriculture and STEM fields)—will be central to this research effort. Understanding the employment pathways, challenges, and success strategies of highly qualified and motivated secondary and university graduates in Africa will provide evidence that will be of great interest to policymakers in Africa's growing economies.

As our Scholars grow and change on their way to becoming leaders, so does the Program itself. The Scholars Program case study demonstrates how a donor and its partners have engaged in real time with many of the issues discussed in this volume. The Program continues to adapt and grow in response to evidence (including feedback from Scholars), debate, and reflection at the level of strategy (e.g., the role of international education in

the context of an Africa-focused initiative), the level of implementation (e.g., the ways in which services such as recruitment and leadership training are delivered), and the meta-level (e.g., how we learn about the Program and weave learning back into the Program). We look forward to continuing to share this story—and the stories of our Scholars—in the years to come.

Note

1. Current partners include **North American universities:** Arizona State University, Duke University, McGill University, Michigan State University, Queen's University, Stanford University, the University of British Colombia, the University of California (Berkeley), the University of Toronto, and Wellesley College; **European universities:** Sciences Po and the University of Edinburgh; **African universities:** the African Institute for Mathematical Sciences, African Leadership Academy, Ashesi University, Carnegie Mellon University (Rwanda), Gondar University, Kwame Nkrumah University of Science and Technology, Makerere University, the University of Abomey-Calavi, the University of Cape Town, and the University of Pretoria; **Other universities:** American University of Beirut, EARTH University; and **NGO partners:** Bangladesh Rural Advancement Committee, Campaign for Female Education, Equity Group Foundation, and Forum for African Women Educationalists (FAWE).

References

Marsh, R., Baxter, A., Di Genova, L., Jamison, A., and Madden, M. (2016), *Career Choices, Return Paths and Social Contributions: The African Alumni Project, Abridged Report*, Toronto: The Mastercard Foundation.

The Mastercard Foundation. (2014), Women's Transformative Leadership in Africa. [Online] Available at http://www.mastercardfdn.org/women's-transformative-leadership-in-africa/ (Accessed 9 Dec 2016).

The Mastercard Foundation. (2016), Education in Support of Social Transformation: Learning from the First Five Years of The Mastercard Foundation's Scholars Program. [Online] Available at: http://www.mastercardfdn.org/education-in-support-of-social-transformation (Accessed 9 Dec 2016).

UNESCO. (2016), *Global Education Monitoring Report 2016. Education for People and Planet: Creating Sustainable Futures for All*, Paris: UNESCO.

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PART V

Looking to the Future

CHAPTER 17

International Scholarships in the Ecosystem of Higher Education in Africa

Amini Kajunju

17.1 Introduction

The African continent has been the beneficiary of numerous local and international scholarship schemes for decades, and thousands of leaders, change-makers, and professionals have received these funds to advance their education. Africa, dubbed as the most youthful continent in the world, represents the future of scholarships and a unique opportunity to solve the higher education access-versus-quality conundrum.

For this chapter, the goal is to contextualize the provision of scholarships and its effects on African students and their respective nations. Three esteemed individuals in the field of higher education have provided insights for this case study: Paul Zeleza, vice chancellor of the United States International University-Africa (USIU-Africa); Tade Akin Aina, executive director of The Partnership for African Social and Governance Research (PASGR); and Patrick Awuah, the founder and president of Ashesi University based in Accra, Ghana. In November 2016, I interviewed Mr. Awuah, Mr. Zeleza, and Mr. Aina, to explore their perspectives on the role of scholarships in higher education in Africa.

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17.2 Tertiary Education, International Scholarships, and Nation-Building in Africa

How a society organizes itself to provide access to higher education can reveal its social and economic values and structure. Providing a solid tertiary education to millions of citizens requires planning and complex organization. Divergent institutions have to coalesce around a common yet ever-shifting set of goals and objectives with, in most instances, governments setting the agenda and leading the charge. Universities are made of people, infrastructure, and academic tools. Staff and faculty exist to serve the recipients of education. In other words, the raison d'être of any form of education is the students.

In Africa, the provision of scholarships for higher education has served key purposes—from educating a cadre of professionals to manage countries post-colonization to, most recently, the critical need to educate and compete in a globalized knowledge economy. Indeed, one cannot underestimate the role that higher education and international scholarships, in particular, have played in promoting knowledge sharing, social justice, economic mobility, and intercontinental networks. At the same time, without systems to assist all college-age citizens, especially those at the bottom of the pyramid, to access tertiary education, universities can become structures that perpetuate widening inequality. Consequently, scholarships are a necessary component of the financial aid package that under-resourced students throughout Africa need in order to pursue tertiary education, either locally or abroad.

The common belief is that scholarships to enable Africans to attend university began when American and European philanthropy touched the shores of Africa in the last century. However, according to Mr. Aina of PASGR, charity began at home. He explains that Africans benefited from African-initiated scholarship schemes from local governments and churches. The beneficiaries of these scholarships were sent outside of the continent with the hopes that these professionals would return to lead the newly independent countries of Africa.

Community-led scholarship schemes were also very prevalent in the post-colonial era. Communities across Africa understood the urgency of the post-colonial transition and made sacrifices for certain members of the community to further their education for the good of the country. Corporations took part in scholarship schemes as well, for example, Exxon Mobil in Nigeria provided scholarships for its local workers.

In the post-colonial era, highly-motivated and smart students attended flagship universities like Makerere in Kampala, the University of Ghana in Accra, or Cheikh Anta Diop in Dakar—universities that either charge very little for tuition or nothing at all with the government paying all of the educational expenses for the students. Once again, the goal was the same. Nascent African countries supported tertiary education through these flagship universities to build a new cadre of much-needed leaders and civil servants. Unfortunately, in light of the persistent population growth of the past three decades, and without continuing investment in the physical and academic infrastructure, these flagship universities are struggling to keep pace.

The African continent has seen a proliferation of private universities to meet the growing demand. Private universities can be seen as expensive and out of reach to many; however, some institutions are committed to lowering the financial barrier to entry by providing financial aid. For example, private universities like USIU-Africa in Kenya set aside more than US$700,000 per year in financial aid for under-resourced students. Ashesi University in Ghana, has offered a 35% discount to half of its students since its inception in 2002.

Traditionally, African students have received funds to study in universities in North America, Europe, and even Asia. From the 1960s to 1990s, the USA government provided millions of dollars for Africans to study in the USA. Programs like African Graduate Fellowship Program (AFGRAD), which supported students pursuing master's and doctoral degrees and was administered by the Africa-America Institute (AAI), enabled thousands of Africans to study in the USA. In addition, private foundations such as Ford, Rockefeller, MacArthur, and Carnegie engaged with both African and American universities in their philanthropic contributions to higher education for Africans. They granted funding directly to African universities and contributed additional funds for Africans to study in the USA and throughout the world.

Most often, Global North foundations gave African universities funds for technical and capacity-building assistance and not for scholarships for its students. The perception has been that the African universities were academically inadequate and, therefore, were not a good investment for scholarships.

Today, mainly due to the proliferation of new private universities, there is a growing appetite for scholarship schemes aimed directly at students attending African universities. This welcome shift provides critical financial

support for growth. Philanthropic organizations, such as The MasterCard Foundation, The Mandela Rhodes Foundation, and The Working to Advance STEM Education for African Women (WAAW) Foundation, and corporations like General Electric, are supporting students at African universities. As Mr. Zeleza from USIU reflects, it is important that African students develop a pan-African consciousness and earn their first degree in well-run educational institutions in Africa. Public universities are now competing with new private universities for students and for financial resources. Even though education is a public good, the competition between private and public universities is necessary. It makes each institution more creative and astute about the needs of the students. Despite an increase in the number of educational institutions in the market, African nations are far from reaching critical mass. According to the World Bank, only 8% of eligible college-age citizens are enrolled in universities in Africa, compared to a global average of 35% (UNESCO 2010). Today, population data show Africa with 200 million people between the ages of 15 and 24. By 2045, this number is expected to double (Ighobor 2013).

With the growing youth population, and given that most Africans want to participate in the global economy, there are not enough universities to educate the masses. Governments lament that public funds are stretched. The private sector tends to focus on supporting education for the specific needs of particular industries. At the government level, many Africans are frustrated because there is a sense that there is no political will to prioritize education and job creation. And for this reason, many young and poor citizens leave the continent risking their lives as they cross deserts and oceans in search for a better life.

17.3 Financing Access and Quality Tertiary Education in Africa

In order to educate the masses, the government cannot be absent from the provision of public education, including at the tertiary level. With governments' ability to tax a myriad of products and services, they are in a unique position to generate the necessary resources to build world-class public universities.

Mr. Awuah from Ashesi University suggests that one solution for improved massification of tertiary education can be found at public universities. Even with the low tuition at public universities, there are still many

who cannot afford the fees. Public universities could perform a needs-based assessment for financial aid for all students and make families who can afford it pay the full, unsubsidized tuition. This will free up more money for the extremely poor to attend a university and possibly pay nothing. Furthermore, African universities, especially public ones, do not have sufficient financial tools (loans, grants, bonds, tax transfers, donations) to build the necessary physical infrastructure to accommodate additional students. Philanthropic dollars are an important element of bringing down the cost of building additional infrastructure in African universities.

Mr. Aina observes that all sectors in society must invest in higher education. A VAT higher education tax can be imposed on certain goods and services. He commends the purpose of the Ghana Education Trust Fund (GETFund), a public trust set up by an act of parliament in 2000. Its core mandate is to provide funding to boost government efforts for the provision of educational infrastructure and facilities within the public sector from primary through tertiary education.

Mr. Zeleza at USIU-Africa believes that there needs to be a 'Marshall Plan' to rescue African higher education institutions and make them centers of excellence. As part of the rescue, he would like to see more investment to build a strong faculty pipeline. Flagship universities like Makerere could focus on producing the next generation of lecturers. Today, USIU-Africa is working with the Institute of International Education to offer the Carnegie Africa Diaspora Fellowship Program, a fellowship program for educational projects at African higher education institutions. Supported by the Carnegie Corporation of New York, African-born faculty members apply for fellowships at 68 African institutions of higher learning in Ghana, Nigeria, Uganda, Tanzania, Kenya, and South Africa in the areas of research, curriculum development, graduate student teaching, training, and mentoring. This is a good example of how to engage the African diaspora to build the faculty pipeline in Africa.

As we think about solutions around accessibility, we still need to consider how we are educating the current generation. Some may lament that a tension exists between job readiness and industry-focused learning versus liberal arts education, which focuses on educating the whole person. Both Mr. Awuah and Mr. Zeleza believe job readiness and liberal arts education are complementary concepts and should be included in a well-rounded university educational experience. Liberal arts education creates a lifelong capacity to learn that serves students well. At the same time, universities can teach the STEM fields and other technical subjects to prepare students for

various industries. With high unemployment rates among college graduates throughout Africa, universities must work with industries to ensure alignment while simultaneously maintaining the benefits of a liberal arts education.

Moreover, Mr. Awuah believes the African continent can create ecosystems like Silicon Valley, surrounded by top universities, industries, and innovators. Ideally, these ecosystems can become massive job creators and absorb the university graduates ready to apply their skills. In order to achieve these systems, we need to change the way we educate university students. A move toward teaching methodologies based on questioning the status quo, engaging in exploration, and conducting research is paramount. Venture capital support and a high tolerance for risk would need to increase exponentially as well for these ecosystems to flourish.

To increase access to higher education without building brick-and-mortar facilities, online education has been touted as a possible solution. Online education is evolving and helps deploy technology for learning. Technology can be a facilitator for certain pedagogical goals, including enhancing personalized learning and continuing education while one is building a career. A hybrid model of online education with traditional classroom learning can generate interesting results. However, many in the academic world believe that on its own, online education is not a sufficient tool for a comprehensive tertiary experience. For those who are seeking undergraduate and graduate degrees, there is still a need for the traditional support systems and physical infrastructure to ensure success. Mr. Awuah believes that online education is best suited for lifelong learning after obtaining a degree.

17.4 The Future of Scholarship Programs in the African Higher Education Ecosystem

International scholarships have given many African professionals the opportunity to study and work abroad. As a result, many have benefitted from thriving careers that keep them far from home. Meanwhile, African countries have suffered from the displacement of its best minds, leaving institutions fragile and unable to respond to local needs. For example, Kenya loses 30–40% of newly graduated doctors to the USA, the UK, and South Africa. In Lamu, a small coastal town in Kenya, the effect of the brain drain has led

to the migration of 80% of the doctors leaving the city, resulting in only one doctor for 100,000 people.

Although seeking tertiary education outside of Africa is one of the key contributors to brain drain, the need to study abroad remains. Students will leave the continent for further study to plug into the global economy, build networks, and acquire emerging and new capacities. Thus, governments and the private sector need to find creative and effective pathways for these individuals to return home and sufficiently use their skills (see Chap. 11 in this volume for examples of successful policies to encourage return migration).

Scholarship funds can provide African universities with the much-needed support for both the institutions and the students. However, third-party scholarship schemes require that universities are well managed and consistently deliver on their goals and objectives. The key to attracting more scholarship funds for students is a university's commitment to academic excellence. Furthermore, high-quality administrative and operational services like registration, admissions, fund-raising, and other services must also be in place.

As important, each African university, especially the public ones teaching a wide range of disciplines, needs to decide which degrees offer the most competitive advantage based on the university's academic strengths or positioning. Deciding on specific departments of excellence can attract more funding as well as the best students and professors in the selected field(s). Ultimately, this focus on excellence in specific subjects will increase capacity and impact, thus creating strong ecosystems of universities throughout the continent.

Investing in higher education, through scholarships and other forms of support, has strong positive economic and social benefits, including increased tax base, greater innovation, and higher productivity. According to the World Bank (2009), a 1-year increase in average tertiary education levels can raise annual GDP growth in Africa by 0.39 percentage points and may increase a country's GDP per capita by 12% over time. This is due to greater access to the global economy and technological innovations plus the ability to use the acquired skills to be more effective in newer production methods and services.

Finally, scholarships for Africans to study in universities outside the African continent, or within, have played a positive role in the personal advancement of individuals and the African continent as a whole. Giving the populace access to a good education from the cradle to the grave is how we build progressive and productive societies. We need to seek solutions for the massification of higher education and still maintain excellence in

teaching, research, and innovation while remembering the need to create jobs, safety nets and prosperity for all citizens.

References

Ighobor, K. (2013). Africa's youth: a "ticking time bomb" or an opportunity?. Africa Renewal [Online]. Available at: http://www.un.org/africarenewal/magazine/may-2013/africa's-youth-"ticking-time-bomb"-or-opportunit (Accessed 8 March 2017).

United Nations Educational, Scientific, and Cultural Organization [UNESCO]. (2010). Trends in tertiary education: Sub-Saharan Africa. UIS fact sheet, no. 10. Available at: http://www.uis.unesco.org/Library/Documents/fs10-trends-tertiary-education-sub-saharan-africa-2010-en.pdf (Accessed 8 March 2017).

World Bank Data. Gross enrolment ratio, tertiary, both sexes %. Available online: http://data.worldbank.org/indicator/SE.TER.ENRR?end=2016&start=2010

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Prior to her current roles, Amini Kajunju was the first African president and CEO of the Africa-America Institute (AAI)—the oldest non-profit organization of its kind in the USA—where she initiated and directed programs in higher education and skills training, including the Future Leaders Legacy Fund, East African Development Bank STEM scholarship fund, and the State of Education in Africa conference. Amini currently serves on the advisory committee of University of South Africa (UNISA), is a member of the World Economic Forum's Economics of Innovation Council, and a founding member and Vice-President at the non-profit AngelAfrica. She holds a Bachelor's degree in International Relations from Brigham Young University and a Master's in Public Administration from New York University.

CHAPTER 18

Higher Education International Scholarships and Social Change in India

Vivek Mansukhani

18.1 Introduction

This study reflects on the higher education (HE) international scholarships landscape in India over the last two decades. While the government has welcomed support from foreign governments and donors, it seldom allocates its own funds for international scholarships. These policy choices have important consequences for India as an emerging superpower. The earlier fear of 'brain drain' is now undergoing a paradigm shift as many Indians who have studied overseas are returning to live and work in India, a process of 'reverse diaspora' with exciting opportunities back home. This chapter argues that there is a need for more people with international experience, knowledge and skills to accelerate the development and growth process and therefore the Indian government as well as the corporate sector should consider investing more significantly in international scholarships.

This study also examines why in India today there are hardly any HE international scholarships opportunities extended to disadvantaged groups either by the government, corporate entities or overseas donors. Such opportunities seem to be available only to the already advantaged. The chapter examines the Ford Foundation's International Fellowships Program, which provided international scholarships for over 300 members of

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marginalized groups between 2001 and 2013 in India, and considers why the government or private donors have not encouraged similar models. Such programs are necessary to create a pipeline of leaders from disadvantaged communities to create more inclusive development and greater social cohesion in India.

18.1.1 Indian Higher Education in Context

With 1.3 billion people, nearly a fifth of the global population, India is the second most populous country in the world. Seventy-three percent live in rural areas while 27% live in urban agglomerations. More than 50% of the population is below the age of 25 and more than 65% below the age of 35 (Basu 2007). Currently the third largest economy in the world, India is predicted to become one of the two largest by 2050 (PriceWaterhouseCoopers 2017).

Although the agricultural sector continues to be India's largest employer, the country has a rapidly growing service sector and is a major exporter of information technology and software services. It is also one of the world's fastest growing e-commerce markets. Poised to be a superpower in the early part of the twenty-first century, India faces a huge challenge in upgrading the quality of its vast human capital. It lacks a robust strategy that can leverage its massive people power by providing them opportunities for academic and skills enhancement in local as well as global contexts.

The Indian government's ambitious Skill India campaign—with a goal of skilling 400 million people by 2022—aims to redress this enormous challenge by improving the capacities of a critical mass. However, these opportunities to enhance job and employability skills, improve entrepreneurship and vocational skills at an international level seem to be focused entirely in-country. While the government has created its Massive Online Open Courses (MOOC) platform called SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), which will benefit millions of students through self-study modules designed by top faculty, these online courses cannot replace the additional benefits of an actual immersive international university experience. We see therefore that many Indians elect to study abroad—some 181,872 in 2014 (IIE 2015)—especially in the English-speaking, high-prestige systems of the United States, the United Kingdom, Australia, New Zealand and Canada (UNESCO 2016). However, there are currently very few initiatives to offer Indian students higher education or skills-building opportunities at foreign universities or training institutes abroad.

In contrast, emerging BRIC countries like China and Brazil have invested significant funds to provide high-quality international academic experiences to their students and seem to have benefited enormously. They have done this with a view to internationalize their education systems, to sharpen students' academic skills and orient bright young minds toward extensive research in different disciplines. Brazil has created major opportunities for its citizens. A prime example is the Brazilian Scientific Mobility Program, the Brazilian federal government's large-scale nationwide scholarship program profiled as a case study in this book. China's Ministry of Education allocates significant funds and works with the Chinese Scholarship Council to offer the Chinese Government Scholarship Program, a national scholarship program financing outstanding Chinese students to study at top universities around the world, also a case study in this book. In India, however, investment in international higher education is not seen as priority. With not enough quality HE institutions and the HE system requiring a major overhaul, the government's more immediate goal seems to be addressing these domestic issues rather than supporting students for international education.

The Indian domestic higher education scenario presents serious, perhaps insurmountable, problems. For example, only a small percentage of India's vast college-age cohort enrolls in higher education. UNESCO (2017) has reported that enrolment in tertiary education in India had reached 25.5% in 2013, although fewer will finish their studies than begin them. Author and journalist Shreyasi Singh argues that both quantity and quality are serious issues:

> India's huge pool of young people might be considered its biggest strength. Unfortunately, India is far from having its act together when it comes to figuring out how to educate these young people. Government data suggests that only one out of every seven children born in India goes to college. What's more, the nation suffers from both a crippling quantity, as well as a quality, challenge when it comes to higher education. (Singh 2013)

Higher education in India suffers from systemic deficiencies, and the country cannot sustain its growth momentum and maintain competitiveness unless these seemingly endless problems are fixed. Education expert Pawan Agarwal highlights issues such as low and declining standards of academic research, an unwieldy affiliating system, inflexible academic structure, uneven capacity across subjects, eroding autonomy of academic

institutions, a low level of public funding and an archaic and dysfunctional regulatory environment (Agarwal 2010). These deficiencies lead to a weak higher education system that produces many unemployable graduates, despite mounting skill shortages in a number of sectors. As well-known scholars Devesh Kapur and Pratap Bhanu Mehta conclude:

> India is facing a deep crisis in higher education, which is being masked by the success of narrow professional schools. The veneer of the few institutions of excellence masks the reality that the median higher education institutions in India have become incapable of producing students who have skills and knowledge. (Kapur and Mehta 2004, p. 27)

These problems are compounded by the roadblocks to opening opportunities for international education providers at home and the scarcity of scholarships for study abroad. Several top international universities have been interested in coming to India, an attractive destination with its estimated USD10 billion higher education market. India offers huge potential for them to expand and grow new markets. However, the Foreign Education Providers Bill—legislation to open the higher education market to non-Indian universities—has been awaiting approval and implementation for several years. The government had hoped to allow the world's top 400 universities to set up campuses in India and operate independently without local partners, in a step intended to loosen control and regulation of foreign universities. Yet the Bill also prohibits the foreign universities from taking surpluses out of India and contains clauses requiring them to maintain escrow accounts and obtain the University Grants Commission's permission to operate. In contrast, places such as Singapore, Dubai and Qatar are not just enabling quick permissions but are providing top universities free infrastructure and facilities to entice them to set up local campuses. With the failure to pass the Foreign Education Providers Bill and consequently allow foreign universities to set up their branches in India, a huge opportunity to offer world-class learning opportunities to Indian students without having to go overseas remains untapped, since the demand for quality education far outstrips the available supply.

18.1.2 Funding Challenges and International Study

Since the process of economic liberalization began in India about two decades ago, an increasing middle-class population has arisen with

aspirations for their sons and daughters to access high-quality international education and to acquire an extra edge in securing jobs in an extremely competitive labor market. But they do not have the financial resources to make this happen, as foreign higher education is prohibitively expensive. While economic liberalization has led to a wide proliferation of public and private sector banks that offer loans and finance schemes to pursue international higher education, these are very expensive options and students from less privileged or even middle-class backgrounds are not able to avail themselves of such opportunities for fear of debt traps.

Funding for international higher education opportunities for Indians has always been a rare commodity, in relationship to the size and scale of the country. Nonetheless, over the 70 years since the country's independence, thousands of Indians have benefitted from international scholarships—but these have been offered almost entirely by foreign universities and international private or public donors. The government's mandate has been to promote basic education for all, and it has introduced free education up to high school. While the Indian government has offered domestic higher education scholarship opportunities to students who are socially disadvantaged, it has not extended significant financial support to those who want to acquire an international higher education experience.

While the Indian government may believe in the merit of its young people acquiring global knowledge to create a critical mass of internationally educated and skilled workers and entrepreneurs, it does not contribute its own financial resources toward this endeavor. The Indian government funds very few of its own scholarship programs to enable students to pursue higher education in foreign countries. Instead, it relies on the governments of countries like the UK and the USA, with which it enjoys strong bilateral relations, to offer scholarships such as the Commonwealth Scholarship and Fellowship Plan and the Fulbright Foreign Student Program, respectively. At present, the external scholarships administered, but not funded, by the Ministry of Human Resource Development (MHRD) can be grouped into two categories: (1) those provided through the Commonwealth scholarships for the UK and New Zealand and (2) scholarships offered by the governments of China, Korea, Israel, Japan, Belgium, Italy, Mexico, Turkey and Sri Lanka for study in those countries. The only funding for international study offered by the government of India is the National Overseas Scholarships, targeted to support candidates from financially and socially deprived sections of society such as those belonging to scheduled castes, scheduled

Table 18.1 Popular international government scholarships for Indians to study abroad, in alphabetical order

Scholarship program	Sponsoring Country
Australia Awards	Australia
Chinese Government Scholarships	China
Chevening Scholarships	UK
Commonwealth Scholarships and Fellowships Plan	UK
Fulbright Foreign Student Program	USA
International Postgraduate Research Scholarships	Australia
Italian Government Scholarships for Foreign and IRE Students	Italy
Korean Government Scholarships	South Korea
National Overseas Scholarships	India
Singapore International Graduate Award	Singapore
Singapore MOE Tuition Grant Scheme	Singapore

Adapted from Careers360 (2017)

tribes, other backward classes and those with disabilities. Table 18.1 lists some of the more popular scholarships, in alphabetical order.

In addition to scholarships offered by foreign universities and by foreign governments, students also draw on private funding channels to pursue their graduate studies overseas. Table 18.2 provides an illustrative list of some of the more widely known scholarships, including funding sources that are loan scholarships rather than non-refundable grants.

Indian private corporations, despite a growing commitment to corporate social responsibility, have not invested their funds to support international scholarships, which are expensive propositions for them. They would rather support programs that offer (the much cheaper option of) domestic scholarships or support primary and secondary education initiatives, even adopting entire villages with large numbers of children. These projects demonstrate more return on investment in terms of sheer number of beneficiaries whose lives have been impacted, as compared to individual international scholarships that require significant investments per person.

Similarly, there are several reasons why the Indian government does not offer more international scholarship opportunities. First is an ongoing concern that the country is losing revenue and valuable foreign exchange due to the large exodus of students. Agarwal (2010) indicates that the

Table 18.2 Privately funded scholarships and loans for Indian students to study overseas, in alphabetical order

Private scholarship programs
Aga Khan Foundation International Scholarship Programme
Asian Development Bank (ADB) Japan Scholarship Program
Association for Overseas Technical Scholarship (AOTS)
Cambridge Nehru Scholarships
Cambridge Society Mumbai Scholarship Fund
Homi Bhabha Fellowships Council
Inlaks Shivdasani Foundation Scholarships
ITC Ltd
J.N. Tata Endowment for Loan Scholarships
K.C. Mahindra Education Trust
Lady Meherbai D. Tata Education Trust Scholarships
R.D. Sethna Scholarship Fund
Rhodes Scholarships
Rotary International Ambassadorial Scholarships
Sahu Jain Trust
Singapore Airlines Scholarships (SIA Youth Scholarships)
Tata Scholarships at Cornell University
The Oxford & Cambridge Society of India Scholarships
United World Colleges International Youth Scholarships

Compiled by the author

figures are comparable to the total public expenditure on higher education. It is estimated that Indian expenditures on foreign higher education totaled USD 3151 million in 2004: equivalent to 0.46% of the Gross Domestic Product (Bashir 2007). Thus, the concern is genuine. However, most of the students who go abroad finance their own study. It is therefore private expenditure, not public money. Further, it is not clear that these students or their families would have spent the money in country if the students had stayed back.

Second, the Indian government is apprehensive about 'brain drain' because of outward student mobility (see Chap. 11 for further discussion). A significant proportion of students who undertake postgraduate and doctoral studies abroad have completed their undergraduate degrees at high-prestige institutions at India and many do not subsequently return to India. It is argued that building domestic postgraduate higher education capacity

would enable the country to retain students. This, however, may not entirely be true. Recent studies indicate that increases in educational capacity in the home countries and in the number of institutions and teachers are likely to increase the flow of students to the USA (where highest number of Indian students go for postgraduate studies). This is primarily because student migration is strongly affected by the promise of wage opportunities, not constraints in the domestic educational capacity of their home countries (Agarwal 2010). As Agarwal (2010) observes, several countries now use the academic gate approach—drawing on the pool of students coming to study in a foreign country—to lure talent into the longer-term labor force.

Concerns about brain drain are not universal, however. There now seems to be a reverse trend, with many Indians—especially in business and technology sectors—coming back after successful stints overseas and adding to their home country's skilled workforce.

> For India, with its large population and huge capacity to generate skilled professionals at home as well as by education abroad, out-migration of professionals is an opportunity and not a threat. A country like India with its large population and sizeable pool of scientists and engineers could threaten the North's monopoly in high tech sectors by producing innovative products and services. (Agarwal 2010, p. 16)

This could result in "human resource leapfrogging" for countries like India (Freeman 2005). Based on this trend, the government could create opportunities for international mobility through higher education on the premise that these steps will eventually lead to enhancing the country's stock of human capital. It could also, if desired, enact policies to help mitigate the effects of brain drain, as countries such as Singapore have done (see Ziguras and Gribble 2015). Investment in international education—leading to quality education and the unique experience of individuals acquiring world-class knowledge and skills—is likely to contribute new ideas and innovation for Indian development in the long run. Although present concerns about revenue loss and brain drain are understandable, luring talent through return migration, joint ventures, diaspora engagement and other similar strategies could be very fruitful, especially if tied to investments in Indian higher education institutions.

18.2 Scholarships and Social Inclusion

While international universities and donors do offer scholarships to students from India, these are normally secured by those who have already accessed high-quality education in India and are ready to spread their wings further. This means that a large cross-section of students, lacking the necessary platforms to compete for admission to international academic institutions and the financial resources to study abroad, gets completely marginalized. The chasm of inequity continues to widen.

This gap creates an opportunity for international scholarships programs to take a more needs-based approach and be more ambitiously designed to address social change. The Indian government is missing an opportunity to use international scholarships as a tool to create a more equitable society. No substantive research data are available to indicate how international scholarships opportunities have impacted social change in India, except for a few isolated cases like the Ford Foundation International Fellowships Program (IFP) which ended its 12-year intervention in India (2001–2013) with a detailed assessment of what had been achieved through the program and how it would continue to influence societal change (Mansukhani and Handa 2013). The few reports available assert that studying in high-quality academic institutions outside of India gives students truly transformative and life-altering experiences that impact them both professionally and personally. But no in-depth study of critical issues exists that could help potential private donors or the government understand the benefits of such investments to the larger society.

The experience of the IFP, which supported 330 fellows from marginalized backgrounds in India, provides some clues about these broader benefits. Although the program was a very small drop in the ocean in a country of such epic proportions and which has such "layered inequalities" (Devy 2009), the program proved to be a springboard for the fellows' personal and professional transformation. The return rate to India was 95%, even after study in the USA and UK, the sites of traditional concern about postgraduate brain drain. Social entrepreneurship expert Manisha Gupta observes that apart from newly acquired academic and technical skills, the IFP alumni returned from their international experiences with a richer understanding of their own identities and their potential as social justice leaders (Mansukhani and Handa 2013). Her analysis reveals that many who were already heading civil society organizations before their IFP experience

felt that their time outside of their local environment had helped them to reflect on their social justice ideals and plans.

Several IFP alumni are today regarded as role models in their communities. Their achievements have encouraged others with similar backgrounds of deprivation to explore the possibilities of international higher education as a possible route for strengthening their social justice leadership skills. Gupta concludes: “As streams of Fellows returned to their community bases with new skills and knowledge, they accelerated development at the grassroots as social entrepreneurs, strategic activists, advisors to local governments, academics anchored in grassroots communities, or as artists committed to the politics of the subaltern” (Mansukhani and Handa 2013, p. 136). Examples include Nekram Upadhyay, himself a person with disabilities, who returned from the University of Illinois in Chicago as one of the first Indians certified in assistive technology, an emerging field in India’s disability sector. Bhangya Bhukya from the Lambada tribal gypsy community completed a PhD in Modern History from the University of Warwick in the UK and is now a professor at a well-known Indian university. Shubhra Pachouri, having faced discrimination as a woman from a rural background and accessed the English language at a very late stage of her educational journey, completed a Masters in Human Rights Development from the Institute of International Studies in The Hague. Back in India, she now argues human rights cases and advises on gender issues.

Some of the key design features and outcomes that were the hallmark of the IFP model are still applicable and could be replicated. IFP was an equity-based program that enabled those who had faced social disadvantage but had demonstrated that they could be potential leaders for social justice to access high-quality international higher education opportunities in any country in the world. Once selected, IFP fellows were provided with mentoring and preparatory training, as well as ongoing administrative assistance during their study period. For example, those who were unfamiliar with academic study options were offered advice on graduate schools and assisted with application procedures. They underwent English language instruction, training in computer and research skills and took part in networking opportunities designed to provide personal support and a powerful sense of belonging to a national and international leadership cohort. Many more of the finalists than the IFP could fund (approximately 1800 candidates were interviewed for the 330 fellowships that were eventually offered) were fully qualified: a powerful reminder that if education is to be a catalyst

for development, societies must find ways to reach more of this deep but hidden talent pool.

IFP demonstrated that careful investment in selecting the right individuals—those committed to using their education to promote development at home—and offering them bespoke opportunities for their self-enhancement could not only contribute to the high physical return rate but also bring in compelling social returns. The fellows are now giving back to society in various capacities affecting the lives and livelihoods of large numbers of people. Although a "mere trickle in terms of human capital investment" in the world's second most populous country, the program's conviction that the fellows would "become torch bearers who could inspire others to improve their lot, to equip and empower themselves through higher education options" was largely confirmed (Mansukhani 2011). With equivalent methods, the Indian government could sponsor programs that achieve similarly compelling results.

18.3 Recommendations: What Lies Ahead?

Sukhadeo Thorat, an economist and former chairman of the University Grants Commission in India, has argued that unequal opportunities for higher education in general, and international higher education in particular, "...have developed unequal human capabilities and converted education into an instrument to further economic inequalities" (Thorat 2015). This is a major challenge for current policymakers, for the next generation and for the country as a whole. Thorat believes there are two ways to deal with this. First, the quality of education provided, both by public and private higher education institutions, needs to be seriously improved. The government could offer new schemes for financial assistance as the current scenario of educational loans from banks, despite government subsidies on interest, does not help the poor to gain access to higher education and only exacerbates the inequality (Thorat 2015).

Further, enabling an education—whether in India or abroad—that is relevant to the economy and society is critical. While the newly created Ministry of Skills Development and Entrepreneurship has created initiatives for vocational and professional education, this is not the case for the education sector. Framing successful policies requires reliable data that are sadly lacking. The D.S. Kothari Commission conducted the last major review of the education sector over 50 years ago, in 1965. The need of the

hour is a review that will address the interrelated issues of access, equity and quality head-on (Thorat 2015).

There are many priorities for higher education in India on both the domestic and international fronts. For the latter, passing and implementing the Foreign Education Providers Bill and offering more scholarships for international study should be a priority. Most important, though, is using rare and valuable scholarship opportunities to promote greater equity and social justice. The government has taken on the mandate to prepare many more Olympics winners in time for the 2020 Olympics by giving young sports people world-class opportunities and training to compete at international levels. Perhaps they might also consider funding international higher education programs to equip India's future leaders with world-class skills and expertise. While educating millions and skilling them under the Skill India campaign, the importance of international education, especially for social justice leaders from marginalized communities, should not be forgotten. Indian corporate sector giants, such as Tata, Mahindra, Ambani and Murthy, have made endowments worth millions of USD to universities such as Harvard, Stanford and Wharton (DNA 2010; Whoop 2016). For instance, the Harvard Business School received a gift of USD 50 million from the Tata Group in 2010 (DNA 2010). Perhaps the private sector could join hands and combine resources with the government to support ambitious scholarships programs for the most deserving Indians to study abroad, with a focus on those who are most committed to social justice from their respective communities. This focus will enable the county not only to continue its spectacular economic growth but also allow for more inclusive development and greater social cohesion in India.

References

Agarwal, P. (2010). Indian Higher Education: Envisioning the Future, New Delhi: SAGE Publications India Private Limited.

Mansukhani, V. (2011). The Net Worth of a Network: A Case Study of IFP Alumni. Aqui Estamos, 15, pp. 11.

Bashir, S. (2007). Trends in International Trade in Higher Education: Implications and Options for Developing Countries, Washington, DC: The World Bank.

Basu, K. (2007). India's Demographic Dividend. [Online] Available at: http://news.bbc.co.uk/2/hi/south_asia/6911544.stm (Accessed 11 March 2017).

Careers360. (2017). Top government scholarships to study abroad. [Online] Available at: http://www.studyabroad.careers360.com/articles/top-government-scholarships-study-abroad (Accessed 13 March 2017).

Devy, G. (2009). India: Layered Inequalities. In: T. A. Volkman, J. Dassin & M. Zurbuchen, eds. Origins, Journeys and Returns: Social justice in international higher education. New York: Social Science Research Council, pp. 177–195.

DNA. (2010). Why is Tata funding a Harvard?. [Online] Available at: http://www.dnaindia.com/analysis/editorial-why-is-tata-funding-a-harvard-1454109 (Accessed 13 March 2017).

Freeman, R. (2005). Does Globalization of the Scientific/Engineering Workforce Threaten US Economic Leadership, Cambridge: National Bureau of Economic Research (NBER), Working Paper No. 11457.

Kapur, D. & Mehta, P. B. (2004). Indian Higher Education Reform: From Half-Baked Socialism to Half-Baked Capitalism, Cambridge: Center for International Development at Harvard University.

Mansukhani, V. & Handa, N. L. (2013). Opening Doors: ten years of the Ford Foundation International Fellowships Program in India. New Delhi: Ford Foundation International Fellowships Program.

PriceWaterhouseCoopers. (2017). The Long View: How will the global economic order change by 2050?. New York: PWC Global.

Institute of International Education [IIE]. (2015). Project Atlas: India's students overseas. [Online] Available at: http://www.iie.org/Services/Project-Atlas/India/Indias-Students-Overseas#.WMZh2_nyiUk (Accessed 13 March 2017).

Singh, S. (2013). Challenges and Solutions in Indian Higher Education. The Diplomat. [Online] Available at: http://thediplomat.com/2013/10/challenges-and-solutions-in-indian-higher-education/ (Accessed 13 March 2017).

Thorat, S. (2015). A Blueprint for Higher Education. The Hindu. [Online] Available at: http://www.thehindu.com/opinion/lead/a-blueprint-for-higher-education/article7522994.ece (Accessed 13 March 2017).

Scoop Whoop. (2016). PepsiCo's Indra Nooyi Is The Biggest Alumnus Donor To A US University. Here Are 5 Other Generous Indian Tycoons. [Online] Available at: https://www.scoopwhoop.com/IndianOrigin-Indra-Nooyi-Becomes-The-Biggest-Alumni-Donor-But-Shes-Not-The-Only-One-To-Fund-Foreign-Universities/#.29zs0leh1 (Accessed 11 March 2017).

United Nations Educational, Scientific and Cultural Organization [UNESCO]. (2016) UNESCO Institute of Statistics: Global Flow of Tertiary- Level Students 2014. [Online] Available at: http://uis.unesco.org/en/uis-student-flow (Accessed 13 March 2017).

United Nations Educational, Scientific and Cultural Organization [UNESCO]. (2017). UNESCO Institute of Statistics: Gross enrolment ratio by level of education. [Online] Available at: http://data.uis.unesco.org/index.aspx?queryid=142 (Accessed 13 March 2017).

Ziguras, C. and Gribble, C. (2015). Policy responses to address student "brain drain": An assessment of measures intended to reduce the emigration of Singaporean international students. Journal of studies in International Education, 19(3), pp. 246–264.

Vivek Mansukhani was Director of the Ford Foundation International Fellowships Program in New Delhi, India. Over a 12-year period, this program supported more than 300 socially and economically underprivileged candidates from India who had demonstrated social commitment, academic viability and social justice leadership skills, offering them international higher education opportunities at universities in several countries. At the conclusion of the program, he co-edited a book *Opening Doors*, which examined the outcomes of this path-breaking intervention and its impact on the lives of the fellows and their communities. Vivek worked previously with the British Council in Calcutta and New Delhi, managing a large portfolio of higher education scholarships programs (including Chevening) for Indian students going to the UK and helping set up and consolidate their alumni networks. Alongside two decades of experience in the development and education management sectors, he pursues his interest in the performing arts and heads a theatre company where he acts, writes, directs. He has also worked as Director Arts, India, at the British Council from 2013 to 2017 and is now Head of the Institute of International Education in India.

CHAPTER 19

Conclusion: Pathways Revisited

Joan R. Dassin, Robin R. Marsh, and Matt Mawer

19.1 Introduction

This book grapples with the fundamental question of whether international scholarships serve as a vehicle for positive social change. Rather than offer a single answer, we have explored the particular conditions and specific ways in which diverse pathways are manifest. These reflections and analyses are based on extensive practice and research about international scholarship programs. While acknowledging a series of difficulties in both design and data collection, authors writing from different regional and professional perspectives confirm the book's thesis: there are numerous pathways by which scholarship programs and award recipients break down barriers and foster positive change.

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Turning the spotlight on international scholarships as a subject for analysis has revealed a number of themes, remarkably consistent, and illuminating both the enduring qualities of scholarships as well as their multi-faceted relationship to social change and evolving models of higher education. We examine these themes in the remainder of the first section. In the second section, we highlight the policy and programming choices that can enhance the social change impacts of international scholarship programs. Finally, in section three, we propose a future research agenda and practical steps to build a community of researchers for this nascent field.

19.1.1 Continuity and Innovation

As both a policy instrument and a funding mechanism, scholarships are remarkably durable and adaptable. As John Kirkland observes, the Commonwealth Scholarship and Fellowship Plan, established in 1959, has "maintain[ed] its high profile, whilst continually responding to changing environments" (Chap. 8). This ability to balance continuity and innovation is the hallmark of many long-standing programs, including iconic examples—such as Rhodes and Fulbright—that are indelibly associated with the word 'scholarship'.

One consequence of this longevity and adaptability is that that the universe of international scholarships is varied to the point of fragmentation, reflecting the capacity of these financial instruments to serve a wide array of objectives and adapt to changing circumstances. The variation also reflects a lack of coordination among sponsors, which include both state and non-state actors who differ in the scope and purpose of their investments. Developed countries frequently invest under the broad mantle of international development but also expect to see their investment benefit domestic higher education systems (where incoming scholarship students are usually required to study) and yield longer-term returns in public diplomacy, 'brain gain' and trade. Developing countries, in contrast, typically justify the expenditure of public funds on international scholarships for their own citizens to study abroad as a means to build scientific, institutional and technical capacity in key areas for growth and development or, in the case of support for inbound students, as a means to increase their influence abroad.

This broad array of motivations and aims, combined with an increasingly multipolar world of international study destinations, makes it difficult to

trace a straight line from any given international scholarship program to a broader set of impacts. As Kent observes, this complexity has been recognised elsewhere:

> Scholarships … sit in an undefined academic space, somewhere between development, education and public diplomacy. They are studied across faculties, or by interdisciplinary researchers. It is perhaps this undefined space that has allowed for scholarships to remain relatively under-researched, although this is changing. International students and the role they play in the world of foreign relations is *'not a terrain of neat paths and well-trodden methodologies, but it seems to have dawned as a field of study'* (Lowe cited in Kent, Chap. 2).

The terrain is unlikely to become any neater in the near future, with new scholarship programs emerging and traditional programs being progressively reconfigured.

Another perennial issue raised by individual scholarships is their relationship to institutional support in target countries. Donors often confront trade-offs between investment in developing country higher education institutions and international scholarships oriented toward individual change agents. From a sustainable development point of view, which is most effective? Combining individual scholarships and institutional investments is compelling in theory but difficult to achieve in practice. Boeren (Chap. 3) analyzes the experience of European Union and bilateral scholarship and capacity-building programs and suggests that a hybrid, 'orchestrated' approach can reap substantial rewards, but requires a rarely found longer-term perspective and willingness to share or cede control over operations.

Similar trade-offs stem from the relative benefits of international exposure versus study in regional higher education hubs that are emerging in the developing world, for example, in the United Arab Emirates, Qatar, Malaysia, Singapore, South Africa and China. Increasingly, intra-regional mobility—often twinned with higher education investment in developing countries—is being funded with the intention to develop many of the same qualities as traditional scholarship programs that support study in high-income countries. Intra-regional scholarships present a substantial challenge to the status quo: study in intra-regional institutions is almost always less expensive to fund and may help to address long-standing concerns about the social context in which knowledge is generated and transferred. Yet intra-regional exchanges raise quality and capacity concerns, as

Kajunju (Chap. 17) and Mansukhani (Chap. 18) have outlined in the African and Indian contexts.

19.1.2 Defining and Identifying 'Social Impact'

From roughly the year 2000 onward, a burst of research on international scholarships has developed in response to major trends in higher education and in development funding. These trends include: the 'rediscovery' of higher education by the international development community after decades of priority investment and research in primary education; greater focus by donors on measurable outcomes, accountability and 'value for money'; and advances in both empirical investigation and research methodologies. Matt Mawer summarizes the state of the art in this research, while Mirka Martel provides an overview of evaluation methodologies. Their chapters make clear that more empirical information about scholarship outcomes, especially at the individual recipient level and focused on career advancement, is now available. More rigorous evaluation methodologies, including counterfactual data on non-recipients and longitudinal studies that will allow programs' long-term effects to emerge over time, are still not the norm but are becoming more common.

The upturn in research interest, and concurrent policymaking interest, have begun to raise more nuanced questions about what is meant by the 'social impact' aims of scholarship programs. Dassin and Navarrete argue that the social impact of individual scholarship holders is more of an 'idealized trajectory' (Chap. 15) than a demonstrated relationship. One reason is the common failure of both international and national programs to gather the necessary data to analyze the specific circumstances under which individual recipients begin their educational and professional journeys and the diverse contexts to which they return.

A facet of beneficiaries' trajectories that has garnered extensive interest is the relationship between social impact and returning home. Marsh and Uwaifo (Chap. 11) argue that although brain drain still has significant negative effects on some of the world's poorest countries, *physical* return of scholarship recipients to their home countries is not necessarily synonymous with impact. New trends are emerging that complicate this linear trajectory. First, return migration to emerging economies such as China and India is increasing, while 'brain circulation' and 'brain gain' are resulting from increased competition for global talent, particularly where governments have enacted programs that encourage citizens living abroad to be

involved in national development. Second, recipients' home countries may be in the throes of economic and political crises, prolonged conflict or authoritarian regimes—situations hardly conducive to eager graduates' plans for social change. Such plans may be better advanced by a strategic 'delayed return' (Marsh et al. 2016) to take advantage of career opportunities and, in many cases, continuing access to international networks and resources for creating social enterprises that benefit home countries.

The conditions scholarship programs impose for the post-graduation return of recipients to their countries of origin are closely linked with theories of change that build from the individual to spheres of society where needs are greatest. Both historically and at present, this relationship typically equates scholarship beneficiaries' social impact with returning to, and remaining in, their country of origin. Yet "...the growing potential of diaspora and transnational communities to stimulate economic development and social change" (Marsh and Uwaifo, Chap. 11) is challenging this fixed idea. Evidence from this book suggests that both individual agency and societal transformation may be undermined when scholarships have inflexible conditionality requirements around returning home, at least in the short term (Campbell, Chap. 9). A recommendation for greater flexibility need not be inconsistent with 'social contracts' between scholarship providers and recipients. Rather, it acknowledges the limitations of planning an 'idealized trajectory' and recognizes heterogeneity in scholars' ambitions and learning priorities, their employment options, and in the dynamic nature of socially meaningful work open to highly skilled and committed graduates.

Defining and identifying social impact is highly dependent on particular contexts. Examples of the need for specificity in analyzing 'social impacts' recur throughout the book: in approaches to finding the appropriate candidates for targeted scholarships; in the guidance offered during academic programs to support scholarship recipients' subsequent socially-oriented work; in the latitude given by program designers for individual beneficiaries to determine their own post-scholarship trajectories; and in the approaches of evaluators to understanding the link between individual action and broader impacts on communities, institutions and society. There is currently no unified view on most of these topics, reflecting the varied aims of scholarship programs, the diversity of contexts and the contingencies and variations of individual agency. Rather than seeking oversimplified formulas, we are encouraged by the extent to which these questions are increasingly

being addressed at the highest levels of program design, implementation and evaluation.

19.2 Policy and Programming Implications

In the current global political environment, public resources for foreign affairs and international development will be hotly contested and may be reduced or redirected. How funding for international scholarships will be affected is an empirical question yet to unfold, but one this book may influence. Population growth and a globally expanding middle class will propel increased demand for higher education in countries worldwide. Internationalization of higher education is likely to keep pace, and scholarships—often the fulcrum of higher education access strategies—will likewise experience greater demand. Inevitably, concerns will arise about trade-offs between the 'quantity' of scholarships and 'quality' of beneficiaries' experiences, with their associated comprehensive (and resource-intensive) support. This book provides some important guidance to those involved in these vexing policy decisions.

To draw together the international scholarship policy and programming implications of the book, we return to the framework outlined in our introduction: the 'change agent', 'social network', 'widening access', 'academic diversity' and 'international understanding' pathways by which scholarships lead to social change. We avoid prescribing specific recommendations given the wide diversity in scholarship program goals and priorities described earlier, allowing the evidence from the text itself to provide useful lessons for best practice and effective policy.

19.2.1 Change Agents

Program funders, particularly private foundations, are increasingly attentive to design elements that strengthen their programs' social change impacts. Most important are selection processes that seek candidates with outstanding records of community service and leadership capacity as well as traditional academic achievement, as documented by Everlyn Anyal in her chapter on 'Selecting Leaders'. As an example, the Ford Foundation International Scholarships Program (IFP) adopted a strategy to select social justice leaders from marginalized or excluded communities throughout the developing world for graduate degrees at universities of their choice (see also Manukhani, Chap. 18). The intention was to enable grassroots

leaders to transcend discrimination and become powerful agents for change. In IFP and in other programs, design features such as preparatory training in languages, placement and mentorship support, activities to strengthen social and professional networks and—as Martha Loerke argues in her chapter on 'Facilitating Post-Study Transitions'—support for successful post-study transitions to home countries, can help prepare individual beneficiaries to succeed not only in their studies but also as change agents after graduation.

Scholarship program managers and funders also debate the level of education that scholarships should fund. These debates are increasingly based on new data and evidence linking certain programmatic decisions with likely outcomes that most reinforce the formation of 'change agents'. For example, many donors prefer scholarships for master-level degrees because of lower cost, historically higher rates of return (as compared to PhDs and undergraduates) and these programs' typical focus on practical skills for social and economic development. However, while doctoral education is expensive, evidence from past doctoral-level scholarship programs (e.g. AFGRAD - African Graduate Fellowship Program, Rockefeller, Fulbright, Commonwealth Scholarships, and more) shows significant and enduring gains for academic institutions to which recipients return. The Brazil case study in this book, on *Ciências sem Fronteiras*, counters that investment in undergraduate programs furthers young peoples' exposure to new ideas, pedagogies and cultures: "Investing in younger students – at least in hypothetical terms – was understood as an investment in broader social change, and not simply in human capital formation or scientific development" (Zahler and Menino, Chap. 4). These examples demonstrate that international scholarships at all levels can play an important role in preparing 'social change' agents. Under scarcer resource environments, however, it may be necessary for international scholarship programs to share and coordinate their efforts to cover individual beneficiaries at different levels of study.

Catalyzing social change through individuals is an indirect and often long-term process, requiring that scholarship programs accept the non-linear trajectories of individuals and their social groups and movements along the way. Pressures for short-term gain and immediate return on investment are likely to be counterproductive for achieving hard-won social change in challenging environments, such as post-conflict societies. As Brodgen puts it, "Having patience in this process is key" (Chap. 7). In practice, this means that scholarship programs must be tied to longer cycles of investment and evaluation than is typically the case.

19.2.2 Social Networks

Throughout this book, references have been made to the potential, but often under-tapped, power of alumni networks (and social networks generally) to support individual scholarship recipients and their social movements. Marsh and Oyelere's review of the 'brain drain' debate points to the supportive role of international professional networks for scholarship recipients who return home and remain connected. An important part of post-graduation support is to maintain contact with alumni temporarily or permanently residing in the diaspora and to facilitate their connections with fellow alumni who have returned home. The Carnegie African Diaspora Fellowship Program (Foulds and Zeleza 2014) is an example of a mechanism linking academics across continents that could be adapted to other transnational alumni groups.

Loerke strongly recommends adequate attention and financial support for post-graduation 'enhancements', including alumni networks: "Apart from strengthening individual beneficiaries' capacities, the need to create networks and support systems for these social change leaders ensures that they will encounter a more powerful platform from which to effect positive systemic change once they have completed their studies" (Chap. 10). Alumni of international scholarship programs can also use their connections to promote mutually beneficial outcomes for both their host and home countries. In the best of situations, alumni willingly serve as 'ambassadors' of their alma mater institutions (or fellowship programs) for recruiting new generations of students. In some cases, they are also in an advantageous position to foster positive economic and trade relationships for their home countries (see Boeren, Chap. 3, for examples from Western Europe).

19.2.3 Widening Access

One of the most promising and direct routes from individual scholarships to social change is the 'widening access' pathway. As Dassin and Navarrete argue, "international scholarship programs may *in themselves* generate significant social change" by directing resources to individuals who are under-represented in higher education (Chap. 15). The IFP, the MasterCard Foundation's Scholars Program and the Gates Millennium Scholars Program, discussed in the book, are directed to members of low-income communities, women and girls, religious, racial, ethnic and religious minorities or other marginalized groups. Evidence from these and other programs

strongly suggest that targeted scholarships can produce role models for families and communities, create new clusters of qualified professionals, affect leadership structures, transform institutions and create more social inclusion in hierarchical and unequal societies. Martel and Bhandari's (2016) research on IFP demonstrates that proactive outreach and recruitment of high potential and socially committed members of marginalized communities for quality tertiary study can accelerate social mobility and change in their communities of origin.

Various authors touch on the critical issue of whether international scholarships are successful in widening access or simply entrench existing elites. Historical focus on granting scholarships to students who can readily gain admission to highly competitive universities in OECD destination countries may be counterproductive for programs committed to opening up opportunities to non-elite communities. Kent sums up the problem: "…While there are some scholarship programs that work to attract and support those students who are less able to access these existing opportunities, the elite nature of the Western university system creates a significant barrier" (Chap. 2).

This underlying barrier can severely blunt the impact of international scholarships as a vehicle for widening access to quality tertiary education. Some exceptions prevail, such as those few programs that are able to persuade highly selective host universities to adopt more comprehensive and inclusive admission criteria and also provide enhanced academic and support services to non-traditional students. Kent points to scholarship programs that fund pre-study language instruction as another partially successful way to raise admission rates for non-elites from developing countries.

19.2.4 Academic Diversity

Scholarship programs may also leverage their financial power and prestige to persuade host universities to recruit students 'widely' and 'deeply'. Anyal (Chap. 5) discusses a parallel pathway to social change through increased academic diversity on the dozens of host university campuses that received IFP fellows. The partnerships between the MasterCard Foundation and higher education institutions in both developed and developing countries provide further examples. The greatest gains from this pathway are won when the host university fully embraces the opportunity for integrating

non-traditional students into their communities and creates programs for meaningful cross-learning interactions.

Baxter (Chap. 6) advises that scholarship programs work closely with host universities to ensure that non-academic scholarship goals, such as leadership development, intercultural competency and exposure to civic participation and volunteerism, are built into the university experience. This is a departure from the conventional 'hands-off' approach of most scholarship programs when it comes to guiding university-sponsored activities. The case studies of the Open Society Foundations' and MasterCard Foundation's programs demonstrate significant benefits for international students when their host universities show flexibility and interest in partnering with scholarship programming staff, and the students themselves, on curricular and extracurricular design, including service learning.

The prevailing 'hands-off' position carries forward into scholarship evaluation and impact assessment, where the details and nuances of the university experience are rarely captured, undermining our understanding of the relative impacts of different host institutions on post-graduation outcomes. Dassin and Navarrete (Chap. 15) argue that these details are vital to unpacking the 'black box' of educational experience and to understanding how the knowledge and skills acquired in their academic programs affect scholarship recipients' post-study activities and social impacts.

19.2.5 International Understanding

Taken together, the case studies in this book demonstrate the value of an international education for participation in the global economy and knowledge networks and for improving intercultural competencies and international understanding. The cases from Brazil and China highlight those respective governments' priorities for upgrading training in the STEM fields through international education, while the Open Society Foundations and MasterCard Foundation scholarship programs emphasize exposure to diverse cultures and critical thinking to build student capacities for contesting intolerance and creating more innovative and inclusive models for economic growth. The Commonwealth Scholarships have evolved over time to reflect the changing priorities of UK foreign policy, with 'public diplomacy' and 'merit-based' scholarships having precedence until 2000, and programming that furthers 'access' and 'development' goals taking priority since then.

Assertions that international scholarships also contribute to the national interests of donor countries are often made (see Boeren, Chap. 3). From a

purely economic standpoint, this book amply illustrates the benefits of shoring up local academic institutions with needed funds and stellar students as well as future talent retention where it is most needed. Politically, international education is historically linked with building mutual respect at a deeper level than more cursory diplomatic exchanges. Yet conclusively establishing that international scholarship programs lead to greater understanding among host and sending nations is empirically elusive and therefore vulnerable to critique.

Moreover, we cannot assume a public consensus in favor of the internationalization of education and investment in international scholarships as contributing to the national interest of donor countries. In fact, the traditional 'soft power' rationale for increased international engagement, and foreign aid more generally, is currently under assault in many of the countries and institutions where we live and work. The case for greater investment in international scholarships must be strengthened as part of the emerging field and research agenda framed by this book, not the least to present better evidence of their long-term value for both donors and recipients. In making this case, one research question to include is who are the intra-societal 'winners' and 'losers' from internationalization of education and international scholarships?

Despite certain political trends to the contrary, there is no turning back on the technological and information revolutions that have fueled our ever-smaller globe. Recipients of international education, many funded by scholarships, have developed the expertise and networks to bring these revolutions into their home countries and adapt them for broad economic and social benefits. 'Brain circulation' is slowly but surely taking the place of 'brain drain', and hybrid, transnational education is gaining popularity. The studies in this book affirm that the human relationships and professional networks forged through student mobility have been—and can continue to be—a potent countervailing force against inward-looking, closed-border policies. In this sense, the international understanding pathway to social change may be the most valuable of all.

19.3 Toward a Future Research Agenda

Considering the future of research and evidence about scholarship programs is particularly timely. The launch of Sustainable Development Goal (SDG) target 4b—to "…substantially expand globally the number of scholarships available to developing countries…" (United Nations

2015)—connects research on scholarship programs to international development at the highest level. The SDGs are not the only underpinning for our research agenda, as several constituencies now have a stake in firmer and deeper evidence about the social impact of international scholarships. Still, the SDGs are a powerful reminder that research on scholarship programs has the potential to shape widely accepted global goals like "*…inclusive and equitable quality education and…lifelong learning opportunities for all*" (United Nations 2015).

International scholarship programs sit at the intersection of several research fields. They are a facet of international higher education, concerned with expanding access and exposure to quality academic studies abroad and internationalization of education more broadly. Scholarship programs are also a vehicle for international development and the delivery of aid agendas, whether of national governments, supranational bodies such as the United Nations or private foundations. Especially for national governments, scholarship programs are an instrument of international relations, public diplomacy and 'manufacturing sympathy' (Wilson 2014) within foreign nations. In their operation and effects, scholarship programs cross into areas of labor economics and international migration studies, organizational studies, pedagogic design, cross-cultural psychology and numerous other disciplines. The calculus of scholarship program return on investment—something we have not discussed at length in this book—is grounded in development and educational economics. These are the threads from which the emerging sub-field of research on international scholarship programs is being woven.

In some cases, research and evaluation are now incorporated into the initial program design, a clear advantage for assessing long-term impacts. Whether through a decade-long partnership with academic consultants (e.g. Enders and Kottman 2013) or a small in-house research team (e.g. Mawer et al. 2016), it is difficult to over-estimate the usefulness of thinking about research and evaluation *early* and *during* scholarship programs.

19.3.1 Questions/Future Directions

The intention of SDG target 4b is to improve access to high-quality tertiary education in countries where it is not widely available and where the chronic shortage of highly educated individuals is a barrier to development. Yet, for reasons covered extensively in this book, the success or failure of scholarships as pathways for social change relies on more than their mere

availability. These complexities open opportunities for research to be conducted and for advocacy to shape policy, especially within the state sector, where governments, having signed on to the SDGs, have more direct accountability for working toward their implementation.

The most immediate, and perpetual, research question is 'who should be funded?' This question has been answered in the mission statements and selection processes of scholarships but it has not been convincingly answered in the context of scholarship *outcomes*. Scholarship programs frequently face policy choices about their commitment to widening access: the choice of investing in the marginalized and the non-marginalized (sometimes even the elites) of societies. Research has an important role in providing data that can illuminate what kinds of social change can be achieved by investing in dominant groups or in underserved communities. More generally, "the lack of detailed analysis on the "access and social mobility" dimensions of international scholarship programs" (Mawer, Chap. 13) makes it difficult to answer this question empirically.

A related research question is about the kinds of educational institutions and academic programs that most effectively foster social change. Many programs have sought to place students based largely on the host universities' prestige: the social change commitments of individual academic programs (and individual academics) have rarely been a criterion in selection. Kent (Chap. 2), for example, highlights the focus on top-50 ranked institutions as destinations for Saudi Arabian scholarship recipients. Large philanthropic grants also tend to be invested in high-prestige institutions: the Gates Cambridge scholarships, Stanford's Knight-Hennessey scholarships and the Schwarzman Scholars at Tsinghua University, to name just a few. Many questions are raised by the choice of institutional hosts for scholarships. Aryn Baxter (Chap. 6), for instance, cites examples from the Higher Education Research and Advocacy Network in Africa (HERANA) on how local and regional institutions within Africa promote civic participation and political awareness among their students. Further research should set out to identify higher education institutions with these values, to inform scholarship funders' choices of host institutions while not compromising academic quality.

It is also unclear that the benefits associated with international exposure would necessarily be reduced with intra-regional or South-South scholarships. A strong case has been made for the benefits of international education, but the case for these scholarships being hosted (predominately) in the high-income countries of Northern Europe and North America is less

robust. Increasingly, intra-regional mobility is being funded with the intention to develop many of the same qualities as 'traditional' scholarship programs: roughly two-thirds of undergraduate MasterCard Foundation Scholars, for instance, are undertaking their degrees at African institutions (MCF 2016). The full consequences of these shifts require further research and analysis.

A more fundamental research question is the role of scholarship programs within the shifting global landscape of higher education. As we noted in our introduction to this book, fast-paced technological change and the rising demand for higher education and shifts in skilled labor market needs are the backdrop to our analysis. Important questions are raised for the operation of scholarship programs: what will be the relationship between scholarship funding and participation in new course models, including Massive Open Online Courseware (MOOCs) and their successors, or study programs organized by consortia of local institutions? How can scholarship programs more effectively reach out to refugee and migrant populations, whose higher education is frequently disrupted or deferred by dislocation and yet who are often vital to rebuilding their home countries? To what extent can scholarship programs, particularly state-funded programs, work with for-profit private institutions and with what impacts (if any) for individual and social change outcomes? These are topics to which we have alluded in this book but have not explored in depth: they are part of the future of scholarship programs and thus should be at the forefront of a future research agenda.

19.3.2 Research Approaches

There are many pressing issues about researching scholarship programs but perhaps the most pervasive and significant is the need for more in-depth consideration of 'second-order effects': that is, the impact of individual recipients on those around them. Existing research can tell us more about the impact of scholarships on their immediate beneficiaries than on how these gains are turned into social change within communities or organizations. Existing research is also largely ineffective at explaining the *impact* of social change within communities or organizations. We know, for instance, far more about the propensity of scholarship recipients to teach at educational institutions than we do about the impacts of their teaching on the next generation and, in turn, the impact of the next generation on their communities and organizations.

Several contributors—notably Martel, Mawer, Dassin and Navarrete—have observed the difficulty with this individual unit of analysis and advocate, variously, for models that include impact beyond the individual or research designs that conceive of individual recipients in terms of their membership in social groups and leadership of social movements. One potential route to establishing greater contextual detail is to promote investment in fieldwork, especially richly detailed qualitative research. The historic reliance on self-reported surveys within scholarship evaluation is pragmatic but has deficits, several of which are outlined by Martel (Chap. 14). Dassin and Navarrete (Chap. 15) advocate what might be labeled the 'gold standard' for individual studies in the field: "*To properly trace and comprehend …specificities, and their meaning for social change impacts, qualitative field research in each country or region should be conducted with the support of local researchers, including former scholarship holders*". If combined with appropriately designed and rigorously collected quantitative data, these field studies at the local level will be much better placed to provide the analytical sophistication required to underpin evidence-led policy.

Attention to the status of qualitative fieldwork also highlights another concern: there are not enough voices from developing countries involved in scholarship research. Much of the existing research has been funded by donors or by administering organizations in high-income countries, often drawing on the services of consultancy firms co-located with those organizations. Employing trusted consultants with an understanding of the funding and policy contexts of the donor country is attractive for various reasons, but it cannot provide a substitute for local understanding if research on program experiences and outcomes is to be rich and sensitive to context. There are, for instance, well-recognized cross-cultural challenges in research methodology (see Martel, Chap. 14). Greater involvement of research partners outside of the high-income donor countries is a priority for developing a more sophisticated and contextually relevant understanding of scholarship impacts.

Immediate questions are raised by these suggestions: who will do the work? And who will fund the work? While these issues are largely beyond the scope of the current book, we believe that dedicated consortia of academic researchers can have a major role in advancing the cause of cross-program research. Additionally, program donors and administrators may find common cause in contributing to a research field if it promises a fundamental knowledge-base to improve scholarship outcomes.

Collaboration among consortia of researchers and/or program donors can achieve two goals that are otherwise largely elusive: (a) it can compare outcomes across programs and help to establish the differential impacts of funding, selection and post-graduation support models; and (2) it can explore issues about which informed commentary requires large datasets, such as factors influencing return decisions or the macro-economic effect of scholarship programs on sending countries. At a macro-level, supranational bodies may be open to a coherent proposal for detailed cross-sectional studies of scholarship program impacts. UNESCO's commissioning of baseline research for SDG goal 4b (e.g. Balfour 2016; IIE 2016) and the continuing need to monitor progress against this goal's short deadline (2020) suggest an opening for relevant research funding and a forum for dissemination.

19.3.3 Sharing Findings and Sustaining the Field

After examining these research issues, it is important to reiterate a point made earlier in the book: "*Too often evaluations of international scholarship programs are completed and remain for internal use of donors only*" (Martel, Chap. 14). Research should be made available to all stakeholders to the greatest extent possible for several reasons: first, because such research can be part of the wider accountability process for expenditure; second, because most scholarship programs are part of 'public policy' and so efforts should be made to encourage critical awareness among the 'public'; and third, because sharing findings will allow scholarship decision makers around the world to draw on a more extensive knowledge-base to underpin policy and programming decisions. In this area, there is an imperative to make progress. As various contributors to this book have made clear, program evaluations focused on only one scholarship scheme, without peer critique, and often unpublished, do not provide a robust evidential basis for investments of USD billions globally.

Some modest steps can be recommended to generate improvement:

1. Academic authors can offer pre-publication versions of journal articles on scholarship-related research, either on their personal websites or by direct correspondence with existing mailing lists of interested parties. Alternatively, subject to continuing progress in the accessibility of research, relevant articles might be published in open-access journals that do not charge for subscription.

2. Program evaluations commissioned by public agencies and private foundations should be made available to others wherever possible, regardless of their conclusions. These reports should not be partially or completely withheld if they do not completely validate the program's success. One innovative arrangement, albeit after the conclusion of a program, is the Ford Foundation International Fellowships Program archives at Columbia University, New York, in which most of the program documentation from over a decade of scholarship grantmaking is publicly accessible.[1]
3. A detailed bibliography of published research on scholarship programs should be actively curated and made publicly available. Much significant insight is housed in 'grey literature' that is not indexed by bibliographic databases.

Only by taking steps to create and sustain a dynamic network of researchers, policy makers and practitioners collaborating to understand and improve international scholarship programs can these critical interventions ever reach their potential. The collegiate construction of this book—representing cross-cutting professions, organizations and sectors from different parts of the world—provides ample evidence that such collaboration can be fruitful in advancing research and building a responsive community dedicated to international scholarships and the multiple pathways they open to social change.

Note

1. The IFP archives are housed by Columbia University Libraries: https://dlc.library.columbia.edu/ifp. The volume of information made available can be gauged somewhat by this quotation from one of the 22 country offices: *"The IFP China office was closed in 2013. The archive received 4.3 GB of digital materials and 43.75 linear feet of paper materials in July 2013"* (Columbia University Libraries 2017).

References

Balfour, S. (2016). SDG Target 4b: A global measure of scholarships [ED/GEMR/MRT2016/P1/10]. Paper commissioned for the Global Education Monitoring Report 2016, Education for people and planet: Creating sustainable futures for all. Paris: UNESCO.

Campbell, A. (2016). International scholarship graduates influencing social and economic development at home: The role of alumni networks in Georgia and Moldova. *Current Issues in Comparative Education*, 19(1), pp. 76–91.

Columbia University Libraries. (2017). Ford Foundation International Fellowships Program Archive: China. [Online]. Available at: https://dlc.library.columbia.edu/ifp/partner/china (Accessed 6 Feb 2017).

Enders, J., and Kottman, A. (2013). The International Fellowships Program: Experiences and Outcomes: Final report of the formative evaluation. Enschede, The Netherlands: Center for Higher Education Policy Studies.

Foulds, K., and Zeleza, P.T. (2014). The African academic diaspora and African higher education. International Higher Education, 76, pp. 16–17.

Institute of International Education [IIE]. (2016). Scholarships for Students from Developing Countries: Establishing a Global Baseline (ED/GEMR/MRT/2016/P1/11 REV). Paper commissioned for the Global Education Monitoring Report 2016, Education for people and planet: Creating sustainable futures for all. Paris: UNESCO.

Marsh, R., Baxter, A., Di Genova, L., Jamison, A., and Madden, M. (2016). *Career Choices, Return Paths and Social Contributions: The African Alumni Project, Full Report*. Toronto: The MasterCard Foundation.

MasterCard Foundation [MCF]. (2016). Education in support of social transformation: Learning from the first five years of the MasterCard Foundation scholars program. Toronto: The MasterCard Foundation.

Martel, M. and Bhandari, R. (2016). Social Justice and Sustainable Change: The impacts of higher education. New York: Institute of International Education.

Mawer, M., Quraishi, S. and Day, R. (2016). *Successes and complexities: the outcomes of UK Commonwealth Scholarships 1960–2012*. London: Commonwealth Scholarship Commission in the UK.

United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development [A/RES/70/1]. [Online] Available at: https://sustainabledevelopment.un.org/post2015/transformingourworld/publication (Accessed 29 Nov 2016).

Wilson, I. (2014). *International Exchange Programs and Political Influence: Manufacturing Sympathy?* London: Palgrave Macmillan.

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