INVESTING IN HUMAN AND INSTITUTIONAL CAPITAL THROUGH BUILDING HIGHER EDUCATION: AN ANALYSIS OF UNITED STATES ASSISTANCE TO HIGHER EDUCATION IN DEVELOPING COUNTRIES FROM 2013-2015 AND THE RELATIONSHIP WITH U.S. UNIVERSITIES

A Dissertation

by

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ABSTRACT

The purpose of this study was to explore United States (U.S) government investments through its foreign assistance to higher education in order to inform policy and identify the relationship between these investments and the U.S. higher education community. This study utilized a mixed-methods approach to address the objectives: (1) to compile data from existing data sources in order to categorize and describe selected characteristics of U.S. foreign assistance to higher education, and (2) to document the role that U.S. universities play in the delivery of U.S. higher education development assistance.

It was concluded that less than one percent of the foreign assistance budget is spent on higher education development assistance. Three agencies, the United States Agency for International Development (USAID), Millennium Challenge Corporation (MCC) and Inter-American Foundation (IAF) have assistance tagged as higher education. Of the 400 unique awards in the Foreign Assistance Dashboard tagged as higher education from 2013-2015, only 277 were determined to fit the higher education definition. More awards (89) were implemented by NGOs than any other implementer type; however, U.S. universities received a higher dollar total than any other implementer type.

Study participants identified many benefits and challenges to higher education development assistance. Benefits included diplomacy and a greater understanding of the United States, higher education as a driver of economic growth and workforce development, and development of both human and institutional capacity. Challenges to

higher education included the difficulty of quantifying results, lack of reliable measurements of higher education impacts, and higher education being perceived as an investment for the elite.

A number of benefits and challenges in terms of working directly with U.S. universities as implementers of higher education development assistance were also identified. Benefits included universities' inherent knowledge of higher education systems, similarities of challenges shared by host-country and U.S. universities, and a history of continued relationships beyond the life of the award. Challenges identified included high overhead costs of working with U.S. universities, a lack of understanding of how the agency (USAID) operates, and dealing with multiple bureaucracies.

Investments in higher education, as well as in primary and secondary education, are investments in human capital. A well-functioning higher education system needs primary and secondary systems that prepare students to be successful in a global, knowledge-driven economy. More balanced investments are needed across all levels of education to derive economic and social benefits for all.

DEDICATION

This dissertation is dedicated to my mom. No matter what crazy thing I say I'm going to do next, I know you'll never tell me it's crazy. I love you. I love you too, Dad, although you'll definitely tell me I'm crazy.

For Anna and Zane, for making me realize I never want to be boring Aunt Sam.

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research will help to justify investments in more iAGRI-like projects. In particular, thank you to Laura Alexander for your support during all the starts and stops on this road.

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LIST OF ABBREVIATIONS

ADB	African Development Bank
APLU	Association of Public and Land-grant Universities
BIFAD	Board for International Food and Agriculture Development
BFS	USAID Bureau for Food Security
CBJ	Congressional Budget Justification
CRSP	Collaborative Research Support Program
E3	USAID Bureau for Economic Growth, Education and Environment
KCADHE	Knowledge Center for Advancing Development through Higher Education
DAC	Development Co-Operation Directorate (of the OECD)
DOD	Department of Defense
DOS	Department of State
GER	Gross Enrollment Ratios
HCA	Humanitarian and Civic Assistance Program
HESN	Higher Education Solutions Network
HHS	Health and Human Services
IAF	Inter-American Foundation
IDB	International Development Bank
INTI	International Trade Transparency Initiative
LAC	Latin America and Caribbean
MCC	Millennium Challenge Corporation

MFAN	Modernizing Foreign Assistance Network
NGO	Non-Governmental Organization
ODA	Official Development Assistance
OECD	Organisation for Economic Co-Operation and Development
OGP	Open Government Partnership
OHDACA	Overseas Humanitarian Disaster and Civic Aid Program
OIG	Office of Inspector General
SSA	Sub-Saharan Africa
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USADF	United States African Development Foundation
USAID	United State Agency for International Development
USDA	United States Department of Agriculture

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CHAPTER I

INTRODUCTION

Background and Setting

No country has ever achieved sustained economic growth without a developed higher education system (McMahon, 2009). Growth of the United States as an economic power can be traced to the increase in the number of college-educated individuals through investments in higher education such as the establishment of the land-grant university system through the Morrill Land Grant Acts; the G.I. Bill; Pell Grants; and other public support to higher education (Bloom, Hartley, & Rosovsky, 2007; Kapur & Crowley, 2008; McMahon, 2009).

There is recognition that "long-term economic growth can only be achieved through investment in a highly skilled workforce" (McCowan, 2014, p. 1), and that higher education will be crucial in training this workforce in the current knowledge-driven economy. However, in developing countries, particularly in sub-Saharan Africa (SSA), higher education has been unable to keep up with demands. In 2008, only six percent of the higher education age cohort in SSA was enrolled in some form of postsecondary education, compared to a global average of 26% (UNESCO Institute for Statistics, 2010). Additional factors, such as the growing youth population, increased investments in secondary education, inequity in access, and industry needs for highly skilled graduates, continue to increase demands on higher education systems in developing countries (Kapur & Crowley, 2008; McCowan, 2014; UNESCO Institute for Statistics, 2010).

Investment by donors in higher education in developing countries has experienced a decline in the past 30 years. Lending organizations and development agencies followed the lead of the World Bank in withdrawing or diminishing investment in higher education after a series of studies showed that returns to education were highest at the primary level education (Psacharopoulos, 1973, 1981, 1985; Psacharopoulos & Patrinos, 2002; Psacharopoulos, Tan, & Jimenez, 1986). Policy recommendations following these reports encouraged reallocation of investments from higher education to primary education (Psacharopoulos, Tan, & Jimenez, 1986). More recent research, using the same methodology of the earlier studies but with new data, now shows that returns to education are highest when investment is made at the higher education level (Montenegro & Patrinos, 2013; Montenegro and Patrinos 2014).

With new research regarding the returns to investment in higher education showing high returns (Montenegro & Patrinos, 2013, 2014) and the well-recognized contributions higher education makes to developing human capital (Bloom, Hartley, & Rosovsky, 2007), the question arises as to what shift, if any, is being made toward support of higher education by development organizations? Specifically, questions arise related to how much U.S. development assistance has been invested in building higher education institutions in developing countries. Determining this investment requires deciphering how U.S. development assistance is both allocated and spent.

Transparency in U.S. Development Assistance

How and where U.S. development assistance is spent is a question that is often asked by, and within, the international development community, as well as the general

public (Ingram, 2013; Organisation for Economic Co-Operation and Development [OECD], 2005). To address the need for openness, President Barack Obama issued a call for transparency in government on his first day in office, saying: "Transparency promotes accountability and provides information for citizens about what their government is doing. Information maintained by the Federal Government is a national asset" (Obama, 2009, para. 2). In response to this call, as well as the commitment that the previous administration made by signing of the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action (OECD, 2005), the Open Government Partnership (OGP) was launched in September 2011 to "set basic standards of openness" by a number of developed and developing countries (Foreign Assistance Dashboard, n.d.-a, para. 2). The Foreign Assistance Dashboard was developed as a method of achieving this openness regarding U.S. foreign assistance (Foreign Assistance Dashboard, n.d.-a).

The Office of Management and Budget (OMB) in 2012 issued a notice to 22 agencies to provide guidance on the collection of foreign assistance data, with the intention for this data to be published on the Foreign Assistance Dashboard (Zients, 2012). However, it was recognized that not all agencies "collect all of these data elements as part of their business processes" (Zients, 2012, p. 7). At an event hosted by the Modernizing Foreign Assistance Network (MFAN) and AidData, a Global Development Lab initiative of the United States Agency for International Development (USAID), speakers from a number of governmental agencies acknowledged that while great strides are being made in making foreign assistance data more readily available,

challenges still occur because not all agencies use the same coding systems, categories, reporting mechanisms, or data collection systems (MFAN & AidData, 2015).

Entities engaged in international development activities are eager to use the raw data to gain further insight into where and how development assistance in specific program areas is spent. Prior to the launch of the Foreign Assistance Dashboard, the Partnership to Cut Hunger and Poverty in Africa, a non-governmental organization (NGO), initiated an effort to map U.S. development assistance to agriculture (Simmons & Shiferaw, 2010; Taylor & Howard, 2005; Taylor & Shiferaw, 2009). In September 2015, the Chicago Council on Global Affairs, an independent, non-partisan organization that educates the public on global issues, released a report analyzing current U.S. investments in food security (Black, 2015). This dissertation, conducted on U.S. investment in higher education development, was similar in its size and scope to the research conducted by the Partnership to Cut Hunger and Poverty in Africa on agricultural development assistance and research conducted the Chicago Council on food security development assistance.

Statement of the Problem

A search of the current literature revealed that neither mapping of development assistance to higher education had been conducted, nor was the role of U.S. universities in delivering this particular category of assistance well documented. A need existed within the higher education community to gain a better understanding of the development budgeting process in regard to funding tied to higher education. Further, an in-depth articulation of what types of projects are categorized as higher education and

documentation of the type of implementer (i.e., NGO, university, or for-profit entity) responsible for the project would be beneficial to the development and higher education communities.

Additionally, there existed a need to understand what roles U.S. universities do or do not play in higher education assistance through U.S. development policy. For example, are universities playing key roles as implementers of higher education projects, as sub-awardees, or as consultants to these projects? This information could prove valuable in efforts to advocate for additional investments in higher education for development to meet global challenges related to agriculture, energy, health and other global development needs (Knowledge Center for Advancing Development through Higher Education [KCADHE], 2014).

To these ends, this study addressed the following questions.

- How much of the foreign assistance budget is spent on assistance to higher education in development?
- How is that money spent (i.e., what types of projects per the sub element program categories)?
- What are the benefits and challenges of higher education development assistance?
- How are U.S. universities engaged in higher education development activities?
- What are the benefits and challenges of working with U.S. universities to deliver higher education development assistance?

Higher education is a sustainable and scalable development solution that has been proven to lead to economic growth (Bloom, Canning, & Chan, 2006; KCADHE, 2014; Koehn & Obamba, 2014; McMahon, 2009). Answering the above questions regarding how and where U.S. development assistance to higher education is being spent and how U.S. universities are engaged in this assistance could provide valuable information for organizations such as the Association of Public and Land-grant Universities (APLU) as they make recommendations for the creation of a strategy for public investment allocated to higher education development assistance. Additionally, this research provides U.S. universities who are and/or wish to engage in development activities with a deeper understanding of the support for higher education development and the role of U.S. universities as partners and implementers.

Purpose and Objectives

The purpose of this study was to explore U.S. government investments in higher education development from 2013-2015 in order to inform policy and identify the relationship between these investments and the U.S. higher education community. The study addressed the following objectives.

1. Compile data from existing data sources in order to
    a. Categorize selected characteristics of U.S. foreign assistance to higher education and
    b. Describe selected characteristics of U.S. foreign assistance to higher education, and

2. Document the role that U.S. universities play in U.S. higher education development assistance.

Theoretical Framework

Human capital theory (HCT) was used as a theoretical framework to guide this study. While expanded and mainstreamed in the 1950s-1970s, human capital theory has its roots in seminal economic work, starting with Adam Smith's *Wealth of Nations* in 1776 and continuing with John Stuart Mill in the 19th century (Sweetland, 1996). Shultz (1961) first introduced the concept of returns to investments in human capital during an address to the American Economic Association in 1960, and Becker (1962) further developed the theory.

Human capital "suggests that individuals and society derive economic benefits from investments in people" (Sweetland, 1996, p. 341) and "refers to the knowledge, expertise, and skill one accumulates through education and training" (Torraco, 2001, p. 106). In Torraco (2001), Becker is attributed as identifying "education and training to be the most important investments in human capital" (p. 109). Schultz (1961) identified five categories or activities that "improve human capabilities":

1. Health facilities and services, broadly conceived to include all expenditures that affect the life expectancy, strength and stamina, and the vigor and vitality of a people;
2. On-the-job training, including old-style apprenticeships organized by firms;
3. Formally organized education at the elementary, secondary, and higher levels;

4. Study programs for adults that are not organized by firms, including extension programs notable in agriculture;
5. Migration of individuals and families to adjust to changing job opportunities. (pp. 8-9)

In the case of this study, the researcher primarily focused on the third category, specifically the investments taking place at the higher education level.

In addition to the five categories identified by Schultz (1961), human capital theory relies on three relationships. The first relationship is an assumption that increased learning is a result of education and training. The second relationship assumes that increased productivity is a result of learning. The third relationship is between productivity and wages. The value of these three relationships, as expressed by the human capital continuum, is often determined as returns to investment. A full explanation of the relationships and the continuum is displayed in Figure 1.

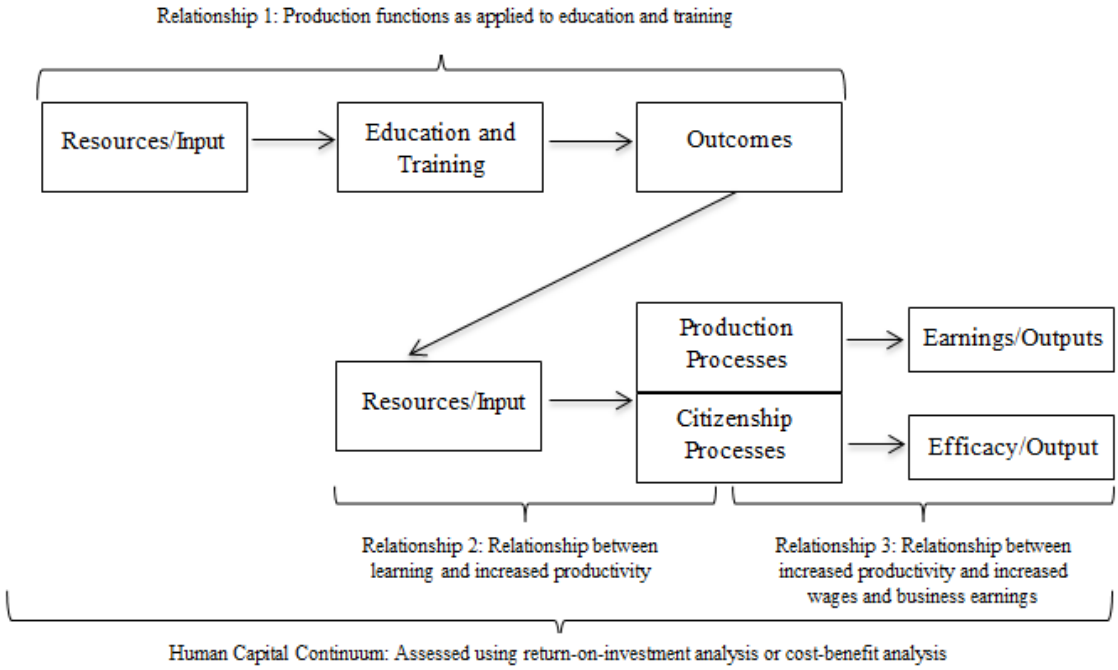

Figure 1. Model of human capital theory, with key relationships and assumptions. Adapted from "Economics, Human Capital Theory, and Human Resource Development" by R. J. Torraco, 2001, in R. A. Swanson & E. F. Holton, III, (Eds.), *Foundations of Human Resource Development*, p. 110. Adapted with permission.

Schultz (1961) clearly identified higher education as one method of increasing human capabilities. Education and training opportunities, as part of the higher education program area, is included under the U.S. Foreign Assistance Program objective "investing in people" (U.S. Department of State [DOS], 2010). This close tie between the definition of human capital theory and the investing in people program objectives for higher education created the basis for applying human capital theory as the theoretical framework to investments in higher education development assistance.

Definitions

Definitions of terminology used throughout this study are provided below.

Developing Country – An agreed upon definition of developing country does not exist in the literature, but a list of least-developed countries is determined by the Development Co-Operation Directorate (DAC) of the OECD based on gross national income information published by the World Bank (OECD, 2012). For the purposes of this study, a developing country was defined as those eligible to receive U.S. development assistance according to the Foreign Assistance Act of 1969.

Foreign Aid/Assistance – According to the DAC of the OECD, official development assistance includes flows of funding to developing countries from multilateral development institutions and whose transactions promote, as their main objective, economic development and welfare of developing countries and are "concessional in nature, with a granting element of at least 25%" (OECD, 2008). In the United States, foreign aid "Traditional foreign aid generally falls under two sub-functions, international development and humanitarian assistance (151) and international security assistance (152)" (Center for Global Development, n.d.)

Higher Education – For the purpose of this research, higher education included all training and education received from a university, college, community college, or teacher-training college or institute. It excluded technical and vocational training. In this document, higher education is used in lieu of tertiary education, a term commonly used by European and other development agencies.

Higher Education Institutions – For the purpose of this research, higher education institutions included institutions that provide education beyond the secondary level, including universities, colleges, community colleges, teacher-training colleges and institutes, and research institutes. It also included relevant government ministries.

Higher Education Assistance – This assistance fosters and improves the quality, contributions, and accessibility of higher education. Higher education assistance includes, but is not limited to:

> teaching; training; curricula; degree programs; pedagogy; research; policy analysis and participation in policy development; community service; extension; applied technology; professional development; exchange programs; institutional linkages; program linkages; institutional governance; financial planning; administration; management; and policy that is developed, conducted and/or implemented by universities, colleges, community colleges, teacher-training colleges and institutes, research institutes and relevant ministries. (DOS, 2010, pp. 57-58)

Assumptions

In conducting this study, it was assumed that the datasets made publicly available by government entities through the Foreign Assistance Dashboard, congressional budget justifications, and other sources contained transparent and accurate information and accounting of higher education development assistance projects. According to the Foreign Assistance Dashboard (n.d.-c),

> agencies have varying abilities to fulfill reporting requirements based on their unique systems and processes. All agencies are reporting data to the site incrementally and are working to build up their capability to report data on a quarterly basis to comply with OMB Bulletin 12-01. (para. 4)

It was also assumed that individuals participating in interviews answered all questions accurately and honestly. Additionally, it was assumed that the researcher did not introduce bias into the collection and interpretation of the data.

Limitations of the Study

This study was limited to foreign assistance data publicly available through the International Aid Transparency Initiative (IATI; Foreign Assistance Dashboard, n.d.-b), which the United States signed in 2011. Engaging multiple stakeholders (i.e., donors, partner countries, and civil society organizations), IATI is a voluntary initiative "whose aim is to make information about aid spending easier to access, use, and understand" (Foreign Assistance Dashboard, n.d.-b, para. 1). These data are accessible through the Foreign Assistance Dashboard.

The original scope of the study was to range from 2009-2014, but it was determined that USAID, the major agency delivering U.S. development assistance to higher education, did not begin to report data to the Foreign Assistance Dashboard until 2013. When the Foreign Assistance Dashboard was established in 2013, agencies were given the option to start reporting data from that date forward or to include historical information. USAID chose to start reporting data and not provide historical information. Data were available for the first three quarters of 2015 at the time of this study, so the time frame of the study was amended to 2013-2015. It should also be noted that figures for 2015 are preliminary and in some cases may only represent the first three quarters of 2015.

Snowball sampling was used to find information-rich participants for the study who were knowledgeable about higher education development assistance. Given that snowball sampling is not an exhaustive process, the limitation existed that there could have been additional experts who were not identified or available to participate in this study. Findings for objective two were limited to the analysis of information shared by these individuals about the subject.

An additional limitation of the study was that the researcher was unable to interview individuals from one of the development agencies with higher education development assistance, the Inter-American Foundation. Additionally, the researcher reached out to individuals from each regional or functional bureau at USAID with higher education assistance funds but was not able to conduct an interview with every bureau due to non-response.

This study was limited by two definitions. First, the definition of foreign assistance and what expenditures are tagged under the foreign assistance budget led to the exclusion of the U.S. Department of Defense and U.S. Department of Interior from this study. Second, the existing definition of higher education development assistance limited the spectrum of projects that fit the definition. For the purpose of this research, higher education included all training and education received from a university, college, community college, or teacher-training college or institute. Post-secondary training at technical and vocational schools were excluded from the higher education definition for this study. Limitation may exist based on the researcher's interpretation of these definitions.

Foreign assistance can only be tagged at the highest level to one sector or category. A limitation may exist in this study as projects that may build higher education but are tagged in another sector (i.e. agriculture or health) were excluded. Another limitation was that each award was only assigned to one sub-category under the higher education program definition. It is acknowledged that awards can have multiple outcomes and could fall under multiple sub-categories. For this study, the primary objective of the award was taken into consideration when coding to sub-categories.

Summary

In today's knowledge-driven economy, high-functioning higher education institutions are important for building local economies and creating a middle class, which is important for capitalism and democracy (Kapur & Crowley, 2008). A prior focus by development organizations on primary education and expansion of access to secondary education will continue to place demands on higher education systems in developing countries that are currently unable to meet demands (Kapur & Crowley, 2008; McCowan, 2014).

Studies from the 1970s through the early 2000s influenced development assistance investments in higher education (Psacharopoulos, 1973, 1981, 1985; Psacharopoulos & Patrinos, 2002; Psacharopoulos, Tan, & Jimenez, 1986), including investments from the World Bank and USAID, among others. Exactly how much of the U.S. foreign assistance budget is spent on higher education-related projects is not known. Recent foreign assistance data transparency initiatives created the opportunity

for this research by pulling together for a clearinghouse of data from multiple government agencies that are engaged in development activities.

CHAPTER II

REVIEW OF THE LITERATURE

No country can create economic prosperity without a functioning higher education system: "a competitive economy now depends in part on a competitive tertiary education system" (World Bank, 2009, p. 15). Yet through a review of the current literature, it was unclear what types of commitment the United States, through its development assistance strategy and budget, is making in higher education assistance to developing countries. The World Bank (2009) has stressed the need for human capital to meet growing global challenges. Opportunities for investment in institutional transformation for higher/tertiary education can produce the human capital needed to meet these global challenges (KCADHE, 2014; World Bank, 2009).

The literature review begins with an overview of areas of investment for U.S. foreign assistance in order to provide an understanding of where and how funds are spent. A review of historical investment in higher education and engagement with higher education institutions in delivering development assistance follows. The section focused on structures of U.S. development assistance includes higher education in the pre- and post-2015 development agendas set by the United Nations. The literature review ends with a focus on global higher education enrollment and returns to investment in higher education. This literature review helped to develop the research questions that guided the study.

U.S. Foreign Assistance

The Foreign Assistance Framework within the DOS and USAID 2007-2012 strategic plan (DOS, 2007) identified five objectives for U.S. development assistance: peace and security, governing justly and democratically, investing in people, economic growth, and humanitarian assistance. Investments in higher education, within this framework, fall under the third objective, investing in people. Within this objective, there are three program areas:

- Health,
- Education and social and economic services, and
- Protection for vulnerable populations.

A map of the foreign assistance program structure can be seen in Figure 2.

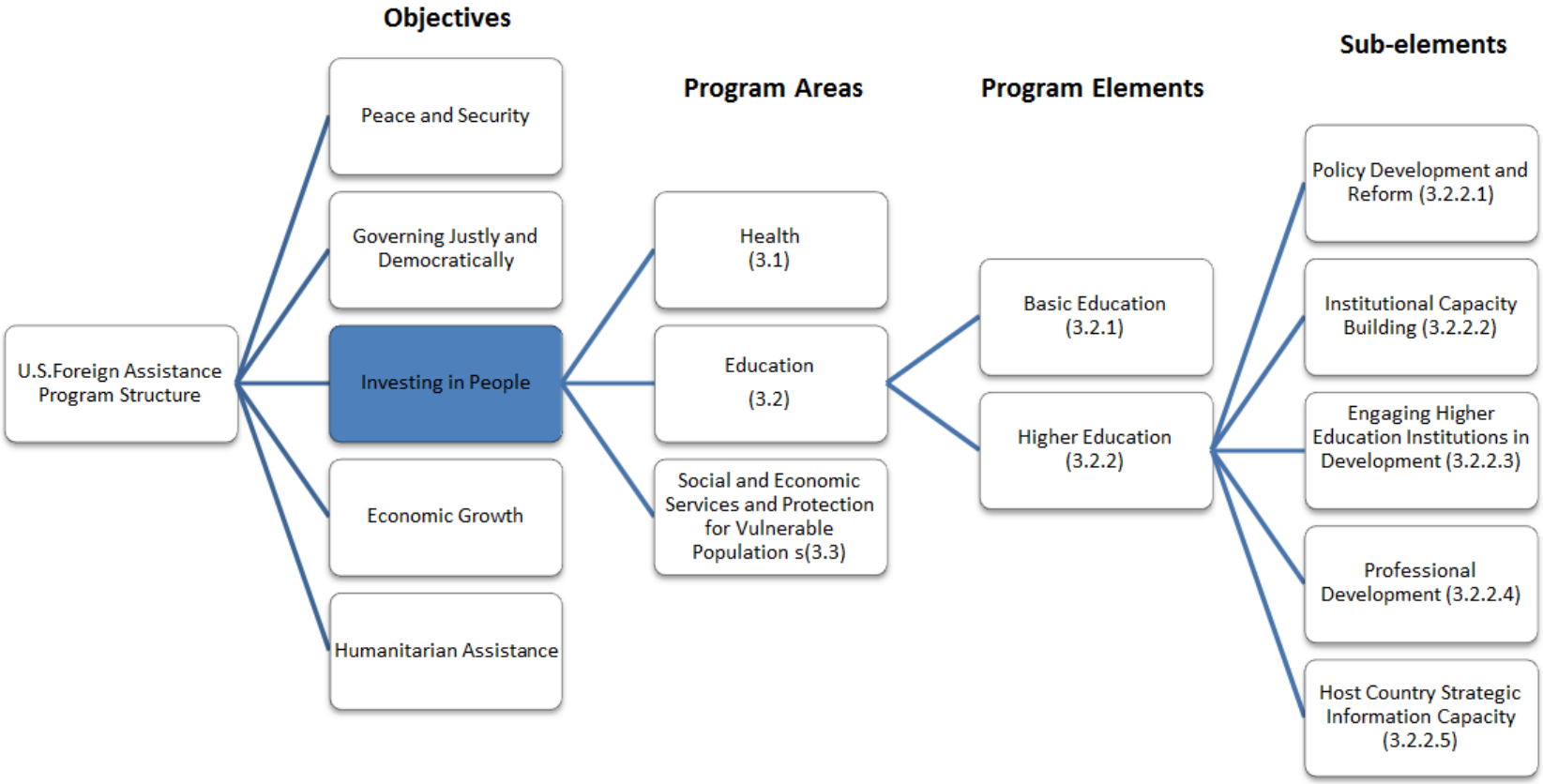

Figure 2. U.S. Foreign Assistance Program structure and pathway for higher education. Created by author based on information in DOS, 2010.

Within the education program area, higher education is program element 3.2.2, with basic education (including secondary education) being the other program element within the program area (DOS, 2010). Higher education investment, within the foreign assistance budget, is program element 3.2.2, and contains five sub-elements: policy development and reform, institutional capacity development, engaging higher education institutions in development, professional development, and host country strategic information capacity (DOS, 2010). Full definitions of these sub-elements can be found in Appendix A.

The term "higher education assistance" includes a range of activities. It is important to understand what is considered higher education assistance according to U.S. foreign assistance policy in order to fully understand how the money can and is being spent. Categories counted as higher education, according to the Foreign Assistance Standardized Program Structure and Definitions published by DOS (2010), include:

> teaching; training, curricula; degree programs; pedagogy; research; policy analysis and participation in policy development; community service; extension; applied technology; professional development; exchange programs; institutional linkages; program linkage; institutional governance; financial planning; administration; management; and policy that is developed, conducted or implemented by universities, colleges, community colleges, teacher-training colleges and institutes, research institutes and/or relevant ministries. The term "higher education" could include postsecondary institutions of education, including colleges, universities, community colleges, diploma granting institutions, and vocational training programs. (p. 3)

Structure of U.S. Development Assistance

The structure of U.S. development assistance is complex, with many related agencies, program areas, program elements, and program sub-elements associated with the foreign assistance budget. While USAID, the Millennium Challenge Corporation

(MCC), and the Inter-American Foundation (IAF) act as individual agencies, their individual budgets are incorporated into a single budget request through the DOS, Foreign Operations, and Related Programs request (DOS, 2015). Foreign assistance is also allocated and distributed through agencies other than those within the DOS structure, including the U.S. Departments of Agriculture (USDA) and Health and Human Services (HHS). At the time of this research, none of the development assistance distributed through these agencies were tagged as higher education in the Foreign Assistance Dashboard, but they may still support higher education development projects. For example, USDA does support higher education through their Higher Education Challenge (HEC) grants program, specifically identifying international education as a focus area (USDA, 2016). However, this investment is not tagged as higher education in the database.

USAID is included in the DOS, Foreign Operations, and Related Programs budget submitted to Congress. The foreign assistance budget includes 14 accounts:

- Non-proliferation, anti-terrorism, demining, and related programs;
- Peacekeeping operations;
- Global health and child survival;
- Migration and refugee assistance;
- International narcotics control and law enforcement;
- Andean counterdrug programs;
- Pakistan counterinsurgency capability fund;
- Global HIV/AIDS initiative;

- International programs and operation;
- Democracy Fund;
- United States Emergency Refugee and Migration Assistance Fund;
- Economic Support Fund;
- Development Assistance; and
- Assistance for Europe, Eurasia, and Central Asia.

Within the foreign assistance budget, budget requests and spending tied to higher education is tied to three accounts: development assistance; the Economic Support Fund; and a smaller amount at the planning level in the assistance for Europe, Eurasia, and Central Asia account. The structure and path of foreign assistance to higher education is presented in Figure 3.

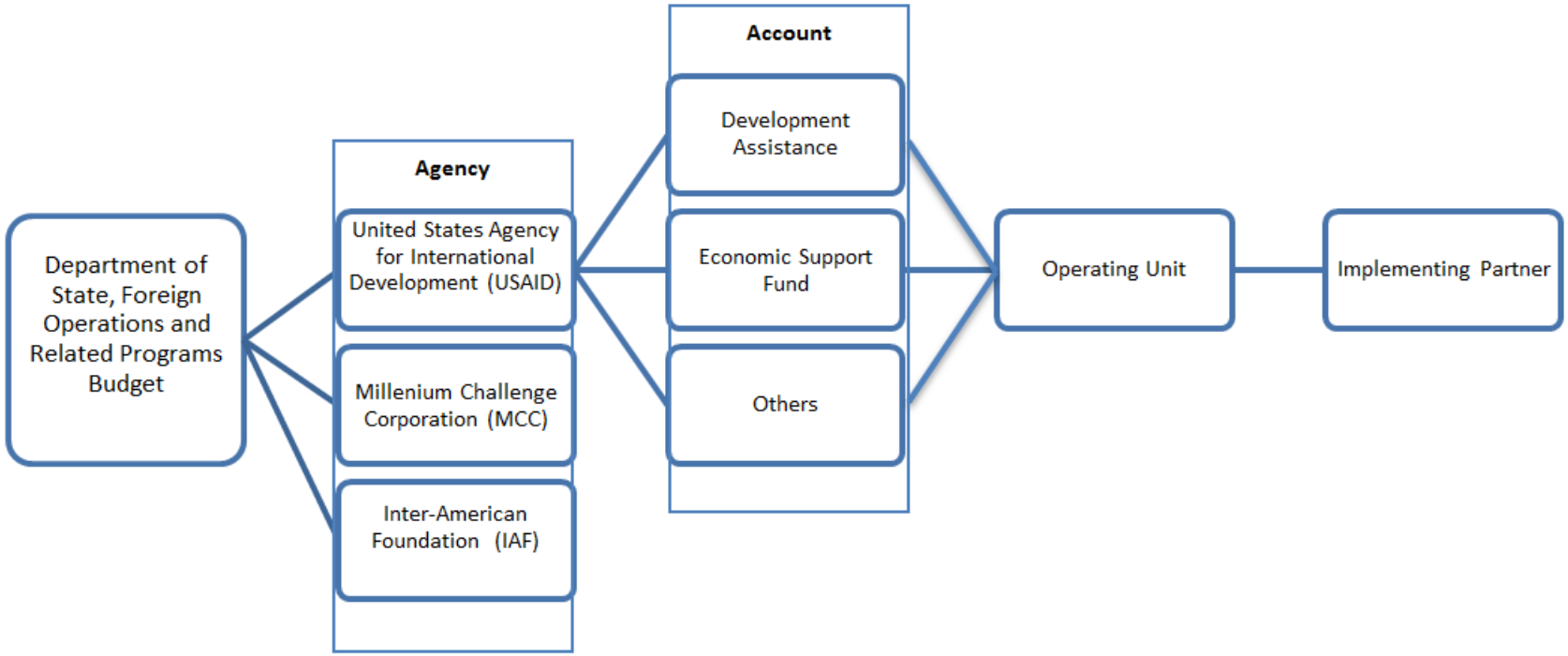

Figure 3. Path of U.S. government foreign assistance to higher education in the State and Foreign Operations budget based upon multiple government documents and author's experience. Created by author.

Historical Engagement of U.S. Universities in Development Assistance

Prior to the establishment of USAID in 1961, U.S. foreign aid was shaped by two early efforts. First, the Marshall Plan which assisted Europe in its recovery after the devastation of World War II. Second, the Point Four program, which had two goals:

- Creating markets for the United States by reducing poverty and increasing production in developing countries, and
- Diminishing the threat of communism by helping countries prosper under capitalism. (USAID, 2015b)

Point Four, so known due to its being the fourth point of action in an outline for U.S. foreign policy in President Harry S. Truman's inauguration speech on January 20, 1949, focused on "making the benefits of our scientific advances and industrial progress available for the improvement and growth of the underdeveloped areas" (Read, 1974, p. 5). In the Point Four program, made official by its passage as the International Technical Cooperation Act of 1949 (Library of Congress, 1949), U.S. universities made an early commitment to assist in delivering technical knowledge, as the National Association of State Universities and Land-grant Colleges (NASULCG), the predecessor organization to APLU, made a pledge for their facilities to be used in achieving the objectives of the Point Four program (Library of Congress, 1949; Read, 1974; U.S. Congress, Office of Technology Assessment, 1991).

The transfer of knowledge between U.S. universities and developing countries was typically in the form of university partnerships and student training, often concentrated in the agricultural sciences (U.S. Congress, Office of Technology

Assessment, 1991). One of the earliest of these partnerships was between a newly independent India and U.S. land-grant universities in Illinois, Kansas, Missouri, Ohio, Pennsylvania, and Tennessee (Read, 1974). Twenty-six additional "alliances" were supported in the 1950s before focus shifted in the 1960s to in-country institution building and U.S. based short and long-term training of students (U.S. Congress, Office of Technology Assessment, 1991).

During this time, USAID was officially established by President John F. Kennedy in the Foreign Assistance Act of 1961 (USAID, 2015b), and in 1966, an investment of $10 million was allocated by Congress for research and educational institutions to strengthen economic and social development programs in developing countries. This investment, however, was short-lived as contracts to universities from USAID dropped by 50% in the 1970s (U.S. Congress, Office of Technology Assessment, 1991).

In 1975, a formal partnership between USAID and U.S. universities was created through the Famine Prevention and Freedom from Hunger amendment to the Foreign Assistance Act. Commonly referred to as Title XII, this act of Congress specified collaboration on activities related to food and agriculture and also established the Board for International Food and Agriculture Development (BIFAD) and the Collaborative Research Support Program (CRSP). BIFAD is a body which continues to serve as an intermediary between universities and USAID. The Collaborative Research Support Program (CRSP) has evolved into the current Feed the Future Innovation Labs for Collaborative Research (U.S. Congress, Office of Technology Assessment, 1991).

While the passage of Title XII seemed to signify a more permanent role for U.S. universities in U.S. development assistance, changes at USAID—including decentralization from Washington, DC, to in-country mission offices; reorganization of the agency; dwindling investments in food and agriculture; and a growing emphasis on private sector engagement; as well as challenges between academic demands and USAID needs—led to a further decline in the role of U.S. universities in delivering development assistance (U.S. Congress, Office of Technology Assessment, 1991). At the same time, it was recognized that U.S. universities had strength in areas that were often cited as "major AID accomplishments" (U.S. Congress, Office of Technology Assessment, 1991, p. 27), such as personnel training, institution building, and technology development, but USAID commitment to these areas "does not appear as strong as AID documents suggest" (U.S. Congress, Office of Technology Assessment, 1991, p. 27). While U.S. universities remained engaged in development assistance, particularly through partnerships with developing country institutions of higher education, the previously mentioned factors, coupled with the findings from World Bank-supported research on the returns to investment in higher education, led to less investment in building higher education in developing countries and a lesser role for U.S. universities in delivering development assistance. For more detail related to a historical overview of USAID-supported partnerships between U.S. and developing country universities from 1951-1991, please see Appendix B.

Higher Education in the Pre- and Post-2015 Development Agenda

Education and the Millennium Development Goals

In September 2000, the 189 member states of the United Nations, the largest gathering of world leaders ever, met to set collective priorities for reducing poverty, creating environmental and human rights, and establishing priorities for peace and security known as the Millennium Declaration (Hulme, 2009; United Nations, 2000a, 2000b). Out of the Millennium Declaration grew the eight Millennium Development Goals (MDGs), adopted in 2001, with a target completion date of 2015 (McArthur, 2013). The eight goals are shown in Figure 4.

Figure 4. Millennium Development Goals. United Nations Millennium Project. (2006b). *What they are.*

The eight goals ranged in focus from eradication of extreme hunger to reducing child mortality. In addition to the eight goals, 18 targets and 48 technical indicators (see Appendix C) were agreed upon by experts from the UN, OECD, International Monetary Fund (IMF) and World Bank (United Nations Millennium Project, 2006a).

Achievement of universal primary education was the only MDG focused on education. According to the UN, primary education enrollment in developing regions grew from 83% to 91% between 2000 and 2015, but 57 million primary-age children remained out of school (United Nations, 2015).

Missing from the goals and targets of the MDGs was any focus on higher education. The only mention of postsecondary education was as an indicator under Goal 3, the promotion of gender equality and empowerment of women, through target 3.1, which mentioned gender equity across primary, secondary and post-secondary education (United Nations Millennium Project, 2006a).

Higher Education in the Post-2015 Development Agenda

As the completion time frame for achieving the MDGs neared, the global development community began to focus on what would come next, commonly known as the post-2015 agenda. While there was general agreement that progress was made on the MDGs, none were completely achieved. Input on what would come next in the development agenda included a stronger voice for more focus across all levels of education and for education to be "integrated into other development goals" (UNESCO, 2014, para. 1).

In September 2015, the MDGs were set to expire on December 31, the UN General Assembly met and approved the 2030 Agenda for Sustainable Development, commonly referred to as the Sustainable Development Goals (SDGs) after a lengthy global consultative process that engaged stakeholders from around the world (United Nations Development Group, 2014; United Nations Division for Sustainable Development, 2015). The new SDGs built upon the work of the eight MDGs, expanding global development goals to 17 goals with 169 targets. The complete list of SDGs can be found in Table 1.

Table 1

United Nations Sustainable Development Goals

Goal	Indicator
1	End poverty in all its forms everywhere
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3	Ensure healthy lives and promote well-being for all at all ages
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5	Achieve gender equality and empower all women and girls
6	Ensure availability and sustainable management of water and sanitation for all
7	Ensure access to affordable, reliable, sustainable and modern energy for all
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10	Reduce inequality within and among countries
11	Make cities and human settlements inclusive, safe, resilient and sustainable

Table 1 Continued

Goal	Inidicator
12	Ensure sustainable consumption and production patterns
13	Take urgent action to combat climate change and its impacts*
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development

* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

Note. Adapted from *Transforming our World: The 2030 Agenda for Sustainable Development* (A/RES/70/1), by the United Nations, 2015.

In the declaration that signaled the acceptance of the SDGs, the Assembly recognized the importance of education at all levels:

> We commit to providing inclusive and equitable quality education at all levels – early childhood, primary, secondary, tertiary, technical and vocational training. All people, irrespective of sex, age, race, ethnicity, and persons with disabilities, migrants, indigenous peoples, children and youth, especially those in vulnerable situations, should have access to life-long learning opportunities that help them acquire the knowledge and skills needed to exploit opportunities and to participate fully in society. We will strive to provide children and youth with a nurturing environment for the full realization of their rights and capabilities, helping our countries to reap the demographic dividend including through safe schools and cohesive communities and families. (United Nations Division for Sustainable Development, 2015, p. 11)

With this declaration, the role of education was expanded in the SDGs beyond the MDGs' goal to achieve universal primary education; it was expanded to include

education throughout an individual's lifetime. Goal 4 of the SDGs is to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations Division for Sustainable Development, 2015, p. 18). This goal includes targets across all levels of education, including higher education in Targets 4.3 and 4.b. All the targets for Goal 4 of the SDGs are found in Table 2.

Table 2

Sustainable Development Goal 4: Quality Education Targets

4.1	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
4.2	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
4.5	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
4.a	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
4.b	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
4.c	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

Note. Adapted from *Transforming our World: The 2030 Agenda for Sustainable Development* (A/RES/70/1), by the United Nations, 2015.

While the SDGs expanded the focus on education, the role of education, and in particular higher education, for achieving development goals is still unclear. Leading up to the creation of the SDGs, organizations such as UNESCO, UNICEF, and the Association of Commonwealth Universities (ACU) emphasized the need for "education to be integrated into other development goals" (UNESCO, 2014, p. 5) and that "higher education underpins efforts to improve social and economic development at all levels and in all spheres" (ACU, 2015, p. 5). Looking beyond the education goals, without strong higher education systems, the ACU (2015) believes that the MDGs and SDGs are not attainable.

Global Higher Education Enrollment

The world is seeing an increase primary education enrollment rates, estimated to have grown from 83% to 91% between 2000 and 2015, due in part to the focus of the MDGs on achieving universal primary education (United Nations, 2015). Increased focus, as well as investment of development dollars, was placed on basic education in the development agenda after the establishment of the MDGs in September 2000, which included "Achieve Universal Primary Education" as its second goal (United Nations Millennium Project, 2006b). As a result of these increased primary enrollment rates, more youth in the developing world entered and completed secondary education (ACU, 2015). Secondary education enrollment rates will likely continue to rise with the focus of the SDGs on access to all levels of education, including secondary and higher education. This shift has created increasing pressure on postsecondary education systems in developing countries due to higher numbers of graduates from secondary school (Burnett

& Felsman, 2012; Kapur & Crowley, 2008). The current higher education system in the developing world, particularly in Sub-Saharan Africa (SSA), simply cannot handle the increasing demand, and many students who are qualified to move forward with their education will be unable to do so due to lack of access (UNESCO Institute for Statistics, 2010)

This increasing demand for higher education in the developing world has created pressure on existing higher education systems. This pressure has led to the expansion of existing institutions, establishment of new institutions, an increase in private universities, and exploration of distance learning (Altbach, Reisberg, & Rumbley, 2009). In many developing countries, these expansions have not been enough to keep up with the growing demand.

Higher education gross enrollment ratio (GER) in the developing regions of SSA, South and West Asia, East Asia and the Pacific, and Latin America and the Caribbean have nearly doubled in the last 20 years, as can be seen in Figure 5 (KCADHE, 2014). In SSA, the GER between 1970 and 2008 was 8.6%, almost double the global average of 4.6%. Despite these increases in enrollment, in 2008, only six percent of the higher education age cohort was believed to be enrolled in some form of postsecondary education (UNESCO Institute for Statistics, 2010).

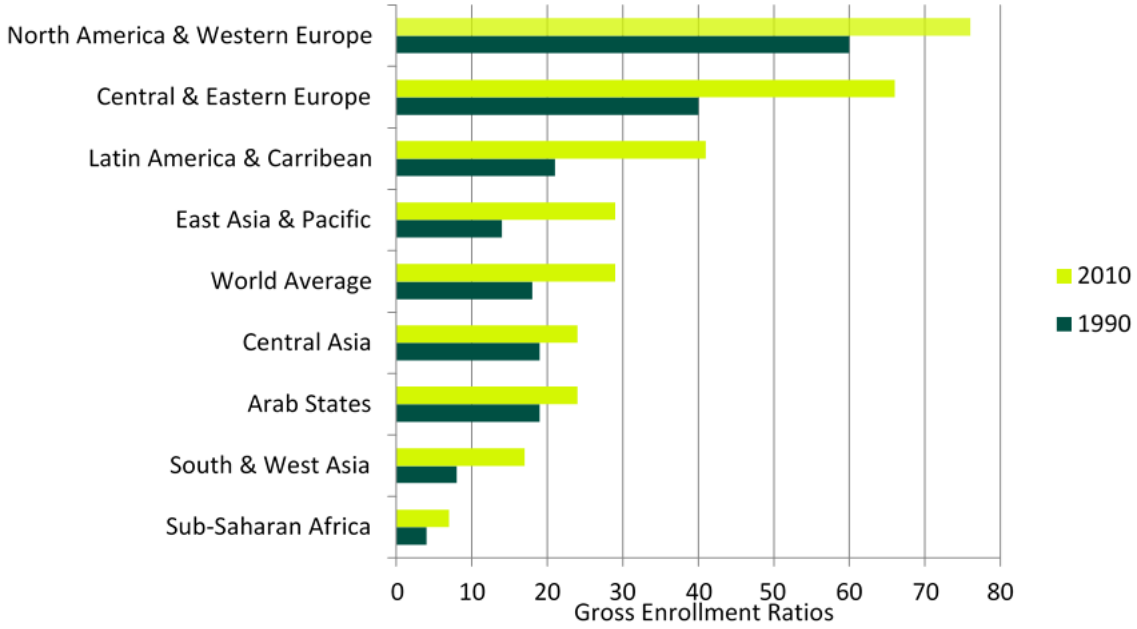

Figure 5. Gross enrollment levels in higher education around the world. Adapted from *African higher education: Opportunities for transformative change for sustainable development*, by KCADHE, 2014. Adapted with permission.

Despite these increases in enrollment, the quantity of students engaged in higher education in the four main developing regions is still quite small when compared to other regions. However, even these relatively low levels of enrollment in comparison to high-income economies are creating pressure on postsecondary education systems that are not equipped to meet the demand of students, both in the quantity of students who apply and in the quality of the education they are providing to their students.

Returns on Investment to Higher Education

While gross enrollment ratios in developing countries are outpacing those in the developed world, the growth has not been enough to keep up with the demands on the system (KCADHE, 2014; UNESCO Institute for Statistics, 2010). The continued

increase in demand for higher education in developing countries, due in part to the increasing numbers of students completing secondary education, creates the need for further investment in building and improving higher education systems.

Investment in higher education development was directly affected by the recommendations from studies in the 1970s-1990s that showed low returns to investments in higher education (Koehn & Obamba, 2014; Psacharopoulos, 1973, 1981, 1985; Psacharopoulos et al., 1986; Psacharopoulos & Patrinos, 2002). These studies led to a decrease in funding and lending for higher education-related development from major development banks such as the World Bank, the International Development Bank (IDB), and the African Development Bank (ABD) (Birdsall, 1996; Kapur & Crowley, 2008). Development agencies, including USAID, followed suit with a shift from long-term investments in building higher education institutions and systems in countries such as India and Brazil in the 1960s and 1970s, to increased basic education investment and more focus on short-term, non-formal training.

This early research on returns to education (Psacharopoulos, 1973, 1981, 1985; Psacharopoulos et al., 1986; Psacharopoulos & Patrinos, 2002) found that private returns to primary education were larger than those for secondary and tertiary education. It is now believed that those studies may have had some "conceptual misgivings" (Kapur & Crowley, 2008, p. 11) and did not include social returns to investment that may take longer to appear than in primary education settings (Birdsall, 1996). A compilation of these previous returns is presented in Table 3.

Table 3

Percent of Return on Investments in Schooling by Educational Level and Region, 1981-2004

	1981			1986			1994			2004		
	Primary	Secondary	Higher	Primary	Secondary	Higher	Primary	Secondary	Higher	Primary	Secondary	Higher
Sub-Saharan Africa	29	22	32	45	26	32	41.3	26.6	27.8	37.6	24.6	27.8
Asia	32	17	19	31	15	15	39	18.9	19.9	20	15.8	18.2
Europe, Middle East and North Africa				32	23	23	17.4	15.9	21.7	13.8	13.3	18.8
Latin America/ Caribbean	24	20	23			--	26.2	16.8	19.7	26.6	17.0	19.5
Developing Countries				31	19	19			--			
Advanced Developed Countries	--	14	12	--	12	12	21.7	12.4	12.3	13.4	11.3	11.6
World							29.1	18.1	20.3	26.6	17	19.0

Note. Compiled from "Returns to education: An updated international comparison," by G. Psacharopoulos, 1981; "Returns to Investment in Education: A Global Update," by G. Psacharopoulos, 1994; *Returns to Investment in Education: A Further Update*, by G. Psacharopoulos & H. A. Patrinos, 2002; and "Financing higher education in developing countries: An exploration of policy options," by G. Psacharopoulos, J.-P. Tan, & E. Jimenez, 1986.

Recent research by the World Bank (2009) has changed course from these earlier studies and found that returns to higher education were proportionate or higher than those to primary, with each additional year of education yielding "10 percent to 15 percent returns in the form of higher wages" (p. xxi). Using the same technique as the earlier returns to education study, but with a new harmonized dataset, Montenegro and Patrinos (2013) revealed that returns to higher education in developing regions such as Sub-Saharan Africa (SSA) and Latin America and Caribbean (LAC) are higher than returns to basic and secondary education and that returns to higher education in SSA are nearly double the returns to higher education in high income economies, as shown in Table 4.

Table 4

Percent of Return on Investments to Schooling by Educational Level and Region, 2000-2011

Region	Primary (%)	Secondary (%)	Tertiary (%)
World	10.3	6.9	16.8
Middle East and North Africa	9.4	3.5	8.9
South Asia	9.6	6.3	18.4
Eastern and Central Europe	8.3	4.0	10.1
High Income Economies	4.8	5.3	11.0
East Asia and Pacific	11.0	6.3	15.4
Latin America and Caribbean	9.3	6.6	17.6
Sub-Saharan Africa	13.4	10.8	21.9

Note. Latest available year from 2000-2011. Adapted from Returns to Schooling Around the World, by C. E. Montenegro & H. A. Patrinos, 2013, p. 8.

Economists have often highlighted higher education as only having private benefits to an individual; however, a number of more recent studies have found that higher education not only provides private benefits, often in the form of higher earnings potential over an individual's lifetime, but also social benefits that contribute to broader economic and societal development (Birdsall, 1996; Bloom, Hartley, & Rosovsky, 2007; Bloom, Canning, & Chan, 2006; KCADHE, 2014; Montenegro & Patrinos, 2013).

Operational Framework

Formally organized education, including higher education, was identified by Schultz (1961) as one of five areas that improve human capabilities—the basis for human capital theory, and the underlying theoretical framework that drove this study. The development of the operational framework that guided the study was based upon this literature review and the theoretical framework. Investments in higher education, whether they come from individuals, governments, or through development assistance, have both social and private outcomes. These social and private outcomes lead to economic benefits for all. However, when the investment is unknown, as is the current case regarding U.S. development assistance to higher education, it is difficult to measure the full impact of the investment. This framework is presented in Figure 6.

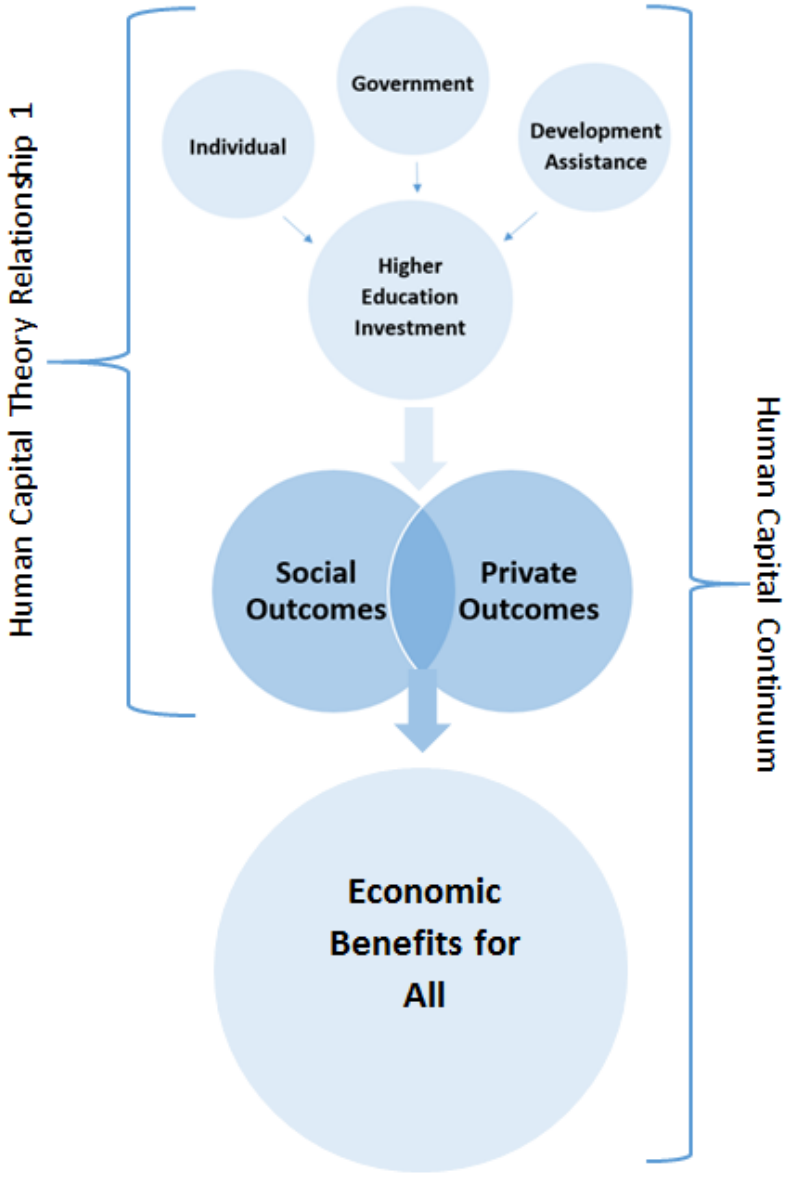

Figure 6. Operational framework for the study. Developed by the author.

Summary

The literature reviewed served as the justification and foundation for the study. Four main themes were explored: U.S. foreign assistance structure, higher education in the pre- and post-2015 development agenda, global higher education enrollment, and returns on investments to higher education.

Literature about the U.S. foreign assistance structure provided an understanding of how development assistance is budgeted and allocated. Access to information is a powerful call to action when attempting to understand a complex process of funding and support. An understanding of the early role of the engagement of U.S. universities by USAID in delivering development assistance through partnerships with host country institutions provided context for the historical role of U.S. universities in higher education development assistance.

Development assistance is often shaped by the goals of world bodies such as the United Nations. At the dawn of the 21st century, the largest-ever meeting of world leaders at the UN resulted in the MDGs. These eight goals sought to eliminate extreme poverty; however, within these goals, the only education goal identified was at the primary education level. Approaching the expiration of the MDGs, the UN, through a consultative, global process, developed the SDGs, adopted by a UN resolution in September 2015. While the role of higher education was not explicitly included in how these 17 goals would be accomplished, higher education was recognized as a needed aspect.

Demands on higher education systems are increasing, particularly in developing countries. While enrollment figures in developing countries, especially in SSA, have far outpaced those in other regions, there is still more demand on the system than there is supply. A growing youth population will only continue to place demands on higher education systems that are receiving little attention from the development community.

Also influencing higher education development assistance are a number of studies regarding returns to investment related to education at all levels. Early studies showed that returns to education were highest at the primary education level, and policy recommendations encouraged investment to be redirected from higher education to primary education. These early studies have been criticized for not including full social returns to education, which are difficult to measure. More recent returns to investment studies, which use the same technique for measuring private returns but with new data, show that the highest returns are now found at the higher education level. These studies, however, are not driving policy recommendations in the same way as earlier studies.

CHAPTER III

RESEARCH METHODS

Introduction

The purpose of this study was to explore U.S. government investments in higher education development from 2013-2015 in order to inform policy and identify the relationship between these investments and the U.S. higher education community. The following questions guided the study.

1. How much of the foreign assistance budget is spent on assistance to higher education in development?
2. How is that money spent (i.e., what types of projects per the sub-element program categories)?
3. How are U.S. universities engaged in higher education development activities?

Research Design

The study used an explanatory mixed-methods approach, analyzing freely available data and interviews with development agency employees who were knowledgeable about higher education development assistance. Fraenkel and Wallen (2009) described mixed-methods research as "research that involves the use of both quantitative and qualitative methods" (p. 557). An explanatory mixed-methods design requires a researcher to use a qualitative approach to follow up on findings from an initial quantitative inquiry. It could also be said that this study took a transformative, advocacy lens, as the intent for the results of the study are advocacy efforts related to increasing investments in higher education for development by encouraging more

balanced investment across all education levels (Fraenkel & Wallen, 2009; Sweetman, Badiee, & Cresswell, 2010).

The study was modeled after those conducted by the Partnership to Cut Hunger and Poverty in Africa on U.S. development assistance in agriculture to SSA (Simmons & Shiferaw, 2010; Taylor & Howard, 2005; Taylor & Shiferaw, 2009). Taylor and Howard (2005) said that the intention of their report was "to stimulate thought and debate within the policy and stakeholder community working to improve the U.S. assistance program and the contribution agriculture can make to poverty and hunger reduction in Africa" (p. vii).

Data Collection

Collection and Use of Existing Quantitative Data

Price (2010) encouraged the use of existing datasets, and existing data provided the basis for achieving the first objective of this study. Multiple datasets are available to the public for download and analysis on the Foreign Assistance Dashboard, which contains planned, obligated, and spent figures on development assistance from 2013-2015 from 10 government agencies: USAID, Peace Corps, IAF, MCC, USDA, DOS, DOD, HHS, United States African Development Foundation (USADF), and the U.S. Department of the Treasury. It is important to note that the Foreign Assistance Dashboard is an aggregator of information submitted by individual agencies. Each agency has its own reporting mechanisms, and each organization made a decision on when to begin reporting its data. The agencies report on a quarterly basis.

The initial dataset downloaded from the Foreign Assistance Dashboard included all projects tagged at the top level as higher education assistance by the agencies reporting the data. Through this resource, 2,078 data points tagged as higher education were obtained. These data included information on the main level operating account, operating unit, and dollar amounts in committed and disbursed categories but did not contain project details (e.g., in which sub-account the program is categorized) or what country or countries received the funding. Data columns that were not pertinent to the objectives of this study were eliminated from the dataset.

The researcher eliminated all data points prior to 2013, and it was found that only USAID, DOD, MCC, and IAF had expenditures tagged as higher education. Through the USAID Foreign Assistance Explorer two additional agencies were identified as having higher education money: the U.S. Department of the Interior and the U.S. Trade and Development Agency. All U.S. Trade and Development Agency expenditures were made prior to 2013 and were therefore excluded from this study. The Department of the Interior, through Compacts of Free Association with the Marshall Islands and Palau, had higher education dollars in 2013 and 2014, but since funding to higher education development from DOD and the Department of the Interior is not included as part of the foreign operations budget, those entries were ultimately excluded from the study.

While these data sources were publically available, they were neither complete nor straightforward in how the information was presented. Using the initial information available on the award, other available data sources (i.e. the USAID Development Clearinghouse, individual award documents, and program websites) were used to further

determine country and project-level details. Lack of complete data-driven information is also the reasoning behind using a mixed-methods approach to complete the research objectives as employees of USAID, DOS, and other government agencies were interviewed to help in completing gaps left in the original dataset.

The downloaded data was systematically scrutinized by the researcher. Not all awards had award identifiers, and despite attempts to identify to what projects these disbursements may have been aligned, the researcher ultimately decided to combine awards with no award identifier by year into entries based on the award transaction type. It is important to note that each line of data in the dataset does not represent a unique investment, as award identifiers span multiple years, as well as multiple disbursements or commitments for some projects. This method is further explained in chapter four. The researcher plans on archiving the raw data set with the International Programs office at the Association of Public and Land-grant Universities.

For totals on how much was spent on the total foreign assistance budget by the U.S. government, the researcher used the Congressional Budget Justification (CBJ) for the State and Foreign Operations Budget for the fiscal years 2011-2016. Actual totals for a year appear in the CBJ two years later. For example, the FY 2014 actual total appears in the FY 2016 CBJ.

Collection and Use of Qualitative Data

Interview requests to agency employees with knowledge of higher education development assistance was supported by the International Programs Office at APLU. Snowball sampling, a form of purposive sampling (Merriam, 2009), was used for the

interviews, allowing for identifying "information-rich informants" (Patton, 2002, p. 237).

To achieve the second objective of the study, interviews were conducted with those involved in planning or delivering higher education development assistance, in part identified by the data collection that took place in achieving objective one. Interview subjects included individuals working in bureaus and offices at development agencies that support higher education development assistance. These individuals served as award contacts, serve on technical review committees, and/or serve in a capacity that is integral to higher education development assistance. Some individuals were already known to the researcher, while others were identified using the USAID directory for regional and topical bureaus. All individuals selected for contact had direct connection with higher education development assistance and had been working for the agencies between 2.5 to more than twenty years.

The researcher originally identified 27 potential participants who were contacted for interviews. Survey participants or those who were initially contacted for interviews referred an additional seven colleagues, and many recommended that the researcher contact colleagues who were originally identified by the researcher. Requests for an interview was sent to a total of 34 individuals. Of the 34 interviews requested, the researcher conducted 15 interviews with 17 participants (one participant invited a colleague to join the interview, and two participants who were individually contacted asked to be interviewed together). Thirteen of the seventeen participants were from the original 27 identified by the researcher. One additional interview was scheduled but was

cancelled by the participant. Two invitations were declined by potential participants. Three of the originally requested participants forwarded the interview request to colleagues. One person was no longer with the agency. There was no response to 10 of the requests. All interviews were conducted over a two week time period. An overview of the interview requests and participation is presented in Table 5.

Table 5

Record of Interview Requests and Participation for Study Related to U.S. Assistance to Higher Education

Interview Participation	Number
Number of Interviews Requested	34
Number of Interviews	15
Number of Participants	17
Non-response to Interview Request(s)	10
Number who declined participation	2

Interviews were conducted with participants from USAID, DOS, and MCC either in person, on the phone, or via an online meeting platform. The researcher made attempts to interview participants from each of three U.S. government agencies that deliver development assistance tagged as higher education but did not receive a response from the Inter-American Foundation.

The sample represented both Washington, DC-based agency staff (13 participants) and in-country or mission-based staff (four participants). For USAID participants, both functional and regional bureaus were represented in the sample.

Institutional Approval

Both Texas A&M University and federal regulations require approval for research involving human subjects. Prior to beginning this research, a request was sent to the Texas A&M University Institutional Review Board (IRB), and approval for the study was granted under study number 2015-0419D. Participants in the qualitative portion of the research were contacted using IRB-approved recruitment materials. Participants were informed of their rights through the use of an information sheet. Materials related to IRB approval are included in Appendix D.

Data Analysis

Analysis of Existing Quantitative Data

To determine the amount of U.S. assistance allocated to higher education, the dataset was sorted to isolate projects defined as higher education based upon the tagging in the Foreign Assistance Dashboard, as well as interviews with agency officials. In-depth analysis of these entries was conducted in order to create a cohesive overview of the U.S. investment in higher education development assistance.

Interviews were conducted with appropriate staff members of DOS, USAID, and other key agencies to determine relevant information about each project or to clarify areas where money marked as higher education may have been spent on areas such as technical assistance.

With the final 1,935 data points from the data collection period, the researcher added or modified the following columns to determine the following information for each award:

- Award accountable bureau (within agency);
- Implementer type;
- Program/project name;
- Region;
- Award transaction type;
- Higher education definition;
- Higher education sub-category; and
- Program description.

Award accountable bureau. USAID is organized into functional and regional bureaus, with offices housed within bureaus. The one exception to this naming scheme is the Global Development Lab, which is on the organizational chart with the functional bureaus. Based on this structure, the researcher created an additional column of information called award accountable bureau and assigned each office to a functional or regional office.

Implementer types. Based on the award implementing organization name, the researcher created categories for implementer types: NGO/non-profit, educational institution, for-profit, local government, U.S. government agency, or unknown. To gain a better understanding of what types of educational institutions are implementing foreign assistance for education in order to achieve objective two of the study, the educational institution category was further divided into the sub-categories of:

- U.S. university - public

- U.S. university - private
- Non-U.S. university
- Secondary school

Program/project name. While there was an existing column for "award title" in the Foreign Assistance Dashboard dataset, these data did not clearly represent the names of the individual award programs or projects. An additional column of data title program/project name was added by the researcher for clarity, and the original column was eventually deleted from the final dataset.

Region. The award location-country name data was an existing column from the Foreign Assistance Dashboard, although information in that column was incomplete for many entries, and information was updated based on information from award documents. To determine where foreign assistance to higher education was spent on a regional level, a column for regional categorization was added to the dataset. Regional assignments can be found in Table 6.

Table 6

Regional Categorizations for the Study

Region	Countries Included
Afghanistan and Pakistan	Afghanistan and Pakistan
Africa	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Cote d'Ivoire, Democratic Republic of the Congo, Djibouti, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Republic of the Congo, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe
Asia	Bangladesh, Burma, Cambodia, China, India, Indonesia, Kazakhstan, Kyrgyz Republic, Laos, Maldives, Mongolia, Nepal, Pacific Islands, Philippines, Sri Lanka, Tajikistan, Thailand, Timor-Leste, Turkmenistan, Uzbekistan, Vietnam
Europe and Eurasia	Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Cyprus, Czech Republic, Georgia, Greece, Kosovo, Macedonia, Moldova, Montenegro, Russia, Serbia, Turkey, Ukraine
Latin America and the Caribbean	Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Venezuela
Middle East	Egypt, Iraq, Israel, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, West Bank and Gaza, Yemen
United States	United States
Worldwide	Project was implemented in countries in at least two regions

Note. Regional assignments were based on USAID regions but include additional countries.

Award transaction types. For award transaction type, the original dataset identified two categories: disbursed and committed. The researcher added two additional categories, committed-deobligated and deobligated, to capture money that was taken away from an award. Deobligation can occur at multiple stages of an award, at the obligation stage (commitment-deobligated) or during/at the end of the implementation of an award, due to changes in the award agreement and/or to recover funds that were left over at the end of an award.

Higher education definition. To determine if the entries met the Foreign Assistance Standardized Program definition for higher education, the researcher used program documents and keyword searches, including "university," "college," "teacher-training," and "ministry" to determine if the program met the definition. The project was then coded as:

- Yes, meets the definition;
- No, does not meet the definition; or
- Unable to determine.

The full Foreign Assistance Standardized Program definition for higher education, including sub-element definitions, can be found in Appendix A.

To determine the higher education sub-category, the researcher used information found in the existing award title column, where 38 lines of data were, based on the information downloaded from the Foreign Assistance Dashboard, already identified as one of the sub-category definitions for the higher education definition.

This information was used as a guide for assigning sub-categories to the awards. For example, because the University Scholarship Program II in Lebanon (AID-268-A-11-00004) was labeled as professional development, the researcher coded all projects that were mainly scholarship in focus as sub-element 3.2.2.4: professional development.

To enhance the quality of the analysis, the researcher engaged in analyst or investigator triangulation of 10 randomly chosen awards with a co-worker who is familiar with higher education development assistance (Patton, 1999). Patton (1999) encouraged multiple observers as a method to eliminate doubt that may arise from a single analyst. An information sheet was provided to the co-worker with information on the higher education definition and an explanation of each higher education sub-element. Each person coded the ten randomly selected awards to determine if they fit the higher education definition and what sub-element (if the award met the higher education definition) or sub-category (if award did not meet the definition) the award was assigned to. The researcher then compared her coding to that of her co-workers and the two then came together to discuss how each coded the ten randomly selected awards and came to agreement on if the ten awards met the definition and the sub-element/category it was assigned to.

In addition to the existing five sub-element definitions for higher education assistance, a sixth category, construction/educational infrastructure, was added to account for funding from American Schools and Hospitals Abroad activities. Additionally, the researcher created sub-categories for those awards that were determined by the researcher not to meet the higher education definition. Sub-categories

for entries meeting and not meeting the higher education definition can be found in Table 7.

Table 7

Summary of Sub-Category Classifications for Higher Education Definition Based on Author's Determination of Meeting the Higher Education Definition

Meets Higher Education Definition	Sub-Category
Yes	a. Policy Development and Reform b. Institutional Capacity Development c. Engaging Higher Education Institutions in Development d. Professional Development (including scholarship, long and short term training) e. Host Country Strategic Information Capacity (Higher Ed) f. Construction/Educational Infrastructure
No	a. Workforce Development and/or Vocational Education and Training b. Basic Education c. Basic and Secondary Education d. Secondary Education e. Human and/or Organizational Capacity not education specific f. Economic Growth/Development g. Gender h. Health i. Research j. Evaluation k. Climate Change l. Youth Development m. Construction (non-education) n. Construction/Educational Infrastructure o. Workforce Development and/or Vocational Education and Training p. Non-Education USAID Staff q. Professional Development r. Unable to Determine

Analysis of Qualitative Data

The qualitative aspect of this study relied on data collection techniques including interviews and documentation. DeMarrais (2004) defined an interview as "a process in which a researcher and participant engage in a conversation focused on questions related to a research study" (p. 54). The interviews were semi-structured, with open-ended questions designed to "yield descriptive data" (Merriam, 2009, p. 99). See Appendix D for the interview protocol.

An interview guide was developed to situate the interviews as guided conversations (DeMarrais, 2004; Merriam, 2009; Yin, 2003). The interview guide followed DeMarrias's (2004) recommendations for guided interviews to have "short, clear questions"; ask for specific recall to encourage rich narrative; and to have few, broader questions rather than limiting close-ended questions (p. 62). Participants' identities were kept confidential by the researcher.

Analysis of data from the interviews occurred concurrently with its collection. As Merriam (2009) stated, "data collection and analysis is a simultaneous activity in qualitative research" (p. 165). Interviews were recorded, along with notes and observations during the interviews. The researcher transcribed interviews within one week of the interview date and analyzed each for reoccurring themes and categories to conduct inductive and comparative analysis (Merriam, 2009).

Construct validity was obtained through a member check, allowing participants to review interview transcripts (Merriam, 2009; Yin, 2003). Interview guides were created and followed, along with an audit trail to document the research process

(DeMarrais, 2004; Merriam, 2009). The audit trail can be found in Appendix E. Two participants returned their member check with edits to clarify their statements.

Additional validity concerns were addressed through triangulation. Data triangulation is described by Yin (2003) as having multiple sources that are "aimed at corroborating the same fact or phenomenon" (pp. 98-99). Data triangulation was addressed through a combination of data collection types and data analysis being conducted continuously throughout the research process (Patton, 2002; Stake, 2009; Yin, 2003). This process ensured consistency of coding.

CHAPTER IV

FINDINGS

Bracketing of the Study

Experiences related to this study include both the researcher's current employment and past experiences in international development. It is important for the reader to understand the lived experience of the researcher, given the focus and direction of the study. This information is presented to provide a research lens in terms of bracketing of the study. While the researcher's experience provided insight into the study topic, through bracketing, the researcher set aside her "beliefs, values, predispositions, and prior assumptions" in the design and analysis of the qualitative portion of the study (Yin, 2016, p. 333).

The researcher works for the Association of Public and Land-grant Universities (APLU) in the International Programs Office and has on-the-ground experience working on USAID-funded higher education institutional capacity projects in Kenya and Tanzania. These experiences, along with her current duties, led to the development of this study's research objectives.

Research Objective One

Objective one of this study was to compile data from existing data sources in order to categorize and describe selected characteristics of U.S. foreign assistance to higher education. Data from the Foreign Assistance Dashboard, CBJ, and interviews with agency employees were used to determine how foreign assistance to higher education was spent from 2013-2015.

How Much of the Foreign Assistance Budget Is Spent on Higher Education Development?

At approximately $33 billion, the U.S. budget for development assistance accounts for less than one percent of the total U.S. government budget (Rutsch, 2015). It is, however, important to note that foreign assistance does not include diplomacy or defense efforts that may also encourage development. Diplomacy is a separate line in the state and foreign operations budget, and DOD efforts that are humanitarian in nature, the Overseas Humanitarian Disaster and Civic Aid (OHDACA) program and the Humanitarian and Civic Assistance (HCA) program, are in the DOD budget.

Based on the reporting of assistance designated as higher education in the CBJ, historically it can be seen that higher education accounts for less than one percent of the total foreign assistance budget. According to Rutsch (2015), health receives the largest portion of the foreign assistance budget, with more than $5 billion budgeted. Table 8 provides an overview of the total foreign assistance budget for fiscal years 2009-2015 and the total reported dollars spent on higher education.

Table 8

Dollar Amount and Percent of U.S. Foreign Assistance Budget Spent on Higher Education Based as Determined by the Congressional Budget Justification

	Total Foreign Assistance Budget	Total Higher Education	Percent of Total Budget
FY 2009	$33,381,357,000.00	$112,336,000.00	0.336
FY 2010	$33,262,526,000.00	$118,044,000.00	0.354
FY 2011	$33,381,357,000.00	$248,837,000.00	0.745
FY 2012	$35,505,240,000.00	$233,499,000.00	0.657
FY 2013	$33,810,927,000.00	$174,887,000.00	0.517
FY 2014	$33,989,450,000.00	$221,906,000.00	0.652
FY 2015	$33,628,064,000.00	$249,592,000.00	0.742

Note. FY 2015 is an estimate from the 2016 CBJ. Actual FY15 will be available in the 2017 CBJ.

When the yearly totals for higher education development assistance from the CBJ are compared to the yearly totals from the Foreign Assistance Dashboard there is a discrepancy when the disbursed dollar amounts are combined across all projects—not only for the projects determined to fit the higher education definition, but also for all projects tagged as higher education within the dashboard. This discrepancy is displayed in Table 9. Yearly totals for higher education for the CBJ may include awards that are tagged in other sectors, such as iAGRI and the Feed the Future Innovation Labs, both of which are tagged at the top level as agriculture.

Table 9

Comparison of Congressional Budget Justification and the Foreign Assistance Dashboard for Higher Education Development Assistance Spending 2013-2015

	Congressional Budget Justification	Foreign Assistance Dashboard—All Regardless of Meeting Definition	Foreign Assistance Dashboard—Only Higher Education
FY 2013	$174,887,000.00	$107,090,962.00	$90,772,235.70
FY 2014	$221,906,000.00	$134,340,404.25	$123,654,136.01
FY 2015	$249,592,000.00	$118,721,581.00	$102,689,698.70

Which Agencies Report Higher Education Development Assistance Dollars?

Based on available data from the Foreign Assistance Dashboard, four entities were identified as having development assistance funding that was categorized in the respective agencies reporting systems as higher education: USAID, MCC, DOD, and the Inter-American Foundation. Since the funds for the DOD projects are not part of the U.S. foreign assistance budget, those funds were excluded from the study. Through the USAID Foreign Aid Explorer, the Department of the Interior, and the U.S. Trade and Development Agency were also found to have higher education development investments, but both were ultimately excluded from the study—the Trade and Development Agency because the funding fell outside of the timeframe of the study, and the Department of the Interior because the funding was not part of the foreign assistance budget.

It was anticipated that DOS, due to the large number of student and scholar exchange programs it conducts through its Bureau of Educational and Cultural Affairs (ECA), including the Fulbright program, would have awards categorized as higher

education. None appeared in the original data downloaded from the Foreign Assistance Dashboard. The researcher then analyzed the dataset from the Foreign Assistance Dashboard that contained all DOS entries. Many of these entries were redacted, and the remaining entries had no indicators that the projects were tagged as higher education. In review of the CBJ for the Diplomatic Engagement and Foreign Assistance Request for FY 2014-2016, ECA budget requests appeared under Diplomatic Engagement, a separate budget line from Foreign Assistance. Through an interview with employees from the Department of State, it was confirmed that ECA funding does fall under Diplomatic Engagement and therefore does not appear on the Foreign Assistance Dashboard and does not count towards any development assistance under the standardized definition of higher education.

Similarly, it was anticipated that the USDA would potentially have higher education investments, due to programs such as the Higher Education Challenge (HEC) grants program. The researcher also analyzed the full Foreign Assistance Dashboard data for USDA and found that while many programs engaged U.S. institutions of higher education in the implementation of foreign assistance programs, none were categorized as higher education. It may, however, be of interest to note that there were a number of awards categorized under the basic education category. What follows next is a brief history and overview of each development agency that supports higher education development assistance. An awareness of each of these organizations is critical in understanding how development assistance to higher education is delivered.

U.S. Department of State and United States Agency for International Development

The United States has three core pillars of foreign policy: diplomacy, defense, and development. DOS is the lead foreign affairs agency of the United States and is the conduit for American diplomacy. Receiving foreign policy direction from DOS, USAID is an independent government agency that administers economic and humanitarian assistance to "end extreme poverty and promote resilient, democratic societies while advancing our security and prosperity" (DOS & USAID, 2014, p. 6). USAID was established by President John F. Kennedy in 1961, following the passage of the Foreign Assistance Act (DOS & USAID, 2014; USAID, 2015b).

USAID is led by a presidentially-appointed administrator who is confirmed by the Senate. USAID and DOS share a joint strategic plan, and USAID programming is planned in collaboration with the DOS and other governmental and non-governmental organizations (DOS & USAID, 2014) USAID is organized as functional bureaus, central bureaus and offices, and geographic bureaus, as shown in Figure 7 (USAID, 2015).

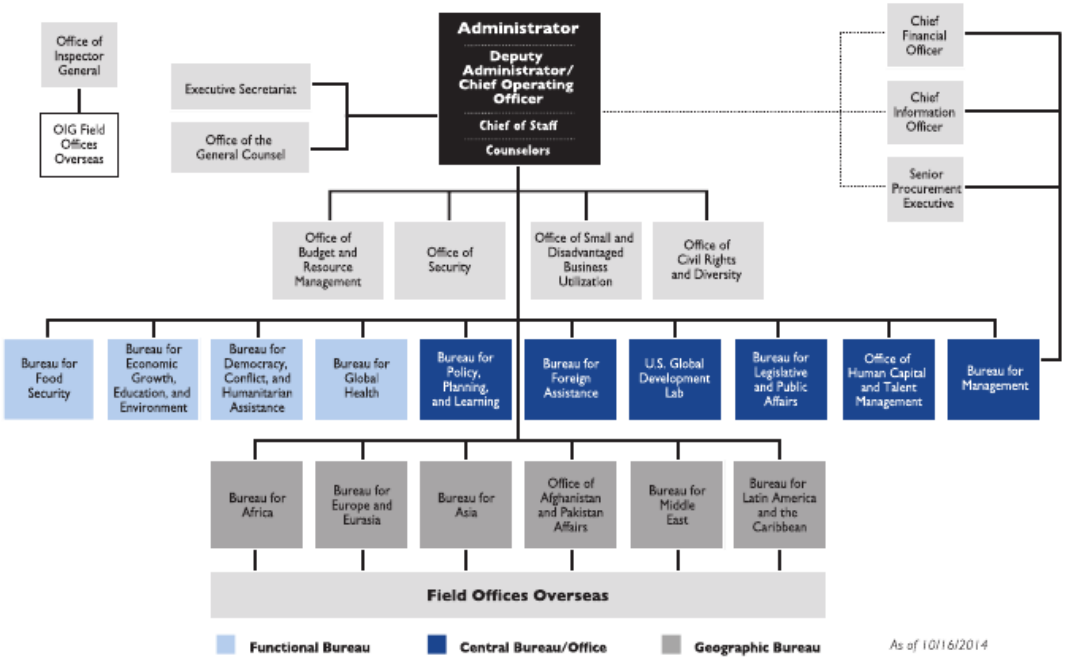

Figure 7. Organizational structure of USAID. United State Agency for International Development. (2015a). *Organization.*

Inter-American Foundation. The IAF was created in 1969 as part of the Foreign Assistance Act and was originally known as the Inter-American Social Development Institute (Foreign Assistance Act, 1969). The organization was originally tasked with placing:

> primary emphasis on the enlargement of educational opportunities at all levels, the production of food and the development of agriculture, and the improvement of environmental conditions relating to health, maternal and child care, family planning, housing, free trade union development, and other social and economic needs of the people. (Foreign Assistance Act, 1969, p. 822)

Today, the IAF provides grassroots development assistance directly to local organizations and institutions in Latin America and the Caribbean. The IAF has a presidentially-appointed board that is confirmed by the Senate. The president of the

board also serves as the chief executive officer (CEO) of the foundation (IAF, 2016). As an independent agency of the U.S. government, its operating budget is included in the foreign operations budget under development assistance (IAF, 2016).

In 1999, the Office of Inspector General (OIG) at USAID was mandated to "provide inspector general services" to the IAF as part of the Admiral James W. Nance and Meg Donovan Foreign Relations Authorization Act (Office of Inspector General, n.d.-b, para. 1). The OIG has three areas of responsibility: audits, investigations, and management related to foreign assistance programs and agency operations for IAF, as well as USAID and the MCC (Office of Inspector General, n.d.-a).

Millennium Challenge Corporation. Like the IAF, the MCC is an independent government agency, with a board of directors chaired by the Secretary of State. The board also includes the Secretary of the Treasury, the USAID Administrator, the U.S. Trade Representative, the CEO of MCC, and four presidentially appointed individuals from the private sector (Tarnoff, 2015). The MCC was created following the 2002 announcement of then-President George W. Bush that formed the Millennium Challenge Account, which called for "a new compact for global development, defined by new accountability for both rich and poor nations alike. Greater contributions from developed nations must be linked to greater responsibility from developing nations" (The White House, 2002, para. 2).

The establishment of the MCC in 2004 by Congress represented a change in how U.S. development assistance was delivered, by requiring host-country ownership and a focus on economic growth and poverty reduction (Tarnoff, 2015, p. 5). The MCC

provides assistance to low-income and lower-middle income developing countries through a competitive process with 20 performance indicators in the areas, known as "baskets," of ruling justly, investing in people, and economic freedom (Tarnoff, 2015, p. 5). At least half the 20 performance indicators must be passed by the countries, and two indicators, the "control of corruption" and one of two democracy indicators, "civil liberties" or "political rights," must be passed (Tarnoff, 2015, p. 5). Countries must also pass at least one indicator in each basket. Each country then receives a scorecard for its performance, and the MCC board of directors determines if a country is eligible for assistance through the MCC.

MCC assistance is delivered through grant agreements known as compacts, which last no more than five years. Once a country is determined to be eligible for assistance, it is invited to prepare compact proposals with guidance from the MCC, a process that takes approximately 27 months from invitation to signing (Tarnoff, 2015, p. 5). Countries are regularly reviewed to ensure they continue to meet performance indicators during their compact program and compacts can be suspended or terminated (MCC, n.d.).

Categorization and Description of Selected Characteristics of Higher Education Assistance

Total number of awards. While USAID, MCC, and IAF all deliver development assistance within the higher education sector, as the lead development agency for the United States, USAID delivers the bulk of development assistance to

higher education. Table 10 includes an overview of the number of unique awards by agency.

Table 10

Number of Unique Awards by Agency designated as Higher Education per Reporting to the Foreign Assistance Dashboard 2013-2015

Agency	Number of Unique Awards
Inter-American Foundation	4
Millennium Challenge Corporation	5
U.S. Agency for International Development	391
Total	400

Of the 400 total numbers of awards, only 277 fit the Foreign Assistance Standardized definition for higher education. Of the remaining unique awards, 91 were determined to not meet the definition (two each from MCC and IAF, 87 from USAID) and 32 unique awards, all from USAID, did not have enough information available to determine if they did or did not fit the definition..

Total number of awards by implementer type. Seven implementer types were identified by the researcher, with the category of educational institution having four sub-categories. Table 11 provides an overview of unique awards by implementer category. NGOs/non-profits were the implementer with the largest number of awards, followed by non-U.S. universities and then U.S. public universities.

Table 11

Number of Unique Awards Fitting Foreign Assistance Higher Education Definition as Determined by Author by Implementer Type from Foreign Assistance Dashboard for 2013-2015

Implementer Type	Number of Awards
Bank/Lending Agency	2
Educational Institution-Non U.S. University	89
Educational Institution-U.S. University Private	18
Educational Institution-U.S. University Public	42
For-Profit	12
Local Government	7
NGO/Non-profit	103
U.S. Government Agency	3
Unable to Determine	1
Total	277

Total by agency by obligation type fitting higher education definition. The Foreign Assistance Dashboard provided information on four different types of transactions for each agency: commitment, commitment-deobligated, disbursement, and deobligated. With the largest number of projects, USAID also had the largest total amount of commitments and disbursements. The IAF had commitments in both 2014 and 2015, but no disbursements were included in the dashboard, nor were the funds reported as deobligated. A complete overview of the total dollars by agency by obligation type that fit the higher education definition is presented in Table 12.

Table 12

Total Dollar Amount by Agency by Obligation Type Fitting Higher Education Definition as Determined by Author from Foreign Assistance Dashboard 2013-2015

Agency	2013	2014	2015	Total
Inter-American Foundation		$83,626.00	$12,000.00	$95,626.00
Commitment		$83,626.00	$12,000.00	$95,626.00
Millennium Challenge Corporation	$1,279,022.62	$32,037,653.15	$5,295,181.90	$38,611,857.67
Commitment	$1,000,000.00	$29,094,335.62		$30,094,335.62
Commitment-Deobligated		-$73,862.00	-$20,473.62	-$94,335.62
Deobligated	-$1,439,719.79			-$1,439,719.79
Disbursement	$1,718,742.41	$3,017,179.53	$5,315,655.52	$10,051,577.46
U.S. Agency for International Development	$187,880,590.13	$247,331,132.49	$238,216,309.78	$673,428,032.40
Commitment	$104,629,528.55	$133,406,796.78	$143,617,513.45	$381,653,838.78
Commitment-Deobligated	-$2,445,992.22	-$1,270,202.69	-$1,343,638.92	-$5,059,833.83
Deobligated	-$3,356,439.49	-$5,442,418.08	-$1,431,607.93	-$10,230,465.50
Disbursement	$89,053,493.29	$120,636,956.48	$97,374,043.18	$307,064,492.95
Total	$189,159,612.75	$279,452,411.64	$243,523,491.68	$712,135,516.07

Disbursements per higher education definition and sub-categories. A total of $360,152,947.25 was disbursed between 2013 and 2015 tagged as higher education according to the Foreign Assistance Dashboard. Of this, the researcher determined that $317,116,070.41 fit the definition of higher education assistance, however, $29,500,111.44 was determined not to fit the definition, and $13,536,765.40 could not be assigned to either fitting or not fitting the higher education definition.

Within the sub-categories of the higher education definition, the highest dollar amount (combined 2013-2015), $93,963,986.05, was spent on institutional capacity development, followed by professional development at $89,825,262.78. No projects were designated to fit the higher education sub-category of host country strategic information capacity. In addition to the five existing sub-categories for higher education, the researcher added an additional category for construction/educational infrastructure, which had a total of $47,988,275.57. Another $2,410,225.38 was determined to fit the higher education definition could not be assigned to a sub-category.

For disbursements not fitting the higher education definition, but tagged as higher education in the dashboard, the largest amount, $8,232,855.93, went toward workforce development and/or vocational education and training. While workforce development is not included in the higher education definition, it is included as part of Goal 2 of USAID's Education Strategy. Workforce development is a program element under program element four, economic development, as sub-element 4.6.3, workforce development. An additional $6,903,962.25 was tagged as higher education but went to secondary education, which is part of program element three, investing in people, but is

represented in program element 3.2.1, basic education, and in two separate program sub-elements, 3.2.1.3, lower secondary education, and 3.21.6, upper secondary education. This tagging could be in large part due to the American Schools and Hospitals Abroad Program, within the Bureau for Democracy, Conflict, and Humanitarian Assistance at USAID counting all projects secondary and beyond as higher education, per the interview with Participant 2.

A complete breakdown of disbursed dollars by higher education definition and sub-category is presented in Table 13.

Table 13

Dollar Amount Disbursed for Higher Education Development Assistance by Award Definition Subcategory for 2013-2015, as Determined by Author

Meets Higher Education Definition	2013	2014	2015	Total
No	$12,064,043.23	$8,342,177.47	$9,093,890.74	$29,500,111.44
Basic and Secondary Education	$38,753.28		$475,838.03	$514,591.31
Basic Education	$1,397,306.58	$968,823.30	$651,828.76	$3,017,958.64
Construction/Educational Infrastructure	$181,362.98	$152,552.94	$11,705.60	$345,621.52
Economic Growth	$2,462,172.57	$853,940.77	$688,564.04	$4,004,677.38
Evaluation	$234,000.00			$234,000.00
Gender		$61,000.00		$61,000.00
Health Leadership	$1,100,000.00			$1,100,000.00
Human Resources			$19,534.84	$19,534.84
Research		$50,000.00	$38,000.00	$88,000.00
Secondary Education	$2,201,322.66	$2,327,494.00	$2,375,145.59	$6,903,962.25
Training and Exchanges	$1,223,901.13	$56,324.12		$1,280,225.25
Unable to Determine	$340,269.62	$752,031.18	$826,357.12	$1,918,657.92
USAID Staff Professional Development	$1,020,668.11	$190,166.34	$59,409.75	$1,270,244.20
Workforce Development and/or Vocational Education and Training	$1,864,286.30	$2,635,353.40	$3,733,216.23	$8,232,855.93
Youth Development		$294,491.42	$173,217.43	$467,708.85
Financial Assessment or Evaluation			$41,073.35	$41,073.35
Unable to Determine	$4,254,683.07	$2,344,090.77	$6,937,991.56	$13,536,765.40
Construction/Educational Infrastructure	$18,950.01	$9,202.00	$2,438,016.89	$2,466,168.90
Unable to Determine	$4,235,733.06	$2,334,888.77	$4,491,224.67	$11,061,846.50
Financial Assessment or Evaluation			$8,750.00	$8,750.00
	$90,772,235.70	$123,654,136.01	$102,689,698.70	$317,116,070.41

Table 13 Continued

Meets Higher Education Definition	2013	2014	2015	Total
Yes				
Policy Development and Reform	$5,814,844.82	$4,594,905.01	$3,622,328.55	$14,032,078.38
Institutional Capacity Development	$21,781,604.55	$36,191,764.37	$35,990,617.13	$93,963,986.05
Engaging Higher Education Institutions in Development	$14,893,712.44	$31,967,341.55	$22,035,188.26	$68,896,242.25
Professional Development	$23,271,748.93	$33,362,633.53	$33,190,880.32	$89,825,262.78
Construction/Educational Infrastructure	$24,938,033.31	$15,199,557.82	$7,850,684.44	$47,988,275.57
Unable to Determine	$72,291.65	$2,337,933.73		$2,410,225.38
Total	$107,090,962.00	$134,340,404.25	$118,721,581.00	$360,152,947.25

Disbursements by region and country. When regional disbursement of funds fitting the higher education definition was explored, it was found that overall the highest amount of higher education development assistance was allocated to Afghanistan and Pakistan, with $65,975,422.28 disseminated over the three-year period. This region was followed by the Middle East at $60,589,082.22 and Asia at $50,170,749.35. In a yearly breakdown, Afghanistan and Pakistan constituted the top region for 2013, while the Middle East received the most higher education dollars in 2014 and 2015. Full reporting for all regions for disbursements meeting the higher education definition is presented in Table 14. A table containing total amounts by regions regardless of meeting the definition is available in Appendix F.

Table 14

Total Disbursed Dollar Amount Fitting Higher Education Definition as Determined by Author by Region, All Agencies Combined for 2013-2015

Region	2013	2014	2015	Total
Afghanistan and Pakistan	$23,636,183.15	$22,761,552.29	$19,577,686.84	$65,975,422.28
Africa	$18,733,661.29	$17,340,165.59	$13,471,936.47	$49,545,763.35
Asia	$14,971,053.45	$18,923,613.81	$16,276,082.09	$50,170,749.35
Europe and Eurasia	$1,610,276.68	$5,199,836.60	$8,003,753.71	$14,813,866.99
Latin America and the Caribbean	$11,642,454.68	$10,658,837.22	$7,268,123.12	$29,569,415.02
Middle East	$14,827,055.77	$24,638,465.59	$21,123,560.86	$60,589,082.22
United States		$432,332.83	$44,791.09	$477,123.92
Worldwide	$5,351,550.68	$23,699,332.08	$16,923,764.52	$45,974,647.28
Total	$90,772,235.70	$123,654,136.01	$102,689,698.70	$317,116,070.41

When broken down at country level, 50 countries received development assistance tagged as higher education between 2013 and 2015. Afghanistan received the most with total disbursement of $50,668,604.08, followed by Lebanon ($35,865,940.73), the United States ($34,060,842.17), Indonesia ($25,682,544.58) and projects that cross multiple countries in the Latin American and Caribbean region ($23,090,066.60). The contribution to Afghanistan represents nearly 16% of the total dollars disbursed that fit the higher education definition and is nearly 77% of the total spent in the Afghanistan and Pakistan region. Full reporting for all countries for total disbursements meeting the higher education definition is presented in Table 15. A table containing total amounts by country regardless of meeting the definition is available in Appendix G.

Table 15

Disbursed Dollar Totals by Country Meeting the Higher Education Definition as Determined by Author 2013-2015

Country	2013	2014	2015	Total
Afghanistan	$15,693,796.40	$19,612,147.44	$15,362,660.24	$50,668,604.08
Armenia	$91,694.63	$330,476.00	$88,391.00	$510,561.63
Bulgaria	$318,157.48	$265,580.92	$35,702.18	$619,440.58
Burkina Faso			$1,374,806.00	$1,374,806.00
Burma	$72,291.65	$807,290.81	$646,610.45	$1,526,192.91
China	$117,173.95	$647,562.24	$149,573.45	$914,309.64
China (Taiwan)	$471,386.11	$2,195.98		$473,582.09
Costa Rica	$917,897.88	$504,174.95	$488,802.74	$1,910,875.57
Czech Republic	$109,547.00	$220,979.00	$69,474.00	$400,000.00
Democratic Republic of the Congo			$16,400.31	$16,400.31
Egypt	$2,790,467.13	$6,432,083.46	$6,810,908.20	$16,033,458.79
El Salvador	$1,731.04	$247,525.41	$1,544,690.54	$1,793,946.99
Ethiopia	$431,426.43	$604,644.19	$338,735.38	$1,374,806.00
Georgia		$2,484,100.56	$5,146,763.16	$7,630,863.72

Table 15 Continued

Country	2013	2014	2015	Total
Ghana	$812,883.35	$456,609.78	$250,000.00	$1,519,493.13
Greece	$581,574.41	$318,134.45	$74,709.80	$974,418.66
Guatemala	$256,084.20	$639,940.72	$448,791.71	$1,344,816.63
Haiti	$73,848.93	$38,978.66		$112,827.59
Honduras	$303,580.61	$633,930.17	$190,407.83	$1,127,918.61
India	$583,509.97	$355,000.00	$61,490.03	$1,000,000.00
Indonesia	$8,672,212.43	$9,620,658.32	$7,389,673.83	$25,682,544.58
Israel	$241,316.64	$175,374.00	$1,061,082.09	$1,477,772.73
Kenya	$880,925.05	$903,154.69	$211,112.62	$1,995,192.36
Kosovo	$506,808.59	$1,576,798.97	$2,588,713.57	$4,672,321.13
Kyrgyzstan	$1,604,600.84	$782,996.02	$1,250,000.00	$3,637,596.86
Lebanon	$10,125,577.70	$15,232,472.33	$10,507,890.70	$35,865,940.73
Liberia	$830,790.81	$3,933,790.84	$2,704,755.03	$7,469,336.68
Malawi	$544,632.81	$413,049.95		$957,682.76
Mexico	$246,432.03	$17,334.02	$4,510.32	$268,276.37
Multiple Countries - Africa	$7,867,017.35	$1,700,312.58	$3,575,922.24	$13,143,252.17
Multiple - Asia	$18,173.21	$175,545.51	$440,489.00	$634,207.72
Multiple Latin America & Caribbean	$9,922,193.33	$8,576,953.29	$4,590,919.98	$23,090,066.60
Namibia	$1,718,742.41	$533,078.97	$168,892.36	$2,420,713.74
Nigeria	$70,004.00			$70,004.00
Pakistan	$7,942,386.75	$3,149,404.85	$4,215,026.60	$15,306,818.20
Philippines	$315,492.92	$2,688,690.30	$3,791,822.46	$6,796,005.68
Senegal	$599,848.39	$204,499.14	$236,388.90	$1,040,736.43
South Africa	$394,202.09	$312,499.48	$4,462.60	$711,164.17
South Sudan	$1,197,583.65	$2,378,702.44	$1,233,729.91	$4,810,016.00
Sudan	$744,800.63	$106,401.66		$851,202.29
Tanzania			$150,617.69	$150,617.69
Thailand		$948,212.22	$91,298.00	$1,039,510.22
Timor-Leste	$476,471.44	$1,059,210.58	$844,312.25	$2,379,994.27
Turkmenistan	$257,243.09	$102,434.01		$359,677.10
Uganda	$2,710,808.32	$5,793,421.87	$3,206,113.43	$11,710,343.62
Ukraine	$2,494.57	$3,766.70		$6,261.27
United States	$4,822,578.43	$16,777,847.81	$12,460,415.93	$34,060,842.17
Vietnam	$2,233,180.50	$1,733,817.82	$1,610,812.62	$5,577,810.94
West Bank & Gaza	$1,669,694.30	$2,798,535.80	$2,743,679.87	$7,211,909.97
Worldwide	$528,972.25	$7,353,817.10	$4,508,139.68	$12,390,929.03
Total	$90,772,235.70	$123,654,136.01	$102,689,698.70	$317,116,070.41

In Afghanistan, $31,549,054.57 was sub-categorized as institutional capacity building and $289,230.00 as professional development. An additional $18,830,319.51 was sub-categorized as construction/educational infrastructure. In Indonesia, the highest dollar amount ($10,968,277.44) was sub-categorized as policy development and reform, followed by institutional capacity development ($6,791,331.06), professional development ($5,115,925.66), and engaging higher education institutions in development ($2,807,010.42).

In the United States, these totals largely reflect the establishment of the Higher Education Solutions Network (HESN). Created in 2012, HESN is a network of eight centers at seven universities (six in the United States and one at Makerere University in Uganda) working to "evaluate and strengthen real-world innovations in development" (USAID, 2016, para.1)

A breakdown of sub-category spending for the five countries receiving the highest dollar amount of higher education assistance is presented in Table 16. A table containing country level details regardless of meeting the higher education definition can be found in Appendix H. A table containing sub-category information for every country receiving higher education disbursements meeting the definition can be found in Appendix I.

Table 16

Breakdown of Higher Education Development Assistance Spending by Higher Education Sub-Category as Determined by Author in the Five Countries Receiving Largest Dollar Amount of Assistance from 2013-2015

Country	2013	2014	2015	Total
Afghanistan Total	$15,693,796.40	$19,612,147.44	$15,362,660.24	$50,668,604.08
Institutional Capacity Development	$1,543,432.42	$14,772,561.44	$15,233,060.71	$31,549,054.57
Professional Development		$163,827.47	$125,402.53	$289,230.00
Construction/Educational Infrastructure	$14,150,363.98	$4,675,758.53	$4,197.00	$18,830,319.51
Lebanon Total	$10,125,577.70	$15,232,472.33	$10,507,890.70	$35,865,940.73
Professional Development	$6,917,773.39	$12,311,169.12	$8,881,481.15	$28,110,423.66
Construction/Educational Infrastructure	$3,207,804.31	$2,921,303.21	$1,626,409.55	$7,755,517.07
United States Total	$4,822,578.43	$16,777,847.81	$12,460,415.93	$34,060,842.17
Institutional Capacity Development		$475,000.00	$280,000.00	$755,000.00
Engaging Higher Education Institutions in Development	$4,822,578.43	$15,633,667.71	$11,720,700.47	$32,176,946.61
Professional Development		$669,180.10	$459,715.46	$1,128,895.56
Indonesia Total	$8,672,212.43	$9,620,658.32	$7,389,673.83	$25,682,544.58
Policy Development and Reform	$3,961,290.41	$4,053,022.04	$2,953,964.99	$10,968,277.44
Institutional Capacity Development	$3,227,873.42	$2,362,649.45	$1,200,808.19	$6,791,331.06
Engaging Higher Education Institutions in Development	$998,023.40	$1,473,162.79	$335,824.23	$2,807,010.42
Professional Development	$485,025.20	$1,731,824.04	$2,899,076.42	$5,115,925.66
Multiple Countries - Latin America and Caribbean Total	$9,922,193.33	$8,576,953.29	$4,590,919.98	$23,090,066.60
Engaging Higher Education Institutions in Development	$277,448.12	$1,359,064.49	$127,220.93	$1,763,733.54
Professional Development	$9,644,745.21	$7,217,888.80	$4,463,699.05	$21,326,333.06

Disbursements by implementer type. Within the seven implementer categories, educational institutions received the highest dollar amount of funds tagged as higher education assistance with $169,947,609.62, followed by NGOs at $118,347,398.78. Disbursements by each implementer type are presented in Table 17.

Table 17

U.S. Development Assistance Higher Education Disbursements by Implementer Type 2013-2015 based on Data from the Foreign Assistance Dashboard as Determined by Author

Implementer Type	2013	2014	2015	Total
Bank/lending agency		$292.02		$292.02
Educational institutions	$56,503,901.52	$68,139,209.00	$45,304,499.10	$169,947,609.62
For-profit	$4,367,728.39	$4,213,584.23	$3,198,756.08	$11,780,068.70
Local government	$1,818,742.41	$3,231,579.53	$9,328,115.52	$14,378,437.46
NGO/non-profit	$28,081,863.38	$45,494,690.23	$44,770,845.17	$118,347,398.78
U.S. government agency		$236,847.27	$87,482.83	$324,330.10
Unable to determine		$2,337,933.73		$2,337,933.73
Total	$90,772,235.70	$123,654,136.01	$102,689,698.70	$317,116,070.41

Research Objective Two

Objective two of the study was to document the role that U.S. universities play in U.S. higher education development assistance. This objective was met through analysis of the Foreign Assistance Dashboard, as well as through semi-structured interviews with agency employees in higher education development assistance.

Role of U.S. Universities in Delivering Higher Education Development Assistance

The implementer category of educational institution had three sub-categories: non-U.S. university, U.S. university-private and U.S. university-public. Of the $169,947,609.62 disbursed to educational institutions, $85,445,610.52 went to U.S. universities, just slightly above the $84,501,999.10 disbursed to non-U.S. institutions. Totals for each educational institution type are presented in Table 18.

Table 18

Higher Education Development Disbursements by Educational Institution Implementer Type as Determined by Author 2013-2015

University Type	2013	2014	2015	Total
Non-U.S. university	$26,617,281.28	$33,162,499.62	$25,066,458.20	$84,846,239.10
U.S. university-private	$14,313,898.43	$9,881,795.26	$5,432,331.73	$29,628,025.42
U.S. university-public	$15,572,721.81	$25,094,914.12	$15,066,344.17	$55,733,980.10
Total	$56,734,010.86	$68,188,404.79	$46,065,133.10	$170,987,548.75

U.S. universities or their foundations received 60 of the 277 awards that fit the higher education definition for the study, nearly 22% of all awards. Non-U.S.

universities received 89 awards or 32% of all awards. This distribution is compared to NGOs/non-profits who received 37% of awards fitting the higher education definition. However, while NGOs received a higher number of awards, the dollar amount awarded to all university-level educational institutions is greater.

Of U.S. universities implementing higher education development assistance from 2013-2015, 28 were public universities, and 11 were private. A list of schools in each category is presented in Table 19.

Table 19

U.S. Universities Implementing Higher Education Assistance from the Foreign Assistance Dashboard 2013-2015 as Determined by the Author

Public U.S. Universities	Private U.S. Universities
Alabama Agricultural Mechanical University	Boston University
Arizona State University	Columbia University
College of William & Mary	Georgetown University
Georgia State University	Gonzaga University
Indiana University	Harvard School of Public Health Center for Continuing Ed
Kansas State University	Harvard University
Massachusetts Institute of Technology	Johns Hopkins University
Michigan State University	President and Fellows of Harvard College
Ohio State University	Trustees of Boston University
Oregon State University	Tulane University-International Foundation for Education and Self-Help
Regents of the University of California	University of Chicago
Rutgers University	
San José State University Research Foundation	
Texas A&M University - Texas Agricultural Experiment	
University of Arizona	
University of California	
University of California, Berkeley	
University of Colorado at Boulder	

Table 19 Continued

Public U.S. Universities	Private U.S. Universities
University of Massachusetts	
University of Notre Dame Du Lac	
University of Santa Cruz	
University of Southern California	
University of Tennessee	
University of Texas at El Paso	
University of Utah	
University of Washington	
Virginia Tech	
Washington State University	

A listing of all award titles won by U.S. universities is presented in Table 20. It is important to note that this listing only represents awards directly received by U.S. universities to deliver development assistance tagged as higher education. Many of these institutions also deliver non-higher education development assistance through sectors such as health, agriculture, and democracy. For non-U.S. institutions, nearly all awards are American Schools and Hospitals Abroad funds or scholarship funding of some sort, with some exceptions. A full listing of award titles by non-U.S. universities can be found in Appendix J.

Table 20

Award to Each U.S. University, Public and Private, Who Implemented Higher Education Development Assistance from 2013-2015 as Determined by the Author

Name of University
Alabama Agricultural Mechanical University
Textbooks and Learning Materials Program
Arizona State University
Higher Engineering Education Alliance Program (HEEAP)
Partner Center for Advanced Studies in Energy (PCASE)
Research & Innovation Fellowship Partnerships
Vocational University Leadership and Innovation Institute
Boston University
African Presidential Archives and Research Center (APARC) at Boston University
College of William & Mary
Higher Education Solutions Network – AidData
Columbia University
Adaptation to Climate Risk In Indonesia (Acri)
Center on Child Protection at the University of Indonesia
HED - Strengthening Indonesia's Climate Change Mitigation
School Action for Innovation in Science
Georgetown University
Scholarships for Education and Economic Development (SEED)
Unable to Determine
Georgia State University
Doctoral Program at CSB
HED - Dual Degree Master's Program in Education
Gonzaga University
ASHA - Catholic University of Sudan
Harvard School of Public Health Center for Continuing Ed
Higher Education Network Ring Initiative (HENRI) Program
Harvard University
Lower Mekong Public Policy Initiative
Strengthening Health Systems in Indonesia (SHSI)
Indiana University
Advancement and Development through Entrepreneurship Program and Training (ADEPT)
Johns Hopkins University
ASHA - John Hopkins Nanjing Center
ASHA - Johns Hopkins
ASHA - Wuhan Nursing School

Table 20 Continued

Name of University
Making a Difference for Myanmar
Kansas State University
HED - Strengthening Business Management Education and Technology Competence
Massachusetts Institute of Technology
Higher Education Solutions Network - D-Lab MIT
Michigan State University
Higher Education Solutions Network - Global Center for Food Systems Innovation
Ohio State University
Program to Extend Scholarships and Training to Achieve Sustainable Impacts II (PRESTASI)
Oregon State University
Smart coalition to improve high-value crops in Indonesia
President and Fellows of Harvard College
Strengthening Health Systems in Indonesia (SHSI)
Regents of the University of California
HED - Augmenting Scientific Research and Education through Biodiversity Research
Rutgers University
Promoting Sustainable Forest Management and Biodiversity
Research & Innovation Fellowship Partnerships
San José State University Research Foundation
Social Work Education Enhancement Program (SWEEP)
Texas A&M University - Texas Agricultural Experiment
HED - John Garang Memorial University of Science and Technology
HED - Rebuilding Higher Education in Agriculture John Garang Memorial University
HED - University Partnership Program
Higher Education Solutions Network - ConDev
Trustees of Boston University
African Presidential Archives and Research Center (APARC) at Boston University
Tulane University-International Foundation for Education and Self-Help
American Educators for Africa (AEFA) Program
University of Arizona
Developing A Sustainable Seafood Industry For Burma
Vocational University Leadership and Innovation Institute
University of California
Partner Center for Advanced Studies in Food Security and Agriculture
Research & Innovation Fellowship Partnerships
University of California, Berkeley
Higher Education Solutions Network - Development Impact Lab

Table 20 Continued

Name of University
Research & Innovation Fellowship Partnerships
University of Chicago
Research & Innovation Fellowship Partnerships
University of Colorado at Boulder
US-Indonesia Influenza Collaborative Study
University of Massachusetts
Higher Education Project in Afghanistan
University of Notre Dame Du Lac
Research & Innovation Fellowship Partnerships
University of Santa Cruz
UCSC/Indonesia Marine Biotechnology Collaboration
University of Southern California
U.S.-Indonesian Geothermal Education Capacity Building
University of Tennessee
HED - Digital Library Installation
University of Texas at El Paso
HED - Enhancing Behavior Change through Conservation Programs
University of Utah
Partner Center for Advanced Studies in Water At University of Utah
University of Washington
Advancing Democracy and Producing Transformations in Information & Technology for Burma (ADAPT-IT)
Virginia Tech
InnovATE
Washington State University
Smart Strategic Coalition for Sustainable Agricultural and Economic Development in Indonesia

Benefits of Higher Education Development Assistance

Study participants agreed that higher education development assistance has a number of benefits, not only to the developing country receiving the assistance, but also to the United States. As stated by Participant 4, "I think the longer-term benefits really are the humans and institutions that can be built and bridges that can be built and essentially support both diplomacy and development goals." Common themes in terms of the benefits of higher education development assistance are explored below.

Diplomacy and greater understanding of the United States. The most often mentioned benefit to the United States was higher education as a form of diplomacy (P3, P4, P6, P8, P9, P10, P11), in particular in the form of providing understanding of the United States, by providing scholarships for students to study in the United States. "We have relied for years on our universities as a source of improving our diplomatic relations, of improving our image abroad. Maintaining relationships between the U.S. and other countries that last for years and years, for decades," said Participant 9 in regard to the benefits of higher education to the United States. Participant 8 explained, "I think you don't want people to be anti-American, you want to impart American values in a way that is not superficial; I think you want to impart good things that an American education offers about the things I was talking about [earlier like] critical thinking, open-mindedness, and so on." Participant 3 also spoke of higher education as a way to show "people that we were supporting them, rather than any kind of government or non-government or any actors."

Drivers of economic impact and workforce development. Six participants identified universities as engines of economic growth and/or innovation. As stated by Participant 3, "There's a strong economic justification for a well-educated world population." Similarly, Participant 5 remarked, "First and foremost, well-functioning higher education institutions are necessary to promote long-term economic development and competitiveness."

The role of higher education in creating a well-educated, responsive workforce was also highlighted (P6, P8, P11). "Being able to have an educated population and educated workforce is an obvious benefit" for the host country, said Participant 11. According to Participant 6, "There's a lot that people can do with a high school degree, but they can really change their communities with the perspective and the knowledge of a higher education degree."

Developing human and institutional capacity. Many participants (P3, P5, P6, P7, P8, P9), discussed the benefits of higher education investments in terms of developing human capital through the education and building of future leaders, not only in government, but also in education, the private sector, and elsewhere in the host country. Participant 9 stated:

> Well, if you view development assistance as education, training of young people so that they can make an impact in their country that's a huge benefit, if you avoid the brain drain. So their technical knowledge and skills being used and applied in the country is incredibly important. These folks go on to become leaders in the public sector.

It was also discussed that there were benefits of in-country scholarship programs to local institutions to avoid immigration and brain drain (P8, P9), the ability to stretch your

investment farther (P3), and to build host country capacity (P3, P5, P6, P8). In relation to higher education projects that partner U.S. universities with those in developing countries to build local institutional capacity, Participant 5 said, "it's a really effective mechanism to strengthen local capacity."

Provision of data for decision making. Three participants (P1, P4, P6) presented higher education's ability to provide policy and decision makers with data and information as another benefit of higher education investments. Participant 1 explained, "we also realize that having really good data does not necessarily mean that politicians are going to make decisions based on that data, but if they don't have that data, they can't … so we think that this investment in developing [in-]country science is [a] really important sort of driver of better policy making, better decision making." When asked what opportunities are available for higher education in development, Participant 4 said there were opportunities to "produce [a] stronger evidence base, validate models."

Participant 6 gave a specific example of how a USAID-funded PEER researcher was called upon by the environmental committee of the Peruvian Congress to present research he had been doing on the melting of glaciers and the impacts that the melting would have on coastal cities.

Benefits of Working with U.S. Universities

Participants offered valuable insights into their thoughts on the benefits of working with U.S. universities to deliver not only higher education development assistance, but also assistance that may fall into technical assistance categories (i.e., health, agriculture, democracy). Only mentioned specifically by one participant (P8), but

touched upon by others (particularly P6), was the sense that the participant felt that because development is not universities' "business," they are not as driven by money to engage in development activities, as is often the case for NGOs and for-profit firms. Additional benefits of working with U.S. universities as implementers are explored below.

Inherent knowledge of higher education. Multiple participants mentioned the inherent knowledge of higher education challenges and opportunities that U.S. universities would have over an NGO or other implementer as a benefit to working with a U.S. university on higher education development. When asked about the benefit of working with a university over an NGO or a for-profit company on a higher education projects, Participant 8 said, specifically related to an award that partners a public U.S. university with three local institutions to deliver dual degrees, "I think compared to an NGO, I mean, who knows how to deliver U.S. higher ed degrees, a university right?"

The similarities of issues faced by higher education institutions, both in developing countries and in the United States, was also mentioned as a benefit: "What I see is that you have like colleges and like universities working on similar problems and issues in the developing country as well as here in the U.S." (P7). Some of the challenges experienced from both perspectives include admissions, scholarships, engaging the private sector, curriculum development to meet labor demands, and finding revenue opportunities as public funding support of higher education shrinks (P5, P7).

In regard to these commonalities and knowledge of higher education, Participant 9 said of U.S. universities, “In many cases, they are good representatives of their developing country counterparts.”

Continued relationships. Three study participants (P5, P6, P13) identified as a benefit of working with U.S. universities those institutions’ reputation for continuing relationships long after initial funding ends. With more than 20 years of experience in higher education development, Participant 5 felt that a linkage between universities “forms both institutional and personal linkages that often outlive the time of the contract or agreement.” Both Participant 6 and Participant 13 discussed the differences between U.S. universities and NGOs in terms of their long-term interest. “Universities tend to play the long game much better because they’re not concerned about their own viability past this grant,” said Participant 6, and Participant 13 shared:

> It creates networks and opportunities for dialogue that more often could exist after a project ends because with an implementer, they’re usually pulling back and assuming that they’re done. But universities at least, they’re always going to be interested in coming back.

Internationalization of their students, faculty, staff, and others. Three participants (P5, P8 and P13) felt that a benefit of working with U.S. universities is the value these institutions place on the internationalization of their students, faculty, and staff, and, tangentially, to the communities in which those universities are located. Participant 5 stated, in regard to a project with [State] University, “they really value the internationalization of their faculty, the experience their faculty get from working on various development projects,” as being important for the success of the project.

Participant 13 said, “I encourage working with universities often because of the graduate students. It’s a fantastic opportunity for graduate students.” In addition, Participant 13 remarked, “it provides an opportunity to U.S. students who are enrolled in schools a view of what’s happening outside of their community or outside the university itself,” as well as for the “community in which the university is. If you have people studying at the University of [State], how often do people from [country redacted for confidentiality] walk down the streets of … [State]…? So it gives community members an opportunity for interaction like that as well.”

Another benefit of U.S. universities as implementers is that it can provide value to congressional representatives in their home districts, particularly for scholarship programs that bring students from developing countries to the United States. Participant 6 explained,

> There [are] always at least three members of Congress to go to and say, “Look at what we’re doing in your district. You should keep funding us.” That’s another benefit to funding through U.S. universities, because Congress doesn’t care about the for-profit companies that are all based in DC. That’s the domestic benefit.

Research and knowledge production. When asked about the role of U.S. universities in delivering development assistance, Participant 11 shared,

> I think they [U.S. universities] have something to offer in non-higher education assistance, in part because so many of the projects that we’re talking about does take a certain amount of knowledge development and then knowledge transfer. I mean if we absolutely knew the solution, you know, fine, you can go in and implement the solution. But it often does require a certain amount of research and understanding, and I think those are tools that higher education institutions bring.

These thoughts were echoed by other participants who highlighted higher education’s research, analysis, and knowledge production abilities as a benefit.

"You know, universities are great, in my experience, when you want to have more analytical support in terms of really doing rigorous monitoring and evaluation, especially if you're moving into the space of really trying to understand data," said Participant 10. While research and analysis is a benefit of working universities, Participant 9 shared, "I think where the agency struggles is to identify the role of universities. They implement projects. They provide research and analysis. They really speak to a lot of the areas that the agency could do a better job in."

Challenges to Higher Education Development Assistance

Study participants were asked two questions related to challenges: "What do you think the key challenges are to higher education development?" and "What are the challenges of working with U.S. universities as implementers of development assistance?" Both questions elicited responses around common themes.

Participants identified a number of key challenges to higher education development in countries that receive foreign assistance. Most were challenges of the developing country, but some were challenges shared by both the country receiving development assistance and the United States.

Lack of data. The most common challenge identified (P3, P4, P7, P9, P10, P11) was the difficulty in quantifying results, showing long-term impacts on a short-term time frame, and the overall lack of data for higher education. "We find it more difficult in the education sector to quantify our results than say health," stated Participant 3. Participant 4 stated that, as an individual, they "call bullshit on the timelines associated with higher education," and that, like innovation, education is a "long-term investment that you don't

see the payoff for immediately"—innovation is "just sexier." Participant 8 supported these statements: "Generally in the education space, and especially in [higher] education, it's hard to quantify the benefits and the impacts outside of increased wages, improvements in attendance, and so on."

Higher education development assistance often has a capacity-building component that involves changing or improving the performance of an institution. This outcome can be difficult to measure, contributing to the difficulty in quantifying results. As Participant 7 said, "One of the other things too that might be a challenge for our U.S. universities and those colleges and universities abroad is how do you measure performance of an institution?" Participant 9 also identified this challenge: "We still lack a lot of strong data and evidence that substantiates what's the best model for improving higher ed systems."

Investment for the elite and barriers to access. Mentioned with similar frequency were the challenges of higher education institutions' being viewed as ivory towers and an investment for the elite, as well as challenges concerning access and equity due to these and other perceptions and factors. "I think it's a tough sell to investors, particularly in the government side, because there's this whole perception that only rich people go to college in a community," said Participant 8.

Participant 3 mentioned the Bayh-Dole Act as a mechanism that began to move universities away from the seclusion of academia and elitism, "from being the ivory tower, disconnected from reality … into the research and development, economic growth engines that they are today." However, Participant 4 felt that at times, universities, while

no longer thinking of themselves as towers, still think of themselves as "as a city on a hill."

"Higher education is still an elite sector, if you will, which is understandable, but the equity of access to higher education is important for continuing diversity and quality," said Participant 5. They continued, "Countries that are better able to harness their best students or to spread, [or] even increase access to education to a larger percent of [the] population, assuming this education is worth something, right, they eventually will be better positioned to grow." While higher education in many developing countries is free or relatively low-cost in terms of tuition when compared to the United States, if a student is able to overcome barriers to access, cost is often still a factor, as Participant 10 said: "There really is no way to take out loans or access grants in most of the countries we work in," which creates access barriers for students who need to live away from their families to complete their education.

An additional barrier to access is the national testing systems that are employed by some developing countries. Participant 3 shared, "You have to get a really high grade to get into certain universities. And your grade even directs, to some extent, what you are allowed to study. So it is so rigid. It is so centralized." Additionally, Participant 3 reported, "You also have, in some places, sometimes tribal issues. You know, depending on what your ethnic background is, you may be given slots at certain universities. So it seems like it should ultimately be so fair because everyone takes the same test, but really it's not." Participant 3 also shared that wealthier students are often able to receive "extraordinary amounts of tutoring" to help them pass the tests. Participant 9 also

commented that there is “corruption of testing systems.” Participant 5 also mentioned corruption as a challenge to higher education, particularly in governance or in “grant corruption schemes,” but also in terms of what she deemed as “petty corruption,” such as paying for grades or exam marks and requiring students to pay for books. The petty corruption of book payment schemes was also mentioned by Participant 10, in terms of faculty finding ways to generate extra income due to low wages by requiring students, in order to receive their grade, to show a receipt that they purchased their book.

Response to the market. A challenge that was identified by Participants 4, 7, and 9 is the ability of higher education, both in developing countries and the United States, to respond to private sector labor market needs and offer relevant curricula for a well-trained workforce. “There’s a huge mismatch, even in this country and developing countries as well, between the type of education that’s being provided and the connection with the labor market,” said Participant 9. Participant 7 asked, “How do you connect the curriculum, the relevant curriculum, to the needs of the private sector or the needs of business or industry or government? ... It’s important that curriculum is relevant.”

Additional challenges. Participants 7 and 8 both mentioned that their respective agencies’ five-year time period for awards is a limitation for higher education. In the words of Participant 7, “It takes a while to get these relationships and partnerships going.”

Participant 7 also indicated that changes in administration can affect the direction of the agency and must be taken into account:

> But then if you put another overlay of the political environment like we're coming up with elections and we have leadership that's going to shift where we have a focus…so over time you will see if you put a political overlay on top of the development or diplomacy overlay you're, going to see some shifts. (P7)

Participant 6 concurred, "That's our own limitation actually, that doesn't get talked about much, the administration change." Participant 9 felt that higher education might be more of a priority within the agency if the President gave a speech, "just a speech that said, you know, higher education is important in a developing country context," and then much more would likely be done to support it. Differences in the levels of support between basic and higher education investments and a lack of a champion on the Hill were identified as reasons for the unbalanced investments. "I want to know where the champions are on the Hill for higher education," said Participant 9, after remarking that basic education has support on the Hill.

While continued relationships after the project ends were an oft-cited benefit of working with U.S. universities in development, Participant 8 also noted as a challenge the long-term sustainability of large-scale higher education projects after initial funding ends. Participant 8 cited the experience of the donor community, including USAID and the World Bank, who "have provided money for higher education programs, and then once the money dries up, there's no sustainability" in terms of maintaining quality and/or accreditation.

Challenges of Working with U.S. Universities as Implementers

In addition to challenges to higher education development assistance, participants were asked to identify challenges of working with U.S. universities. Participants discussed how these challenges are different from the challenges of working with NGOs

or for-profit development organizations. Common themes emerged and are discussed below.

Universities are expensive. The cost of universities negotiated indirect cost rate agreements (NICRA) was an oft cited challenge of working with U.S. universities. When asked about the challenges of working with U.S. universities, Participant 3 said, "Bluntly? They're expensive. The NICRA is double on average what [it is for] an NGO or even a for-profit." Participant 10 echoed this comment with, "It's expensive. Their overhead is a lot higher," but also reported, "I have had experiences with universities that were able to really reduce that overhead."

Participants 9 and 11 both said they had heard that the overhead for universities in usually more expensive. However, Participant 11 said, "Sometimes I don't know if that's just a lack of understanding what that overhead is for and how NGOs might have similar costs, but you see it or experience it in a different way than what a university would do."

Lack of understanding of agency operations. "The first thing we hear is that working with universities is a pain, they take forever, they don't get our systems, it's not worth the effort, we'd rather work with partners we know," said Participant 6. Other participants also cited the lack of understanding of agency policies and regulations as a challenge to working with universities. Participant 13 provided a scenario in which a faculty member might oppose questioning from the agency contracting officer,

> but we have hundreds of pages of regulations requiring us to ask this. So that's sometimes more difficult than when you work with a traditional partner who has managed many USAID projects. They know or they expect these types of requests and they just follow through with them. (P13)

Participant 13 also pointed to faculty members' having "autonomy at the university" as a reason why they become frustrated with agency processes and procedures.

Getting universities to understand the need to report USAID-sponsored scholarship student data as required by Congress was a challenge identified by Participant 7: "We have to have a report on their [students studying in the United States] performance and track them throughout their period here in the United States as they enter and as they go back, and then we put it in a consolidated agency report that goes to Congress. Some of our universities don't like to enter that data." However, Participant 7 also acknowledged that at times there is duplication of data entry processes, and the agency "can do a better job in how we do it [collect data]." Participant 7 indicated that they are in the process of streamlining data collection on students.

Multiple bureaucracies. Participants 5 and 13, both with USAID, pointed out that a challenge to working with U.S. universities is that the two bureaucracies must align their different processes and procedures. "Well, universities are not easy to work [with] because they are a bureaucracy, a different type of bureaucracy, but still a bureaucracy. So you have two bureaucracies working together," said Participant 5.

"I can see sometimes why it's better when you have an NGO working with a bureaucracy, because the NGO or private sector, like a corporation, they operate in different ways," said Participant 13. "Where USAID is stymied by its bureaucracy, a corporation that has a foundation component or philanthropy component can get things done more quickly and vice versa."

While not a challenge, Participant 9 offered an interesting perspective as to why NGOs and for-profits are favorited by the agency: "The types of activities that they want to do are written for those institutions." Participant 9 felt that "the agency needs to do a better job of crafting programs where universities and their potential and their technical expertise and capabilities can be further exploited."

Conflicting priorities. The primary focus or mandate of universities, unlike NGOs and development organizations, is not to deliver or facilitate development assistance. Universities, especially public universities, have local stakeholders to whom they are accountable. As Participant 8 stated, "It's a public university, and so they are constrained by the demands of their own legislature and their own mandate to deliver high-quality education [in their state]. Which you know takes precedent over delivering high-quality education in [host country], as much as one would like to believe to the contrary it is a state university and they have to deliver for the taxpayers in [state]."

Participant 7 highlighted, as a way to counter this challenge, the importance of universities' having a mission that aligns with development activities. For universities that have been successful in engaging with the agency,

> they understand that with their policies and with their mission statements they have something that makes a statement and says, "We are engaged in international development. We have open doors to foreign students and research that works for development problems around the world." (P7)

Participant 7 continued, "If you have a president or vice chancellor that provides that rhetoric, then the deans of the colleges and universities can follow that and engage their students and professors in international development."

Additional challenges. Incentive structures at U.S. universities, in particular those for the faculty tenure and promotion process, were identified by three participants (P4, P7, and P8) as an additional challenge to engaging with universities. Related to the challenge of mission alignment, faculty members, in a publish-or-perish environment, need to know that their international work will be recognized.

The challenge of working within the academic calendar was identified by Participants 6 and 11. University faculty, unlike staff of an NGO or for-profit, generally do not have singular responsibility for development projects. They often have teaching, research, and/or service components to their work and therefore may not be able to quickly switch focus in times of need, as pointed out by Participant 8: "You can't say why don't you [just] dedicate [a] person's time at home campus to support this during this time period? Those individuals are all pulled in multiple directions."

Participant 6 was the only participant who identified universities' taking too long as a challenge to their engagement. Participant 4 felt that how university faculty view funding was a challenge: "They look at grant money as the end all, be all, when really if you want your research to have impact, if you want your innovation to have impact, you need other people to co-invest in that work." Participant 10 felt that universities "just don't have the bandwidth, to my knowledge, most universities, to really implement projects in countries overseas, which is where, you know, 98% of our programming takes place."

Summary

This study used a mixed-methods approach to collecting data. Data on U.S. development assistance to higher education was downloaded from the Foreign Assistance Dashboard and supplemented by other sources and interviews. To assist in achieving the second objective of the study, interviews were conducted with employees of agencies responsible for U.S. development assistance.

Less than one percent of the foreign assistance budget is spent on higher education development assistance. Three agencies, the United States Agency for International Development (USAID), Millennium Challenge Corporation (MCC) and Inter-American Foundation (IAF) have development assistance tagged as higher education. Of the 400 unique awards in the Foreign Assistance Dashboard tagged as higher education from 2013-2015, only 277 were determined to fit the higher education definition. More awards (89) were implemented by NGOs than any other implementer type; however, U.S. universities received a higher dollar total than any other implementer type. Thirty-nine U.S. institutions, 28 public and 11 private universities, were determined to be lead implementers of awards defined as higher education.

Study participants identified many benefits and challenges to higher education development assistance. Benefits included diplomacy and a greater understanding of the United States, higher education as a driver of economic impact and workforce development, development of both human and institutional capacity, and provision of data for decision makers. Challenges to higher education included the difficulty of quantifying results and good data for higher education impacts, higher education being

viewed as an investment for the elite, barriers to access to higher education for student populations, and responsiveness to the public sector in terms of labor market needs and curriculum reform.

A number of benefits and challenges in terms of working directly with U.S. universities as implementers of higher education development assistance were also identified. Benefits included universities' inherent knowledge of higher education systems; similarities of challenges shared by host-country and U.S. universities; a history of continued relationships beyond the life of the award; a prioritization of the internationalization of their students, faculty, and staff; and their ability to produce research and knowledge. Challenges identified included high overhead costs of working with U.S. universities; a lack of understanding of how the agency (USAID) operates; dealing with multiple bureaucracies; conflicts that may arise from universities being accountable to local (state) stakeholders; incentive structures, including promotion and tenure; and challenges with working around the academic calendar.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Purpose and Objectives

The purpose of this study was to explore U.S. government investments through its foreign assistance to higher education from 2013-2015 in order to inform policy and identify the relationship between these investments and the U.S. higher education community. The study addressed two objectives: (1) to compile data from existing data sources in order to categorize and describe selected characteristics of U.S. foreign assistance to higher education, and (2) to document the role that U.S. universities play in the delivery of U.S. higher education development assistance. The following questions were developed to guide the study.

- How much of the foreign assistance budget is spent on assistance to higher education in development?
- How is that money spent (i.e., what types of projects per the sub element program categories)?
- What are the benefits and challenges of higher education development assistance?
- How are U.S. universities engaged in higher education development activities?
- What are the benefits and challenges of working with U.S. universities to deliver higher education development assistance?

Interpretation of the Study

It is important to recognize that this study took a transformative, advocacy lens, as the intent for the results of the study are advocacy efforts related to increasing investments in higher education development assistance by encouraging more balanced investment across all education levels (Fraenkel & Wallen, 2009; Sweetman, Badiee, & Cresswell, 2010). The theoretical framework for the study, human capital theory states "that individuals and society derive economic benefits from investments in people" (Sweetland, 1996, p. 341) and Schultz (1961) specifically identified education across all levels (elementary, secondary, and higher) as areas that "improve human capabilities" (p. 8-9). This study utilized the Department of State's (2010) Standardized Program Definition of higher education as the guiding definition for the study. For the purpose of this research, higher education included all training and education received from a university, college, community college, or teacher-training college or institute. It excluded technical and vocational training.

Readers should be aware that only awards that were tagged as higher education in the Foreign Assistance Dashboard and that were determined by the researcher to fit the higher education standardized program definition were included in the findings of this study. Awards which may build higher education capacity, but are tagged under other areas of the standardized program definition were excluded from this study. Three examples of excluded projects included the Innovative Agriculture Research Initiative (iAGRI), the Feed the Future Innovation Labs and two of the Higher Education Solutions Network (HESN) labs.

The Innovative Agriculture Research Initiative, a project which aims to "strengthen the capacity of the Sokoine University of Agriculture (SUA) and the Ministry of Agriculture, Food Security and Cooperatives (MAFC) to contribute to the development of effective solutions to address food insecurity in Tanzania" (iAGRI, 2016, para. 4). The researcher has first-hand knowledge of this project, working in Tanzania as part of the team for one year. While iAGRI very clearly is working to building the human and institutional capacity of Sokoine University of Agriculture and would appear to fit the higher education definition, iAGRI is tagged under the "Agriculture" program area at USAID, and is therefore excluded from this study.

The Feed the Future Innovation Labs, formerly known as the Collaborative Research Support Program (CRSP), could be viewed as fitting the higher education definition under the sub-category of engaging higher education institutions in development. However, the Innovation Labs, as is the case for iAGRI, are tagged at the highest level as agriculture. For the Higher Education Solutions Network, two of the eight labs are excluded from this study. The Social Entrepreneurship Accelerator and Innovations in Healthcare labs at Duke University are funded through the Global Health Bureau at USAID, and are therefore tagged as health at the top level.

Summary of Procedures

This study used a mixed-methods approach for data collection. Data on U.S. development assistance to higher education was downloaded in November 2015 from the Foreign Assistance Dashboard. Supplemental data was obtained from the CBJ, USAID Foreign Aid Explorer, the USAID Development Experience Clearinghouse, as

well as program documents and evaluation. Data for projects prior to 2013 were eliminated from the dataset, along with columns that were not pertinent to the objectives of this study. This resulted in the identification of four agencies—USAID, MCC, IAF, and DOD—as having money tagged as higher education. An additional agency, the Department of Interior, was originally identified as having higher education dollars. Ultimately the DOD and the Department of the Interior were eliminated from the study as their development assistance to higher education is not included in the foreign assistance budget.

Using a variety of resources, the researcher then began to fill in the gaps in the data from the Foreign Assistance Dashboard, including project name, descriptions, country of operation, and bureau of operation. With this information, the researcher then coded the projects to determine if they fit the foreign assistance standardized program definition for higher education. To ensure validity, the researcher conducted analyst or investigator triangulation on 10 randomly chosen awards with a co-worker who was familiar with higher education development assistance. Additionally, interviews with agency officials served as an additional check for validity, as those interviewed were also asked to provide information on projects where data gaps existed and to confirm whether they believed each unique award fit the definition of higher education.

To achieve the second objective of the study, interviews were conducted with those involved in higher education development projects, in part identified by the data collection that took place in achieving objective one. These participants were first asked to review the data for their specific region or office to confirm coding and, if possible,

provide information on projects that had data gaps. The participants were then asked a series of semi-structured interview questions regarding the roles of U.S. universities in delivering development assistance, as well as questions about higher education development assistance in general. Interviews were transcribed, in most cases, within 48 hours of the interview and were returned to the participants for a member check. Two participants returned the transcripts with minor edits for clarity. As recommended by Merriam (2009), analysis of the data occurred concurrently with the interviews, and common themes were identified through the constant-comparative method.

Summary of Findings

The total foreign assistance budget (approximately $33 billion) of the United States accounts for less than one percent of the total U.S. Budget. Within that total, higher education development assistance accounts for just .33 percent of the $33 billion, although there have been small increases since fiscal year 2013, based on what was reported in the Congressional Budget Justification. These numbers represent what is reported to Congress as being spent on higher education development assistance. It was determined that three agencies (i.e. USAID, MCC and IAF) had awards under the higher education category and 400 unique projects were identified from over 1900 lines of data. Of the 400 unique projects, it was determined that only 277 met the Higher Education Standardized Program Definition (USAID, 272; MCC, 3; IAF, 2).

Predictably, the majority of the development assistance to higher education is delivered through the U.S.'s main development agency, USAID. USAID has five objective areas within its foreign assistance program structure. Higher Education falls

under Objective 3: investing in people and is included in the education program area, along with basic education. Awards and projects at development agencies can only be tagged at the highest level to one category and in reporting of total dollars to Congress, each award is only supposed to be counted towards one area. Even when the dollar amounts for the awards which were determined to not meet the higher education definition are included, the amounts reported through the foreign assistance dashboard do not add up to the amount reported in the Congressional Budget Justification for higher education development assistance.

The awards that were determined to fit the higher education definition were then assigned to sub-categories within the higher education definition. Five sub-categories already existed within the standardized program definition, and an additional category, construction/educational infrastructure, was added by the researcher. Awards sub-categorized as institutional capacity development were the most frequent sub-category, followed by professional development. No projects were sub-categorized to the existing program element of host-country strategic information capacity. Figure 8 provides an overview of the percentage of projects assigned to each category.

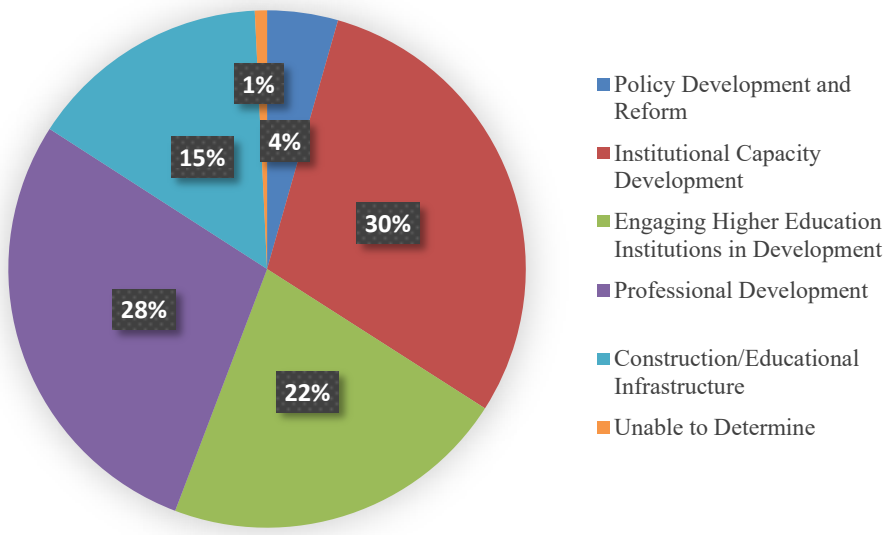

Figure 8. Percent of awards by higher education sub-category based on data from the Foreign Assistance Dashboard as determined by author.

The data was analyzed to determine what type of implementers were delivering development assistance to higher education. NGOs/Non-profits had the highest number of awards, followed by non-U.S. universities, primarily due to funding through the American Schools and Hospitals Abroad (ASHA) program. While NGOs implemented the highest number of awards, Educational Institutions had a higher dollar total for each year of the study – with a combined dollar amount of $169,947,609.62 from 2013-2015, compared to $118,347,398.78 for NGOs.

When analyzed for region and country breakdown of investments, the most higher education assistance during the time of the study was to Pakistan and Afghanistan (just over $65 million) followed by the Middle East (just over $60 million) and Asia ($50 million). When analyzed at the country level, Afghanistan received the most higher education assistance, followed by Lebanon, the United States, Indonesia and awards

across multiple countries in the Latin America/Caribbean region. In Afghanistan, the majority of the money was sub-categorized as institutional capacity building ($31 million) and over $18 million as construction/educational infrastructure.

Exploring objective two of the study, U.S. universities implemented 22% or 60 of the 277 awards identified as meeting the higher education definition. Non-US universities received 89 awards, or 32% of all awards. Of U.S. universities, public universities received a more dollars each year than private universities. Of the 39 U.S. educational institutions implementing development assistance, 28 were public and 11 were private universities. A breakdown of projects by implementer type is presented in Figure 9.

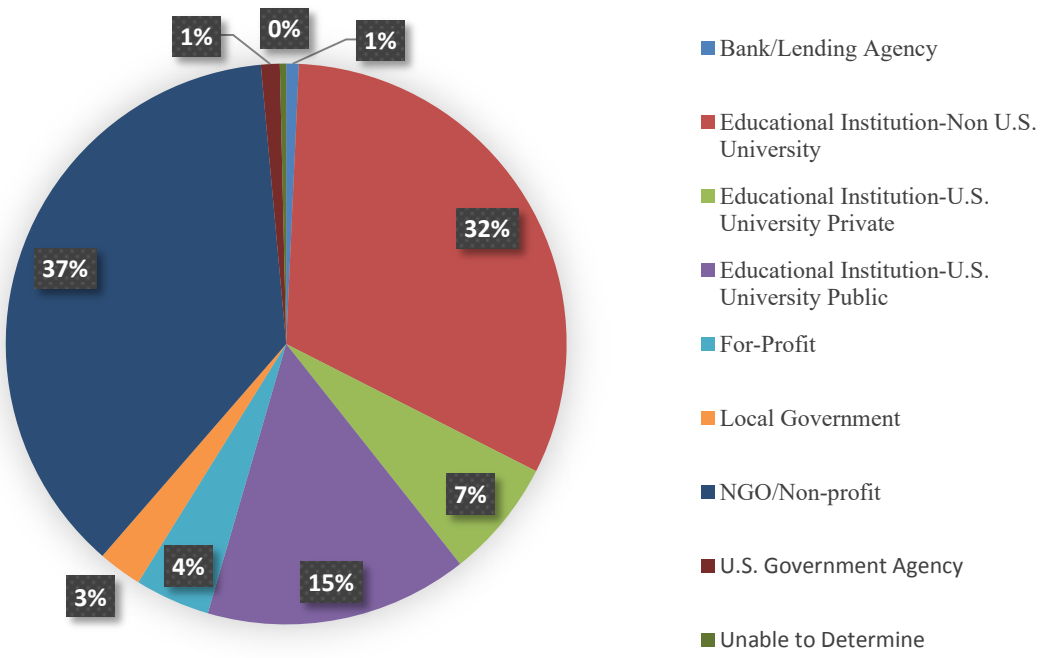

Figure 9. Percent of projects by implementer type based on data from the Foreign Assistance Dashboard as determined by author.

Study participants identified a number of challenges and benefits of higher education development assistance, as well as challenges and benefits of working with U.S. universities. These benefits and challenges of higher education development assistance are presented in Table 21; benefits and challenges of working with U.S. universities is presented in Table 22.

Table 21

Benefits and Challenges of U.S. Development Assistance to Higher Education Identified by Study Participants

Benefits of Higher Education Development Assistance	Challenges of Higher Education Development Assistance
• Diplomacy and greater understanding of the United States; • Higher education as a driver of economic impact and workforce development; • Higher education develops human and institutional capacity; • Higher education provides data for decision making.	• Lack of data on impacts of higher education development assistance; • Higher education is viewed as an investment for the elite and has barriers to access; • Higher education is not responsive to the (labor) market • Additional challenges: 5-year time frame of development projects, administration changes (both at the agencies and presidential.

Table 22

Benefits and Challenges of Working with U.S. Universities to Deliver Development Assistance as Identified by Study Participants

Benefits of Working with U.S. Universities to Deliver Development Assistance to Higher Education	Challenges of Working with U.S. Universities to Deliver Development Assistance to Higher Education
• Inherent knowledge of higher education; • Continuation of relationships with host country institutions after funding ends; • Internationalization of their student, faculty and staff; • Research and knowledge production.	• Universities are expensive • Lack of understanding of agency operations • Multiple bureaucracies • Conflicting priorities (research versus development) • Additional challenges: incentive (promotion and tenure) structures, academic calendars.

Conclusions and Implications

Research Objective One

Objective one of this study was to compile data from existing data sources in order to categorize and describe selected characteristics of U.S. foreign assistance to higher education. Less than one percent of the total foreign assistance budget was found to be dedicated to higher education assistance (program area 3.2.2) as defined by the Foreign Assistance Standardized Program definition under program element 3, investing in people. This definition does not take into account projects that may be building higher education capacity but are tagged at the top level in a different sector, such as agriculture or health, as the reporting mechanism for each agency will only allow top-level tagging to one sector. Two such examples include the Innovative Agriculture Researcher

Initiative (iAGRI) and the Feed the Future Innovation Labs, both of which are tagged as agriculture, but, respectively, are building higher education institutional capacity and engaging higher education institutions in development. It can clearly be concluded that discrepancies exist when one compares the higher education investments from the CBJ to the Foreign Assistance Dashboard. Based on this conclusion, an implication may exist that the data presented in the foreign assistance dashboard does not clearly present the total investments in the higher education sector.

It can be concluded that the majority of U.S. development assistance to higher education is conducted by the United States Agency for International Development (USAID). Of the 400 unique awards in the dataset, only 277 were determined to fit the definition of higher education. One may conclude that projects may be mis-categorized or that the definition may not be comprehensive enough and may need to be expanded for clarity.

Expenditures in the Foreign Assistance Dashboard were presented in two ways: committed and disbursed. Two additional categories, committed-deobligated and deobligated, were added by the researcher to clarify funds that were decommitted from an award either at the planning or obligation stage (committed-deobligated), or due to a change in the award after implementation began or to recover money left over at the end of an award (deobligated). Of the total $360,152,947.25 that was tagged as higher education and disbursed between 2013 and 2015, $317,116,070.41 was determined to fit the definition of higher education assistance, $29,500,111.44 was determined to not fit the definition, and $13,536,765.40 could not be assigned to either fitting or not fitting

the higher education definition. One can conclude that commitments and disbursements may not necessarily align in each fiscal year due to the multi-year nature of most awards.

For disbursements not fitting the higher education definition, but tagged as higher education in the dashboard, the largest amount, $8,232,855.93, went toward workforce development and/or vocational education and training. While workforce development is not included in the higher education definition, it is included as part of Goal 2 of USAID's Education Strategy, and one could conclude that this may account for why it could be tagged at the top level as higher education. However, workforce development does have its own program element in the standardized foreign assistance definition under program area four, economic development, as sub-element 4.6.3, workforce development. An additional $6,903,962.25 was tagged as higher education but went to secondary education, which is part of program element 3 but is represented in program element 3.2.1, basic education, and two separate program sub-elements, 3.2.1.3, lower secondary education, and 3.2.1.6, upper secondary education. Per the interview with Participant 2, the inclusion of the higher number of secondary school projects could be attributed to the American Schools and Hospitals Abroad Program classifying everything above the primary school level as higher education.

Regionally, it was found that the highest number of disbursed dollars from 2013-2015, all agencies combined, went to the Afghanistan and Pakistan region, followed by the Middle East and Asia regions. In a yearly breakdown, Afghanistan and Pakistan received the most dollars in 2013, the Middle East in 2014 and 2015. At the country level, Afghanistan received the most total dollars, followed by Lebanon, the United

States, Indonesia, and a combination of multiple countries in Latin America receiving funds for the same award. It can be concluded that the geographic areas receiving the highest amount of higher education development assistance are often in areas of conflict or political instability. There are implications of these investments in terms of benefits to the U.S. in supporting scholarship and building of institutions in these areas in terms of diplomacy efforts through higher education. There are also implications that we may need to better study investment in higher education in areas of political instability to better understand these investments.

It can also be concluded that higher education development assistance is not only going to developing countries. The U.S. is one of the top 5 countries receiving higher education development assistance, in large part due to the establishment of the Higher Education Solutions Network, which uses universities as think-tanks for development challenges. It can also be concluded that American students also benefit from scholarship and fellowship programs that support research related to topic of interest to international development. There are implications that the American people are as much direct beneficiaries of foreign assistance as those in the countries receiving the assistance.

Research Objective Two

Objective two of this study was to document the role that U.S. universities play in U.S. higher education development assistance. By implementer type, across all agencies, educational institutions received the highest dollar amount of disbursed funds, although as previously noted, NGOs/non-profits received the highest total number of

awards. U.S. universities are playing an important role in implementing higher education development assistance, and one could conclude that there could be more opportunity for U.S. universities to work with USAID if perceptions of universities were changed. While universities are viewed as the logical choice for implementing higher education programs and appreciated for what they bring to development; there are also challenges of working with universities in that they appear to be expensive and difficult to work with because of the nature of two bureaucratic structures making nimbleness next to impossible. Frustration was also expressed by the study participants of universities lack of understanding of agency operations – understanding that could be strengthened by more regular interaction and/or partnering with more experienced universities or NGOs.

Thirty-nine U.S. institutions, 28 public and 11 private universities, were determined to be lead implementers of awards defined as higher education. Universities may play an additional role as sub-contractors or consultants to a number of higher education projects, but that involvement was beyond the scope of this study. U.S. universities are also lead implementers (as well as sub-contractors) on a number of development projects that are tagged to other sectors. One could conclude that this study does not present a comprehensive overview of U.S. university engagement across all sectors of international development.

Study participants identified many benefits and challenges to higher education development assistance. Benefits included diplomacy and a greater understanding of the United States, higher education as a driver of economic impact and workforce development, development of both human and institutional capacity, and provision of

data for decision makers. Challenges to higher education included the difficulty of quantifying results and good data for higher education impacts, higher education being viewed as an investment for the elite, barriers to access to higher education for student populations, and responsiveness to the public sector in terms of labor market needs and curriculum reform. The five-year time frame of development activities and the somewhat regular changes in agency and presidential administrations were also identified as challenges to higher education development. It can be concluded that higher education has benefits to both the host country and the United States, however, there are opportunities to increase its effectiveness.

Study participants also identified a number of benefits and challenges in terms of working directly with U.S. universities as implementers of higher education development assistance. Benefits included universities' inherent knowledge of higher education systems; similarities of challenges shared by host-country and U.S. universities; a history of continued relationships beyond the life of the award; a priority on the internationalization of their students, faculty, and staff; and their ability to produce research and knowledge. Challenges identified included high overhead costs of working with U.S. universities; a lack of understanding of how the agency (USAID) operates; dealing with multiple bureaucracies; conflicts that may arise from universities being accountable to local (state) stakeholders; incentive structures, including promotion and tenure; and challenges with working around the academic calendar. One could conclude that while universities are considered a logical choice as an implementer of higher education development assistance, they may need to learn how better to work

with the agencies delivering development assistance and/or become partners with NGOs who have the built-in capacity to manage the bureaucracy that come with governmental awards.

Higher education development assistance can and should play a role beyond the development of host countries' higher education capacity. It also has implications for U.S. diplomacy and the ability of host countries to build human and institutional capacity for their long-term economic and social growth. "There is also a tremendous crisis of countries literally not being able to self-advocate and advance for themselves because they lack the human capital that could have been developed over time," shared Participant 9. Participant 6 shared why higher education development assistance is important: "This is the sort of thing I dream of when I think about investing in higher education so that there are people in-country that have the tools they need to fix their countries problems and have the pride of getting that education at home."

Overall, one can clearly conclude that challenges exist with the mechanisms that track development assistance to higher education. Accounting systems that only allow awards/projects to be tagged to one sector do not account for the full dollar amount invested in higher education through other sectors, such as agriculture, health, and democracy.

Recommendations

The following recommendations are a result of an analysis of the findings and conclusions from objectives one and two of the study.

Recommendations for Development Agencies

Some revisions to the data reported to the Foreign Assistance Dashboard may be required to more accurately reflect projects that fit the Foreign Assistance Standardized Program definition for higher education. Clarity and accuracy are central when compiling data. Transparency in how the dollar amount spent on higher education development assistance is calculated for the CBJ would also help to alleviate misconceptions about how higher education development assistance funds are being spent.

The current higher education definition is limited in how higher education development assistance can be defined in terms of types of higher education institution types, i.e., universities and colleges vs. other postsecondary institutions. For example, the current definition may exclude postsecondary training at technical and vocational institutions based on how an individual interprets the definition. A closer look at the definition may be warranted to ensure clarity.

Based on the findings of this study, current sub-categories for higher education may also need to be expanded to better capture the activities being conducted under the higher education sector. For example, while for the purposes of this study student scholarship programs, both for study in the United States and in a host country, were counted toward the sub-category of professional development. The professional development sub-element, by definition, appears to be more focused on the professional development of faculty members and others in terms of educational leadership, administration and management of higher education. It specifically states, “Participant

training not in the discipline of Higher Education is captured under the appropriate and relevant elements in education and other technical areas," (DOS, 2010, p. 58). The addition of a new sub-category of student scholarships and participant training may help in providing clarity.

Based on the inclusion of American Schools and Hospitals Abroad (ASHA) funds as higher education development assistance, as well as other spending that is for construction and infrastructure, an additional sub-element of construction/educational infrastructure should be added to better capture these types of investments. While the majority of the awards categorized by the researcher were specific awards issued under the ASHA Program, there were other awards that focused on building construction. It could however, also be argued that construction/educational infrastructure could fit under the sub-element institutional capacity development. However, the current wording might be expanded to provide clarity by including the building of facilities, as is done in sub-elements under the health program element.

In light of the challenge identified by study participants in terms of data on higher education and the lack of projects sub-categorized under the current sub-element 3.2.2.5, host country strategic information capacity (higher education), there may be a need to revise the current definition of the sub-element. One revision could be to remove the emphasis on government ministries, instead placing more emphasis on strengthening this capacity at universities.

Due to the large number of projects not meeting the definition of higher education, but determined to be workforce or youth development in focus, the addition

of sub-elements related to workforce development and youth development by higher education institutions may also be helpful.

Higher education can also play a role across all five of the foreign assistance objective areas (i.e. peace and security, governing justly and democratically, investing in people, economic growth, and humanitarian assistance), however the only place outside of the higher education program element (under objective 3, investing in people) where it is mentioned in the standardized program definitions is as a part of sub-element 4.6.3.3, workforce readiness under the objective area of economic growth. Expansion of higher education across objective areas and into specific programs (i.e. agriculture, health, and democracy), as a cross-cutting issue in the same way in which USAID requires gender and climate change to be considered, could result in the strengthening and building of local institutions of higher education, helping to solve the "crisis of countries literally not being able to self-advocate and advance for themselves because they lack the human capital that could have been developed over time," as was stated by Participant 9.

Recommendations for U.S. Universities

Based on interviews with individuals at agencies who are engaged in higher education development assistance, there are a number of recommendations for U.S. institutions of higher education that wish to engage in implementation of higher education and other forms of development assistance. Many of the study participants from development agencies were enthusiastic about working with U.S. universities to deliver not only higher education development assistance but also other areas of

technical assistance, but they also identified challenges to these partnerships. For universities that do not have a history of engagement with development agencies, particularly USAID, it is recommended that the institution adopt a mission or mandate that promotes international development engagement. Such language would help demonstrate the alignment of the university mission with the development agency mission, and hopefully create alignment with agency priorities. In the words of Participant 6, "We just need to align all of our priorities better."

Participants expressed frustrations regarding the lack of understanding by universities regarding how the agency (USAID) works, although it was acknowledged that unlike NGOs and for-profit development organizations, universities are not "built" to manage USAID and other development agency contracts, and that reporting timelines can be burdensome. Staff dedicated to the management of development agency proposals and contracts, who receive specialized training on working on these awards, may assist in alleviating some of these frustrations. Taking advantage of agency resources to learn more about how universities can work with agencies is another way that universities can engage more effectively. For example in 2015, USAID appointed the first higher education coordinator for the agency, with the staff person serving as a liaison to the university community, as well as an advocate for higher education within the agency. This person is a contact point for U.S. universities and they should seek to establish a relationship with the person in this position. Bureaus and offices within the agency, such as the Bureau for Economic Growth, Education and Environment (E3), host open house events and other gatherings where U.S. universities can learn more

about how the agency functions. These are examples of how U.S. universities can better understand the functions of the agency.

Study participants also said that they cannot specifically seek out higher education institutions to respond to requests for proposals, but participants still expressed that universities should to apply for more often for opportunities. One study participant identified that higher-quality applications from U.S. universities are needed to better compete with NGOs and for-profit firms. A focus by universities on applying for funding opportunities and in submitting high-quality proposals, especially those that do not have a history of engagement in international development, could increase the number of universities that receive awards. For those universities that are new to engaging in this field, there may be benefit to establishing relationships with universities that have existing relationships and/or partnering with NGOs or for-profits. U.S. universities should continue to highlight their ongoing relationships with higher education institutions and other development actors in developing countries—not only those projects done through development agency funding, but also those that are created through relationships with alumni who have returned to their home country; relationships of foreign faculty members with colleagues in their country of origin; and teaching, research, and other relationships that may have been established by U.S. faculty members.

Recommendations for Additional Research

The scope of this study was limited to foreign assistance investments tagged as higher education within the foreign assistance budget, but additional investments that

strengthen higher education capacity in-country or that encourage diplomacy through higher education are conducted in other areas of the foreign assistance and diplomatic engagement budgets. A future area of study of foreign assistance investments in higher education could involve specific sectors of USAID's work (e.g. agriculture, health, democracy) could reveal even greater impact on higher education. Additionally, one could look at the role of U.S. universities as implementers in these sector areas. One could also explore the role of U.S. universities as sub-contractors for higher education development assistance projects. For example, USAID's recent U.S.-Egypt Higher Education Initiative (HEI) is being implemented by RTI International, but $57 million of the project is dedicated to university partnerships, which will engage a coalition of universities in its implementation.

Higher education investments through the Department of State's Bureau of Educational and Cultural Affairs are tied to the diplomatic engagement budget and therefore were not a part of this study. Additional research could explore how this money is being spent and if these investments strengthen higher education in developing countries. The exclusion of the Department of Defense's Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) from the foreign operations budget meant that these programs were outside of the scope of this study; how those investments are spent could be an area for additional research.

This study focused on identifying characteristics of U.S. development assistance investments in higher education. The theoretical framework of human capital theory, which was applied to this study states that both individuals and societies derive benefits

from investment in human capital through the building of knowledge, abilities and skills. Higher education investments often have more easily measureable private returns (to the individual) such as those determined by the studies by Montenegro and Patrinos (2013, 2014) through the World Bank, but measurement of the social impacts or outcomes to society, as identified in the operational framework of the study, are lacking and could be an area for additional research.

Oft-mentioned challenges of higher education development assistance were the lack of data on higher education and the difficulty of quantifying results. Therefore, an additional area of study could be how to more effectively measure the impacts of higher education investments. As stated by many study participants, higher education is inherently a long-term investment that does not always have immediate payoffs. Research on the long-term impacts of scholarship programs, training programs, and institutional capacity building could prove beneficial to making a stronger case for more investment in higher education development assistance. Additional research could be done on comparing the long-term benefits of higher education development assistance in conflict versus non-conflict areas. A final recommendation is that this study should be updated annually to begin presenting a historical overview of investments in higher education development assistance.

Investments in higher education, as well as in primary and secondary education, are an investment in human capital. A high-functioning economy cannot be established in a country only educated to the primary level. A well-functioning higher education system needs primary and secondary systems that prepare students to be successful in a

global, knowledge-driven economy. More balanced investments are needed across all levels of education to derive economic and social benefits for all.

REFERENCES

Altbach, P.G., Reisberg, L., & Rumbley, L.E. (2009). Trends in global higher education: tracking an academic revolution. Retrieved from http://www.uis.unesco.org/Library/Documents/trends-global-higher-education-2009-world-conference-en.pdf

Association of Commonwealth Universities. (2015). *Progress and potential: Higher education playing its part in the sustainable development goals*. Retrieved from https://beyond2015.acu.ac.uk/about/final-reports

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, *70*(5), 9-49. doi:10.1086/258724

Birdsall, N. (1996). Public spending on higher education in developing countries: Too much or too little? *Economics of Education Review*, *15*, 407-419. doi:10.1016/S0272-7757(96)00028-3

Black, A. (2015, March 12). New project announced—Global food security by the numbers [Blog post]. Retrieved from Chicago Council on Global Affairs website: http://www.thechicagocouncil.org/blog-entry/new-project-announced-global-food-security-numbers

Bloom, D. E., Canning, D., & Chan, K. (2006). *Higher education and economic development in Africa*. Retrieved from Anderson Research Group website: http://ent.arp.harvard.edu/AfricaHigherEducation/Reports/BloomAndCanning.pdf

Bloom, D. E., Hartley, M., & Rosovsky, H. (2007). Beyond private gains: The public benefits of higher education. In J. J. F. Forest & P. G. Altbach (Eds.),

International Handbook of Higher Education (pp. 293-308). Available from http://link.springer.com/chapter/10.1007%2F978-1-4020-4012-2_15

Burnett, N., & Felsman, C. (2012). *Post-2015 education MDGs*. Retrieved from Overseas Development Institute website: http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7776.pdf

Center for Global Development. (n.d.). *Foreign assistance and the US budget*. Retrieved from http://www.cgdev.org/page/foreign-assistance-and-us-budget

DeMarrais, K. B. (2004). Qualitative interview studies: Learning through experience. In K. B. DeMarrais & S. D. Lapan (Eds.), *Foundations for research: Methods of inquiry in education and the social sciences* (pp. 51-68). Mahwah, NJ: Erlbaum.

Foreign Assistance Act of 1969. Public Law 91-175. §101-501 (1969). Retrieved from http://uscode.house.gov/statutes/pl/91/175.pdf

Foreign Assistance Dashboard. (n.d.-a). *About aid transparency*. Retrieved from http://beta.foreignassistance.gov/learn/about-aid-transparency

Foreign Assistance Dashboard. (n.d.-b). *The International Aid Transparency Initiative*. Retrieved from http://beta.foreignassistance.gov/learn/IATI/

Foreign Assistance Dashboard. (n.d.-c). *Understanding the data*. Retrieved from http://beta.foreignassistance.gov/learn/understanding-the-data

Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education* (7th ed.). New York, NY: McGraw-Hill.

Hulme, D. (2009). *The Millennium Development Goals (MDGs): A short history of the world's biggest promise* (BWPI Working Paper No. 100). Retrieved from Social Science Research Network website: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1544271

Ingram, G. (2013, April 17). Why Congress should care about the International Aid Transparency Initiative [Blog post]. Retrieved from Brookings Institution website: http://www.brookings.edu/blogs/up-front/posts/2013/04/17-congress-aid-transparency-ingram

Innovative Agriculture Research Initiative. (2016). *About.* Retrieved from https://feedthefuture.gov/lp/feed-future-innovation-labs

Inter-American Foundation. (2016). *At a glance*. Retrieved from http://www.iaf.gov/about-the-iaf/at-a-glance

Knowledge Center for Advancing Development through Higher Education, Association of Public and Land-grant Universities. (2014). *African higher education: Opportunities for transformative change for sustainable development*. Retrieved from http://www.aplu.org/africanhereport

Kapur, D., & Crowley, M. (2008). *Beyond the ABCs: Higher education and developing countries* (Working Paper No. 139). Retrieved from Center for Global Development website: http://www.cgdev.org/publication/beyond-abcs-higher-education-and-developing-countries-working-paper-139

Koehn, P. H., & Obamba, M. O. (2014). *The transnationally partnered university: Insights from research and sustainable development collaborations in Africa*. New York, NY: Palgrave Macmillan.

Library of Congress. (1949). *Point Four: Background and program (International Technical Cooperation Act of 1949)*. Retrieved from USAID website: http://pdf.usaid.gov/pdf_docs/Pcaac280.pdf

McArthur, J. (2013). *Own the goals: What the Millennium Development Goals have accomplished*. Retrieved from Brookings Institution website: http://www.brookings.edu/research/articles/2013/02/21-millennium-dev-goals-mcarthur

McCowan, T. (2014). *Can higher education solve Africa's job crisis? Understanding graduate employability in Sub-Saharan Africa*. Retrieved from British Council website: https://www.britishcouncil.org/education/ihe/knowledge-centre/developing-talent-employability/can-higher-education-solve-africa-job-crisis

McMahon, W. W. (2009). *Higher learning, greater good: The private and social benefits of higher education*. Baltimore, MD: Johns Hopkins University Press.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

Millennium Challenge Corporation. (n.d.). *Who we fund*. Retrieved from https://www.mcc.gov/who-we-fund

Modernizing Foreign Assistance Network & Aid Data. (2015, February). Do more with data: Moving US government aid transparency forward. Event conducted at the OpenGov Hub, Washington, DC.

Montenegro, C. E., & Patrinos, H. A. (2013). *Returns to schooling around the world*. Retrieved from World Bank website: http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-1320950747192/8260293-1320956712276/8261091-1348683883703/WDR2013_bp_Returns_to_Schooling_around_the_World.pdf

Montenegro. C. E., & Patrinos, H. A. (2014). *Comparable estimates of returns to schooling around the world* (Serie de Documentos de Trabajo). Retrieved from University of Chile website: http://www.econ.uchile.cl/uploads/publicacion/65c0ff694f471bd2fd4e0bcaf296230c242e74d8.pdf

Obama, B. (2009). *Transparency and open government: Memorandum for the heads of executive departments and agencies*. Retrieved from White House website: https://www.whitehouse.gov/the-press-office/transparency-and-open-government

Office of Inspector General, United States Agency for International Development. (n.d.-a). *History of OIG*. Retrieved from https://oig.usaid.gov/content/history-oig

Office of Inspector General, United States Agency for International Development. (n.d.-b). *OIG oversight: Inter-American Foundation overview*. Retrieved from https://oig.usaid.gov/content/oig-oversight-inter-american-foundation-overview

Organisation for Economic Co-Operation and Development. (2005). *The Paris declaration on aid effectiveness and the Accra agenda for action*. Retrieved from http://www.oecd.org/dac/effectiveness/34428351.pdf

Organisation for Economic Co-Operation and Development. (2008). *Is it ODA?* Retrieved from http://www.oecd.org/dac/stats/34086975.pdf

Organisation for Economic Co-Operation and Development. (2012). *The DAC list of ODA recipients*. Retrieved from http://www.oecd.org/dac/stats/49483614.pdf

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Sciences Research*, *34*, 1189-1208. Retrieved from https://www.uic.edu/sph/prepare/courses/chsc433/patton.pdf

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Price, M. (2010). More data, less hassle: Researchers share tips for collecting data more efficiently. *gradPSYCH*, *8*(2). Retrieved from http://www.apa.org/gradpsych/2010/03/more-data.aspx

Psacharopoulos, G. (1973). *Returns to education: An international comparison*. San Francisco, CA: Jossey-Bass.

Psacharopoulos, G. (1981). Returns to education: An updated international comparison. *Comparative Education*, *17*, 321-341. doi:10.1080/0305006810170308

Psacharopoulos, G. (1985). Returns to education: A further international update and implications. *Journal of Human Resources*, *20*, 583-604. doi:10.2307/145686

Psacharopoulos, G. (1994). Returns to investment in education: A global update. *World Development*, *22*, 1325-1343. Retrieved from Harvard University website: http://isites.harvard.edu/fs/docs/icb.topic1222150.files/Session%207/PsacharopoulosGlobalUpdate.pdf

Psacharopoulos, G., & Patrinos, H. A. (2002). *Returns to investment in education: A further update* (World Bank Policy Research Working Paper No. 2881). Retrieved from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079934475/547667-1135281504040/Returns_Investment_Edu.pdf

Psacharopoulos, G., Tan, J.-P., & Jimenez, E. (1986). *Financing higher education in developing countries: An exploration of policy options*. Retrieved from http://files.eric.ed.gov/fulltext/ED281800.pdf

Read, H. (1974). *Partners with India: Building agricultural universities*. Urbana-Champaign: Board of Trustees, University of Illinois.

Rutsch, P. (2015, February 10). Guess how much of Uncle Sam's money goes to foreign aid. Guess again! *National Public Radio.* Retrieved from http://www.npr.org/sections/goatsandsoda/2015/02/10/383875581/guess-how-much-of-uncle-sams-money-goes-to-foreign-aid-guess-again

Simmons, E., & Shiferaw, D. (2010). *Expanding commitments to food security and agricultural development: U.S. Assistance to Sub-Saharan Africa 2008-2009* (Policy Brief No. 11). Washington, DC: Partnership to Cut Hunger and Poverty in Africa.

Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, *51*(1), 1-17.

Stake, R. E. (2009). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 443-466). Thousand Oaks, CA: Sage.

Sweetland, S. R. (1996). Human capital theory: Foundations of a field of inquiry. *Review of Educational Research*, *66*, 341-359. doi:10.3102/00346543066003341

Sweetman, D., Badiee, M., & Creswell, J. W. (2010). Use of the transformative framework in mixed methods studies. *Qualitative Inquiry*, *16*, 441-454. doi:10.1177/1077800410364610

Tarnoff, C. (2015). *Millennium Challenge Corporation* (Congressional Research Service Report No. RL32427). Retrieved from Federation of American Scientists website: https://www.fas.org/sgp/crs/row/RL32427.pdf

Taylor, M. R., & Howard, J. A. (2005). *Investing in Africa's future: U.S. agricultural development assistance for Sub-Saharan Africa*. Washington, DC: Partnership to Cut Hunger and Poverty in Africa.

Taylor, M. R., & Shiferaw, D. (2009). *Supporting Africa's strategy for reducing rural poverty: U.S. development assistance 2005-2008* (Policy Brief No. 6). Washington, DC: Partnership to Cut Hunger and Poverty in Africa.

The White House. (2002). *The Millennium Challenge Account*. Retrieved from http://georgewbush-whitehouse.archives.gov/infocus/developingnations/millennium.html

Torraco, R. J. (2001). Economics, human capital theory, and human resource development. In R. A. Swanson & E. F. Holton, III, (Eds.), *Foundations of human resource development* (pp 106-114). San Francisco, CA: Berrett-Koehler.

United Nations. (2000a). *Millennium summit of the United Nations*. Retrieved from http://www.un.org/en/development/devagenda/millennium.shtml

United Nations. (2000b). *Resolution adopted by the General Assembly [without reference to a Main Committee (A/55/L.2)]: 55/2. United Nations Millennium Declaration*. Retrieved from http://www.un.org/millennium/declaration/ares552e.pdf

United Nations. (2015). *Goal 2: Achieve universal primary education*. Retrieved from http://www.un.org/millenniumgoals/education.shtml

United Nations Development Group. (2014). *Delivering the post-2015 development agenda: opportunities at the national and local levels*. Retrieved from http://www.undp.org/content/undp/en/home/librarypage/mdg/delivering-the-post-2015-development-agenda.html

United Nations Division for Sustainable Development. (2015). *Transforming our world: The 2030 agenda for sustainable development* (A/RES/70/1). Retrieved from https://sustainabledevelopment.un.org/post2015/transformingourworld/publication

United Nations Educational, Scientific and Cultural Organization. (2014). *Beyond 2015: The education we want*. Retrieved from http://unesdoc.unesco.org/images/0023/002310/231043e.pdf

United Nations Educational, Scientific and Cultural Organization Institute for Statistics. (2010). *Trends in tertiary education: Sub-Saharan Africa* (UIS Fact Sheet No. 10). Retrieved from http://www.uis.unesco.org/Library/Documents/fs10-trends-tertiary-education-sub-saharan-africa-2010-en.pdf

United Nations Millennium Project. (2006a). *Goals, targets and indicators*. Retrieved from http://www.unmillenniumproject.org/goals/gti.htm

United Nations Millennium Project. (2006b). *What they are*. Retrieved from http://www.unmillenniumproject.org/goals/

United States Agency for International Development. (2015a). Organization. Retrieved from https://www.usaid.gov/who-we-are/organization

United States Agency for International Development. (2015b). *USAID history*. Retrieved from https://www.usaid.gov/who-we-are/usaid-history

United States Agency for International Development. (2016). *About the Higher Education Solutions Network*. Retrieved from https://www.usaid.gov/hesn/about

United States Congress, Office of Technology Assessment. (1991). *New opportunities for U.S. universities in development assistance* (OTA-BP-F-71). Retrieved from Federation of American Scientists website: http://ota.fas.org/reports/9131.pdf

United States Department of Agriculture. (2016). *Higher Education Challenge (HEC) grants program*. Retrieved from http://nifa.usda.gov/funding-opportunity/higher-education-challenge-hec-grants-program

United States Department of State. (2007). *FY 2007-2012 Department of State and USAID strategic plan*. Retrieved from http://www.state.gov/documents/organization/86291.pdf

United States Department of State. (2010). *Foreign assistance standardized program structure and definitions*. Retrieved from http://www.state.gov/documents/organization/141836.pdf

United States Department of State. (2015). *Congressional budget justification: Department of State, foreign operations and related programs: Fiscal year 2016*. Retrieved from https://www.usaid.gov/sites/default/files/documents/9276/FY16CBJStateFORP.pdf

United States Department of State & United States Agency for International Development. (2014). *Strategic plan FY 2014-2017*. Retrieved from http://www.state.gov/documents/organization/223997.pdf

World Bank. (2009). *Accelerating catch-up: Tertiary education for growth in Sub-Saharan Africa*. Retrieved from http://siteresources.worldbank.org/INTAFRICA/Resources/e-book_ACU.pdf

Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

Yin, R. K. (2016). *Qualitative research from start to finish* (2nd ed.). New York, NY: Guilford Press.

Zients, J. D. (2012). *Guidance on the collection of U.S. foreign assistance data* (Office of Management and Budget Bulletin No. 12-01). Retrieved from White House website: https://www.whitehouse.gov/sites/default/files/omb/bulletins/fy2012/b12-01.pdf

APPENDIX A

FOREIGN ASSISTANCE STANDARDIZED PROGRAM DEFINITIONS

Program Element 3.2.2: Higher Education
Definition: Foster and improve the quality, contributions and accessibility of higher education. Higher education includes but is not limited to: teaching; training; curricula; degree programs; pedagogy; research; policy analysis and participation in policy development; community service; extension; applied technology; professional development; exchange programs; institutional linkages; program linkages; institutional governance; financial planning; administration; management; and policy that is developed, conducted, and/or implemented by universities, colleges, community colleges, teacher-training colleges and institutes, research institutes, and/or relevant ministries.

Sub-Element 3.2.2.1: Policy Development and Reform

Definition: Develop policies and laws that improve the quality, contributions and accessibility of higher education; support their effective implementation and monitoring; and ensure the participation of higher education institutions, the private sector, civil society, and other interested parties in the development and implementation of such policies and laws. This would include, but not be limited to, national policies that support more equitable access, greater competition, enhanced autonomy, improved transparency in admissions, more effective collaboration with the private sector and civil society, improved accountability, and increased transparency with regard to revenue generation, expenditures, and financial management.

Sub-Element 3.2.2.2: Institutional Capacity Development

Definition: Increase higher education institution's ability to contribute to social and economic development by strengthening their organizational effectiveness. Organizational effectiveness includes, but is not limited to, improving management and administration, research capacity and methods, facilities, degree programs, curricula, and pedagogy.

Sub-Element 3.2.2.3: Engaging Higher Education Institutions in Development

Definition: Engage higher education institutions in addressing social and economic development challenges. Programs include, but are not limited to, applied research, community outreach, and service delivery.

Sub-Element 3.2.2.4: Professional Development

Definition: Broaden and increase access of individuals to professional development opportunities in the discipline of higher education, including but not limited to faculty development programs and programs in higher education leadership, administration, and management. Participant training not in the discipline of Higher Education is captured under the appropriate and relevant elements in education and other technical areas.

Sub-Element 3.2.2.5: Host Country Strategic Information Capacity (Higher Ed)

Definition: Establish and/or strengthen host country institutions' management information systems (MIS) and their development and use of tools and models to collect, analyze and disseminate a variety of information related to the program element. These may include, but are not limited to MIS for government ministries or other host country institutions, needs assessments, baseline studies, censuses and surveys, targeted evaluations, special studies, routine surveillance, data quality assessments, and operational research. This sub-element may also include developing and disseminating best practices and lessons learned and testing demonstration and/or pilot models. Related training, supplies, equipment, and non-USG personnel are included.

APPENDIX B

U.S. and Developing Country University Partnerships 1951-1991

Host University	U.S. University	Dates
Karaj College (Iran)	Utah State University	1951-58
Agricultural College at Aba-Ghraib (Iraq)	University of Arizona	1951-59
National Institute of Agriculture (Panama)	University of Arkansas	1951-57
University of The Philippines	Cornell University	1952-65
Alemaya University of Agriculture (Ethiopia)	Oklahoma State University	1952-68
Kasesart University (Thailand)	Oregon State University	1954-60
	University of Hawaii	1962-65
Seoul National University (Korea)	University of Minnesota	1954-62
Kabul University (Afghanistan)	University of Wyoming	1954-57
Ataturk University (Turkey)	University of Nebraska	1954-57
University of Conception (Chile)	University of California	1954-57
University of Quito and Guayaquil (Ecuador)	University of Idaho	1954-57
Superior Institute of Agriculture (Mexico)	Texas A&M University	1954-56
National Agrarian University (Peru)	North Carolina State University	1954-68
		1982-88
Hariyana Agricultural University (India)	Ohio State University	1955-72
University of Udaipur (India)	Ohio State University	1955-72
G.P. Pant Agricultural University (India)	University of Illinois	1955-72
Andhra Pradesh Agricultural University (India)	Kansas State University	1956-72
Mysore Agricultural University, Bangalore (India)	University of Tennessee	1957-72
Orissa University of Agriculture (India)	University of Missouri	1957-72
Bandung Institute of Agriculture (Indonesia)	University of Kentucky	1957-72
	MUCIA	1969-81
	University of Wisconsin	1980-85
Hokkaido University (Japan)	University of Massachusetts	1957-61
University of San Carlos (Guatemala)	University of Kentucky	1957-63
Peshawar University (Pakistan)	Colorado State University	1958-64
Bangladesh Agricultural University	Texas A&M University	1958-73
Hebrew University (Israel)	State University of New York	1958-62
National College of Agriculture (Cambodia)	University of Georgia	1960-63
National Taiwan University	Michigan State University	1960-64
Chung Hsing University (Taiwan)	Michigan State University	1960-64
University of Nigeria	Michigan State University	1960-67
National College of Agriculture (Vietnam)	University of Georgia	1960-63
National University of Asuncion	Montana State University	1960-63

(Paraguay)	New Mexico State University	1964-67
Punjab University (Pakistan)	Washington State University	1961-69
Universidad de la Republica (Uruguay)	Iowa State University	1962-68
Egerton Agricultural College (Kenya)	West Virginia University	1962-72
Sokoine University of Agriculture (Tanzania)	West Virginia University	1962-72
University of Ceara (Brazil)	University of Arizona	1964-73
University of San Paulo (Brazil)	Ohio State University	1964-73
University of Rio Grande do Sul (Brazil)	University of Wisconsin	1964-73
University of Vicosa (Brazil)	Purdue University	1964-73
University of Costa Rica	University of Florida.	1965-70
Superior Institute of Agriculture (Dominican Republic)	Texas A&M University	1965-73
Punjab Agricultural University (India)	Ohio State University	1955-72
Makerere University (Uganda)	West Virginia University	1964-73
	Ohio State University	1984-93
Ahmadu Bello University (Nigeria)	Kansas State University	1962-78
University of Ife (Nigeria)	University of Wisconsin	1964-75
Bunda College of Agriculture (Malawi)	University of Massachusetts	1963-70
Njala Agricultural University (Sierra Leone)	University of Illinois	1963-71
Madhya Pradesh Agricultural University (India)	University of Illinois	1964-73
Maharashtra Agricultural University (India)	Pennsylvania State University	1967-72
Institute of Agricultural and Veterinary Sciences (Morocco)	University of Minnesota	1969-90
Brazilian Agricultural Faculties	Michigan State University	1973-78
University of Jordan University	Washington State University	1975-79
Peredenia University (Sri Lanka)	Penn State/Texas A&M	1979-85
Eastern Regional Universities (Indonesia)	Washington State University	1980-85
Western Regional Universities (Indonesia)	University of Kentucky	1980-90
Visayas College of Agriculture (Philippines)	Cornell University	1981-87
Agriculture University at Dschang (Cameroon)	University of Florida	1982-90
Northwest Frontier Agri. University (Pakistan)	University of Illinois	1983-92
University of Ouagadougou (Burkina Faso)	University of Georgia	1983-90
University of Zimbabwe	Michigan State University	1984-89
University of Sanaa (Yemen)	Oregon State University	1985-96
Jamaica College of Agriculture	Louisiana State University	1986-90

Host University	U.S. University	Dates
School of Agriculture for Tropics	California Polytechnic and State	1986-88
Humid Regions (Costa Rica)	University	1986-88
	Rutgers University	1986-88
	University of Nebraska	1986-88
	Virginia Polytechnic Academy of Educational Development	
Edgerton Agricultural College (Kenya)	University of Illinois	1986-91

Note. Adapted from *The Impact of Investments on Agricultural Higher Education* (AID Evaluation Highlights No. 5), by G. E. Hansen, 1989, Washington, DC: U.S. Agency for International Development., as cited in United States Congress, Office of Technology Assessment. (1991).

APPENDIX C

LIST OF MILLENNIUM DEVELOPMENT GOALS AND INDICATORS

Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring Progress
Goal 1: Eradicate extreme poverty and hunger	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	1.1 Proportion of population below $1.25 (PPP) per day[a] 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.4 Growth rate of GDP per person employed 1.5 Employment-to-population ratio 1.6 Proportion of employed people living below $1.25 (PPP) per day 1.7 Proportion of own-account and contributing family workers in total employment
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8 Prevalence of underweight children under-five years of age 1.9 Proportion of population below minimum level of dietary energy consumption
Goal 2: Achieve universal primary education	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrolment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15-24 year-olds, women and men
Goal 3: Promote gender equality and empower women	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national parliament
Goal 4: Reduce child mortality	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1 Under-five mortality rate 4.2 Infant mortality rate 4.3 Proportion of 1 year-old children immunised against measles
Goal 5: Improve maternal health	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio 5.2 Proportion of births attended by skilled health personnel

Target 5.B: Achieve, by 2015, universal access to reproductive health	5.3 Contraceptive prevalence rate 5.4 Adolescent birth rate 5.5 Antenatal care coverage (at least one visit and at least four visits) 5.6 Unmet need for family planning
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1 HIV prevalence among population aged 15-24 years 6.2 Condom use at last high-risk sex 6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS 6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to antiretroviral drugs
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6 Incidence and death rates associated with malaria 6.7 Proportion of children under 5 sleeping under insecticide-treated bednets 6.8 Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs 6.9 Incidence, prevalence and death rates associated with tuberculosis 6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course
Goal 7: Ensure environmental sustainability	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	7.1 Proportion of land area covered by forest 7.2 CO2 emissions, total, per capita and per $1 GDP (PPP) 7.3 Consumption of ozone-depleting substances
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.4 Proportion of fish stocks within safe biological limits 7.5 Proportion of total water resources used 7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums[b]
Goal 8: Develop a global partnership for development	

Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Includes a commitment to good governance, development and poverty reduction – both nationally and internationally Target 8.B: Address the special needs of the least developed countries Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction Target 8.C: Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly) Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	*Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.* <u>Official development assistance (ODA)</u> 8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income 8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) 8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes 8.5 ODA received in small island developing States as a proportion of their gross national incomes <u>Market access</u> 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty 8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries 8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product 8.9 Proportion of ODA provided to help build trade capacity <u>Debt sustainability</u> 8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative) 8.11 Debt relief committed under HIPC and MDRI Initiatives 8.12 Debt service as a percentage of exports of goods and services
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies,	8.14 Fixed-telephone subscriptions per 100 inhabitants

especially information and communications	8.15 Mobile-cellular subscriptions per 100 inhabitants
	8.16 Internet users per 100 inhabitants

Note. The Millennium Development Goals and targets come from the Millennium Declaration, signed by 189 countries, including 147 heads of state and government, in September 2000 (http://www.un.org/millennium/declaration/ares552e.htm) and from further agreement by member states at the 2005 World Summit (Resolution adopted by the General Assembly - A/RES/60/1, http://www.un.org/Docs/journal/asp/ws.asp?m=A/RES/60/1). The goals and targets are interrelated and should be seen as a whole. They represent a partnership between the developed countries and the developing countries "to create an environment—at the national and global levels alike—which is conducive to development and the elimination of poverty".

[a]For monitoring country poverty trends, indicators based on national poverty lines should be used, where available.

[b]The actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of the four characteristics: (a) lack of access to improved water supply; (b) lack of access to improved sanitation; (c) overcrowding (3 or more persons per room); and (d) dwellings made of non-durable material

APPENDIX D

INSTITUTIONAL REVIEW BOARD DOCUMENTATION

DIVISION OF RESEARCH

TEXAS A&M UNIVERSITY

DATE: July 29, 2015

MEMORANDUM

TO: Theresa PESL Murphrey
ALRSRCH - Agrilife Research - Ag Leadership, Education & Communication

FROM: Dr. James Fluckey
Chair
TAMU IRB

SUBJECT: Approval

Study Number: IRB2015-0419D

Title: Investing In Human And Institutional Capital Through Building Higher Education: An Analysis Of U.S. Assistance To Higher Education In Developing Countries From 2009-2014 And The Relationship To US Universities.

Approval Date: 07/29/2015

Continuing Review Due: 06/15/2016

Expiration Date: 07/15/2016

Documents Reviewed and Approved: Only IRB-stamped approved versions of study materials (e.g., consent forms, recruitment materials, and questionnaires) can be distributed to human participants. Please log into iRIS to download the stamped, approved version of all study materials. If you are unable to locate the stamped version in iRIS, please contact the iRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area.

Submission Components			
INTERVIEW PROTOCOL-revised	Version 1.1	06/18/2015	Approved
Email Requests-Qualitative Interviews-Revised	Version 1.3	06/29/2015	Approved
Study Consent Form			
Consent Form-Alvis Higher Ed	Version 1.2	06/29/2015	Approved

Document of Consent: Written consent in accordance with 45 CF 46.116/ 21 CFR 50.27

750 Agronomy Road, Suite 2701
1186 TAMU
College Station, TX 77843-1186
Tel. 979.458.1467 Fax. 979.862.3176
http://rcb.tamu.edu

INFORMATION SHEET

Project Title: INVESTING IN HUMAN AND INSTITUIONAL CAPITAL THROUGH BUILDING HIGHER EDUCATION: AN ANALYSIS OF U.S. ASSISTANCE TO HIGHER EDUCATION IN DEVELOPING COUNTRIES FROM 2009-2014 AND THE RELATIONSHIP TO U.S. UNIVERSITIES

You are invited to take part in a research study being conducted by Samantha Alvis, a Ph.D. student from Texas A&M University. The information in this form is provided to help you decide whether or not to take part. If you decide to take part in the study, you will be asked to sign this consent form. If you decide you do not want to participate, there will be no penalty to you, and you will not lose any benefits you normally would have.

Why Is This Study Being Done?
The purpose of this study is to explore U.S. government investments in higher education development from 2009-2014 in order to inform policy and identify the relationship between these investments and the U.S. higher education community as a dissertation study.

Why Am I Being Asked To Be In This Study?
You are being asked to be in this study because you work for a U.S. government agency, contractor or implementer that has projects/programs related to higher education development.

What Are the Alternatives to being in this study?
The alternative to being in the study is not to participate.

What Will I Be Asked To Do In This Study?
You will be asked to answer semi structured, open ended questions. Your participation in this study will last approximately 1-4 hours and may include between 1 and 4 visits.

Will Photos, Video or Audio Recordings Be Made Of Me during the Study?

The researcher will ask your permission to audio record during the interview to supplement her note taking for analyzing your responses. Only if you give your permission to do so will audio recordings be made. You will be able to participate in the study without being audio recorded. Indicate your decision below by initialing in the space provided.

_____ I give my permission for audio recordings to be made of me during my participation in this research study.

_____ I do not give my permission for audio recordings to be made of me during my participation in this research study. However, I would still like to participate.

Are There Any Risks To Me?
The things that you will be doing have no more risks than you would come across in everyday life.

Will There Be Any Costs To Me?
Aside from your time, there are no costs for taking part in the study.

Will I Be Paid To Be In This Study?
You will not be paid for being in this study.

Will Information From This Study Be Kept Private?
The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published. Notes will be coded immediately following the interview. Research records will be stored securely and only Samantha Alvis will have access to the records. Information about you will be kept confidential to the extent permitted or required by law

IRB NUMBER: IRB2015-0419D
IRB APPROVAL DATE: 03/16/2016
IRB EXPIRATION DATE: 07/15/2016

Information will be stored in a locked file cabinet and computer files protected with a password. This consent form will be filed securely in an official area.

People who have access to your information include the Principal Investigator and research study personnel. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Subjects Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

Information about you and related to this study will be kept confidential to the extent permitted or required by law.

Who may I Contact for More Information?
You may contact the Principal Investigator, Samantha Alvis, Ph.D. student, to tell her about a concern or complaint about this research at 202-478-6057 or salvis@aplu.org. You may also contact my committee chair, Theresa Murphrey, Ph.D. at 979-458-2749 or t-murphrey@tamu.edu.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Research Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu.

What if I Change My Mind About Participating?
This research is voluntary and you have the choice whether or not to be in this research study. You may decide to not begin or to stop participating at any time. If you choose not to be in this study or stop being in the study, there will be no effect to you.

Thank you.

Samantha Alvis

IRB NUMBER: IRB2015-0419D
IRB APPROVAL DATE: 03/16/2016
IRB EXPIRATION DATE: 07/15/2016

INVESTING IN HUMAN AND INSTITUIONAL CAPITAL THROUGH BUILDING HIGHER EDUCATION: AN ANALYSIS OF U.S. ASSISTANCE TO HIGHER EDUCATION IN DEVELOPING COUNTRIES FROM 2009-2014 AND THE RELATIONSHIP TO US UNIVERSITIES

Subject Line: Request for Interview

Dear [participant name]:

On behalf of the Association of Public and Land-grant Universities (APLU), our Knowledge Center for Advancing Development through Higher Education and as part of dissertation research for myself, Samantha Alvis, a Ph.D. student at Texas A&M University, I'd like to ask you to participate in an one-one-one interview to discuss U.S. government assistance on projects related to higher education in developing countries. The purpose of this study is to explore U.S. government investments in higher education development from 2009-2014 to inform policy and identify the relationship between these investments and the U.S. higher education community.

Participants in the study include those who work or have knowledge of US development assistance related to higher education.

Interviews will take place at a mutually agreed upon location or can be conducted via Skype or over the phone if an in-person interview is not possible. You will be asked to provide insight and information on the types of projects and programs labeled as "higher education" sector development. It is anticipated that initial interviews may last up to 60 minutes and you may be asked for 1-3 additional interviews that may also last up to 60 minutes each. It is anticipated that the total amount of time will not exceed 4 hours.

Your comments and responses during the interview will be voluntary and confidential. All information collected will be coded (all identifying information will be removed) immediately following the interview.

You may withdraw from this survey at any time without penalty. There are minimal risks associated with this project that are not greater that those encountered in daily life. There are no anticipated benefits for participants

Thank you for considering participating in this study. If you are willing to participate, could we schedule a time on <date> to meet. If this date and time is not convenient, please suggest another time. If you are not willing to participate, please reply to this email letting me know.

Please feel free to me at 202-478-6057 or contact me via email at salvis@aplu.org if you have any questions. For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Research Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at irb@tamu.edu.

Thank you,

Samantha Alvis
Leland Hunger Fellow
salvis@aplu.org
202-478-6057
1307 New York Ave. Suite 400
Washington, DC 20005

IRB NUMBER: IRB2015-0419D
IRB APPROVAL DATE: 07/29/2015
IRB EXPIRATION DATE: 07/15/2016

APPENDIX E

AUDIT TRAIL

Common Perceptions of Benefits and Challenges of Higher Education Development	
Challenges to Higher Education	
Structures/Restructuring	P 5
Investment in/Underfunding of	P6, P9
Economic and Political Climates	P5, P 9
Viewed as Elite/Ivory Tower	P4, P5, P8, P13
Corruption	P5, P10, P9
Barriers; Quality/Access/Equity/Cost	P2, P4, P5, P8, P9, P10
Quantifying Results/ Showing Impact/Lack of Data	P3, P4, P7, P8, P10, P9, P11
Response to Private Sector/Labor Market/Relevant Curriculum	P4, P7, P9
Administration Changes/Hill Support	P6, P9, P11
Length of Projects	P7, P8
Challenges of Working with U.S. Universities	
Multiple Bureaucracies/ Not set-up like NGOs	P5, P13
Calendar/Academic Schedules	P6, P11
Lack of understanding of how funding/agency works	P4, P6, P7, P13
Expensive/Overhead	P3, P9, P10, P11
Conflicting Priorities/ Have local stakeholders/ Mission Statements that don't align/ Domestic agenda	P1, P6, P7, P8, P9, P11

Incentive Structures	P4, P7, P8
Don't have bandwidth	P10
Benefits of Higher Education	
Provide policy makers and others with data/Research ability	P1, P4, P6, P10
Diplomacy/Security/ Understanding of the U.S.	P3, P4, P6, P8, P9, P10, P11
Building of human/local capacity/future leaders	P3, P5, P6, P7, P8, P9
Drivers of: Economic Development/Workforce Development/Innovation	P3, P4, P5, P6, P7, P8, P11, P13
Political Stability	P3
Right thing to do	P3
HE as a tool for development	P4, P7
Benefits of Working with U.S. Universities	
Long-term relationships/ long-game/continued relationships	P5, P6, P13
Inherent knowledge of HEI/expertise/similar issues	P6, P7, P8, P9, P11, P13
Value internationalization of students, faculty, staff/ Pipeline for exchange & joint activities/ Ability for students to gain knowledge	P5, P6, P7, P8, P13
Community centered	P4
Research and analysis ability/knowledge development	P1, P4, P9, P10, P11, P13
Congressional support	P6
Demand for U.S. style education	P8

What is needed by the Agency to work better with U.S. Universities	
More outreach from US institutions to HEIs overseas	P2
Better quality applications	P2
Agency can't seek them out, they need to apply	P3, P8
Better understand of how agency functions/Alignment with agency priorities/mission of HEI to engage	P6, P7, P8, P11
To advocate for HE development on the Hill	P6, P7, P9

APPENDIX F

TOTAL DOLLARS BY AGENCY, REGARDLESS OF MEETING HIGHER EDUCATION DEFINITION

Inter-American Foundation		$183,626.00	$59,035.00	$242,661.00
Commitment		$133,626.00	$22,000.00	$155,626.00
Commitment-Deobligated			-$965.00	-$965.00
Disbursement		$50,000.00	$38,000.00	$88,000.00
Millennium Challenge Corporation	$16,479,022.62	$43,837,653.15	$5,299,747.58	$65,616,423.35
Commitment	$16,200,000.00	$40,894,335.62		$57,094,335.62
Commitment-Deobligated		-$73,862.00	-$20,473.62	-$94,335.62
Deobligated	-$1,439,719.79		-$23,840.84	-$1,463,560.63
Disbursement	$1,718,742.41	$3,017,179.53	$5,344,062.04	$10,079,983.98
U.S. Agency for International Development	$209,522,417.44	$295,835,637.07	$271,447,120.92	$776,805,175.43
Commitment	$115,864,826.70	$171,131,575.40	$156,040,880.70	$443,037,282.80
Commitment-Deobligated	-$4,193,421.36	$318,731.15	$3,838,017.86	-$36,672.35
Deobligated	-$7,521,207.49	-$6,887,894.20	-$1,771,296.60	-$16,180,398.29
Disbursement	$105,372,219.59	$131,273,224.72	$113,339,518.96	$349,984,963.27
Total	$226,001,440.06	$339,856,916.22	$276,805,903.50	$842,664,259.78

APPENDIX G

DOLLAR TOTALS BY REGION, REGARDLESS OF MEETING HIGHER EDUCATION DEFINITION (ALL TRANSACTION TYPES)

Afghanistan and Pakistan	$31,102,883.23	$81,251,370.34	$76,652,960.03	$189,007,213.60
Commitment	$13,053,454.49	$59,785,150.34	$52,616,019.00	$125,454,623.83
Commitment-Deobligated	-$2,395,980.79	-$958,797.70		-$3,354,778.49
Deobligated	-$4,499,089.00	-$1,061,930.48	-$47,986.83	-$5,609,006.31
Disbursement	$24,944,498.53	$23,486,948.18	$24,084,927.86	$72,516,374.57
Africa	$38,822,210.23	$40,655,745.66	$20,156,014.48	$99,633,970.37
Commitment	$17,132,935.40	$23,313,704.53	$5,249,543.25	$45,696,183.18
Commitment-Deobligated	-$2,560.00		-$807,030.32	-$809,590.32
Deobligated	-$1,578,996.68	-$2,308,006.47	-$707,902.12	-$4,594,905.27
Disbursement	$23,270,831.51	$19,650,047.60	$16,421,403.67	$59,342,282.78
Asia	$61,755,714.06	$40,225,923.81	$31,822,701.89	$133,804,339.76
Commitment	$44,149,193.02	$21,179,349.68	$15,268,287.76	$80,596,830.46
Commitment-Deobligated	-$571,415.68	-$527,282.31	-$61,028.42	-$1,159,726.41
Deobligated	-$398,574.17	-$701,698.91	-$271,431.83	-$1,371,704.91
Disbursement	$18,576,510.89	$20,275,555.35	$16,886,874.38	$55,738,940.62
Europe and Eurasia	$4,472,101.88	$58,771,995.27	$13,026,508.73	$76,270,605.88
Commitment	$2,261,130.00	$53,429,335.62	$5,260,137.54	$60,950,603.16
Commitment-Deobligated	-$6,718.54	-$112,336.51	-$20,473.62	-$139,528.67
Deobligated	-$1,394,128.16	-$165,717.86	-$337,042.90	-$1,896,888.92
Disbursement	$3,611,818.58	$5,620,714.02	$8,123,887.71	$17,356,420.31
Latin America and the Caribbean	$23,520,808.06	$22,979,154.42	$13,028,980.22	$59,528,942.70
Commitment	$11,173,884.00	$10,590,196.00	$3,041,797.00	$24,805,877.00
Commitment-Deobligated		-$30,193.23	-$965.00	-$31,158.23
Deobligated	-$1,025.07			-$1,025.07
Disbursement	$12,347,949.13	$12,419,151.65	$9,988,148.22	$34,755,249.00

Middle East	$39,078,917.66	$44,286,339.13	$79,658,555.24	$163,023,812.03
Commitment	$24,906,701.00	$19,626,243.00	$57,510,764.00	$102,043,708.00
Commitment-Deobligated	-$1,193,637.84	-$9,675.95	-$267,577.62	-$1,470,891.41
Deobligated		-$883,084.72	-$72,000.00	-$955,084.72
Disbursement	$15,365,854.50	$25,552,856.80	$22,487,368.86	$63,406,080.16
Multiple	$1,720,016.47	$4,164,267.19	$7,339,384.64	$13,223,668.30
Commitment	$867,602.13	$1,822,980.35		$2,690,582.48
Commitment-Deobligated	$25,060.53	$1,884,990.46	$5,181,656.78	$7,091,707.77
Deobligated		-$1,126,217.07		-$1,126,217.07
Disbursement	$827,353.81	$1,582,513.45	$2,157,727.86	$4,567,595.12
United States	$432,332.83	$581,232.83	$44,791.09	$1,058,356.75
Commitment	$432,332.83	$148,900.00		$581,232.83
Disbursement		$432,332.83	$44,791.09	$477,123.92
Worldwide	$25,096,455.64	$46,940,887.57	$35,076,007.18	$107,113,350.39
Commitment	$18,087,593.83	$22,263,677.50	$17,116,332.15	$57,467,603.48
Commitment-Deobligated	-$48,169.04	-$1,835.61	-$208,002.56	-$258,007.21
Deobligated	-$1,089,114.20	-$641,238.69	-$358,773.76	-$2,089,126.65
Disbursement	$8,146,145.05	$25,320,284.37	$18,526,451.35	$51,992,880.77
Total	$226,001,440.06	$339,856,916.22	$276,805,903.50	$842,664,259.78

APPENDIX H

TOTALS BY COUNTRY REGARDLESS OF MEETING HIGHER EDUCATION DEFINITION

Country	2013	2014	2015	Total
Afghanistan	$16,812,809.94	$19,773,902.38	$15,550,936.97	$52,137,649.29
Armenia	$91,694.63	$330,476.00	$88,391.00	$510,561.63
Bangladesh			$101,357.35	$101,357.35
Bulgaria	$318,157.48	$370,580.92	$109,702.18	$798,440.58
Burkina Faso			$1,374,806.00	$1,374,806.00
Burma	$175,457.22	$954,125.24	$646,610.45	$1,776,192.91
Cambodia			$3,600.00	$3,600.00
China	$117,173.95	$647,562.24	$149,573.45	$914,309.64
China (Taiwan)	$471,386.11	$2,195.98		$473,582.09
China (Tibet)	$200,000.00	$100,000.00		$300,000.00
Colombia		$50,000.00	$38,000.00	$88,000.00
Comoros		$6,000.00	$6,000.00	$12,000.00
Costa Rica	$917,897.88	$504,174.95	$488,802.74	$1,910,875.57
Czech Republic	$109,547.00	$220,979.00	$69,474.00	$400,000.00
Democratic Republic of the Congo			$16,400.31	$16,400.31
Egypt	$2,790,467.13	$6,432,083.46	$6,810,908.20	$16,033,458.79
El Salvador	$51,538.56	$247,525.41	$1,544,690.54	$1,843,754.51
Ethiopia	$431,426.43	$653,786.05	$643,731.60	$1,728,944.08
Georgia	$770,000.00	$2,484,100.56	$5,146,763.16	$8,400,863.72
Ghana	$812,883.35	$460,072.28	$251,526.93	$1,524,482.56
Greece	$581,574.41	$318,134.45	$74,709.80	$974,418.66
Guatemala	$256,084.20	$806,359.87	$1,429,953.69	$2,492,397.76
Haiti	$73,848.93	$38,978.66		$112,827.59
Honduras	$303,580.61	$633,930.17	$190,407.83	$1,127,918.61
India	$583,509.97	$355,000.00	$61,490.03	$1,000,000.00
Indonesia	$8,908,045.43	$10,448,193.16	$7,835,907.54	$27,192,146.13
Israel	$241,316.64	$175,374.00	$1,061,082.09	$1,477,772.73
Kenya	$1,071,053.05	$1,103,258.05	$895,915.12	$3,070,226.22
Kosovo	$1,675,957.49	$1,841,454.39	$2,588,713.57	$6,106,125.45
Kyrgyzstan	$1,604,600.84	$782,996.02	$1,250,000.00	$3,637,596.86

Lebanon	$10,534,559.70	$15,942,616.33	$11,095,025.70	$37,572,201.73
Liberia	$836,338.17	$3,933,790.84	$2,704,755.03	$7,474,884.04
Malawi	$544,632.81	$413,049.95		$957,682.76
Mexico	$672,009.62	$1,512,033.51	$1,205,374.44	$3,389,417.57
Mongolia		$61,000.00		$61,000.00
Multiple Countries - Multiple Regions	$827,353.81	$1,582,513.45	$2,157,727.86	$4,567,595.12
Multiple Countries - Africa	$10,667,017.35	$1,843,312.58	$3,906,934.57	$16,417,264.50
Multiple Countries - Asia	$574,681.42	$201,951.44	$440,489.00	$1,217,121.86
Multiple Countries - Latin America and Caribbean	$10,152,302.67	$8,626,149.08	$5,090,918.98	$23,869,370.73
Namibia	$1,718,742.41	$533,078.97	$168,892.36	$2,420,713.74
Nigeria	$70,004.00			$70,004.00
Pakistan	$8,131,688.59	$3,713,045.80	$8,533,990.89	$20,378,725.28
Philippines	$2,215,609.92	$2,688,690.30	$3,791,822.46	$8,696,122.68
Rwanda		$158,941.87	$767,721.84	$926,663.71
Senegal	$599,848.39	$496,194.79	$429,141.17	$1,525,184.35
Sierra Leone	$181,299.45			$181,299.45
Somalia	$943,262.00			$943,262.00
South Africa	$516,196.50	$315,295.25	$132,468.19	$963,959.94
South Sudan	$1,197,583.65	$2,378,702.44	$1,233,729.91	$4,810,016.00
Sudan	$744,800.63	$106,401.66		$851,202.29
Tanzania	$294,939.00	$1,154,741.00	$577,061.69	$2,026,741.69
Thailand	$609,833.66	$1,138,378.56	$150,707.75	$1,898,919.97
Timor-Leste	$476,471.44	$1,059,210.58	$844,312.25	$2,379,994.27
Turkey	$62,393.00	$51,222.00	$46,134.00	$159,749.00
Turkmenistan	$257,243.09	$102,434.01		$359,677.10
Uganda	$2,710,808.32	$5,793,421.87	$3,312,510.43	$11,816,740.62
Ukraine	$2,494.57	$3,766.70		$6,261.27
United States	$5,282,538.55	$16,777,847.81	$12,460,415.93	$34,520,802.29
Vietnam	$2,233,180.50	$1,733,817.82	$1,610,812.62	$5,577,810.94
West Bank and Gaza	$1,799,511.03	$3,002,783.01	$3,520,352.87	$8,322,646.91
Worldwide	$2,863,606.50	$8,974,769.39	$6,110,826.51	$17,949,202.40

Zambia		$300,000.00		$300,000.00
Total	$107,090,962.00	$134,340,404.25	$118,721,581.00	$360,152,947.25

APPENDIX I

BREAKDOWN OF DISBURSEMENTS BY COUNTY BY HIGHER EDUCATION SUB-CATEGORY

Country	2013	2014	2015	Total
Afghanistan	$15,693,796.40	$19,612,147.44	$15,362,660.24	$50,668,604.08
Institutional Capacity Development	$1,543,432.42	$14,772,561.44	$15,233,060.71	$31,549,054.57
Professional Development		$163,827.47	$125,402.53	$289,230.00
Construction/Educational Infrastructure	$14,150,363.98	$4,675,758.53	$4,197.00	$18,830,319.51
Armenia	$91,694.63	$330,476.00	$88,391.00	$510,561.63
Construction/Educational Infrastructure	$91,694.63	$330,476.00	$88,391.00	$510,561.63
Bulgaria	$318,157.48	$265,580.92	$35,702.18	$619,440.58
Construction/Educational Infrastructure	$318,157.48	$265,580.92	$35,702.18	$619,440.58
Burkina Faso			$1,374,806.00	$1,374,806.00
Engaging Higher Education Institutions in Development			$1,374,806.00	$1,374,806.00
Burma	$72,291.65	$807,290.81	$646,610.45	$1,526,192.91
Institutional Capacity Development		$171,756.06	$168,972.77	$340,728.83
Engaging Higher Education Institutions in Development		$397,647.00	$477,637.68	$875,284.68
Professional Development		$237,887.75		$237,887.75
Unable to Determine	$72,291.65			$72,291.65
China	$117,173.95	$647,562.24	$149,573.45	$914,309.64
Construction/Educational Infrastructure	$117,173.95	$647,562.24	$149,573.45	$914,309.64
China (Taiwan)	$471,386.11	$2,195.98		$473,582.09
Construction/Educational Infrastructure	$471,386.11	$2,195.98		$473,582.09
Costa Rica	$917,897.88	$504,174.95	$488,802.74	$1,910,875.57
Construction/Educational Infrastructure	$917,897.88	$504,174.95	$488,802.74	$1,910,875.57

Czech Republic		$109,547.00	$220,979.00	$69,474.00	$400,000.00
	Construction/Educational Infrastructure	$109,547.00	$220,979.00	$69,474.00	$400,000.00
Democratic Republic of the Congo				$16,400.31	$16,400.31
	Engaging Higher Education Institutions in Development			$16,400.31	$16,400.31
Egypt		$2,790,467.13	$6,432,083.46	$6,810,908.20	$16,033,458.79
	Professional Development	$2,365,000.00	$4,034,159.73	$6,122,099.59	$12,521,259.32
	Construction/Educational Infrastructure	$425,467.13	$59,990.00	$688,808.61	$1,174,265.74
	Unable to Determine		$2,337,933.73		$2,337,933.73
El Salvador		$1,731.04	$247,525.41	$1,544,690.54	$1,793,946.99
	Institutional Capacity Development		$247,525.41	$1,544,690.54	$1,792,215.95
	Professional Development	$1,731.04			$1,731.04
Ethiopia		$431,426.43	$604,644.19	$338,735.38	$1,374,806.00
	Institutional Capacity Development	$431,426.43	$604,644.19	$338,735.38	$1,374,806.00
Georgia			$2,484,100.56	$5,146,763.16	$7,630,863.72
	Institutional Capacity Development		$2,484,100.56	$5,146,763.16	$7,630,863.72
Ghana		$812,883.35	$456,609.78	$250,000.00	$1,519,493.13
	Institutional Capacity Development	$400,362.29	$212,245.27		$612,607.56
	Construction/Educational Infrastructure	$412,521.06	$244,364.51	$250,000.00	$906,885.57
Greece		$581,574.41	$318,134.45	$74,709.80	$974,418.66
	Construction/Educational Infrastructure	$581,574.41	$318,134.45	$74,709.80	$974,418.66
Guatemala		$256,084.20	$639,940.72	$448,791.71	$1,344,816.63
	Construction/Educational Infrastructure	$256,084.20	$639,940.72	$448,791.71	$1,344,816.63
Haiti		$73,848.93	$38,978.66		$112,827.59
	Construction/Educational Infrastructure	$73,848.93	$38,978.66		$112,827.59
Honduras		$303,580.61	$633,930.17	$190,407.83	$1,127,918.61
	Construction/Educational Infrastructure	$303,580.61	$633,930.17	$190,407.83	$1,127,918.61

India		$583,509.97	$355,000.00	$61,490.03	$1,000,000.00
	Professional Development	$583,509.97	$355,000.00	$61,490.03	$1,000,000.00
Indonesia		$8,672,212.43	$9,620,658.32	$7,389,673.83	$25,682,544.58
	Policy Development and Reform	$3,961,290.41	$4,053,022.04	$2,953,964.99	$10,968,277.44
	Institutional Capacity Development	$3,227,873.42	$2,362,649.45	$1,200,808.19	$6,791,331.06
	Engaging Higher Education Institutions in Development	$998,023.40	$1,473,162.79	$335,824.23	$2,807,010.42
	Professional Development	$485,025.20	$1,731,824.04	$2,899,076.42	$5,115,925.66
Israel		$241,316.64	$175,374.00	$1,061,082.09	$1,477,772.73
	Construction/Educational Infrastructure	$241,316.64	$175,374.00	$1,061,082.09	$1,477,772.73
Kenya		$880,925.05	$903,154.69	$211,112.62	$1,995,192.36
	Institutional Capacity Development	$880,925.05	$598,508.19	$115,759.12	$1,595,192.36
	Construction/Educational Infrastructure		$304,646.50	$95,353.50	$400,000.00
Kosovo		$506,808.59	$1,576,798.97	$2,588,713.57	$4,672,321.13
	Institutional Capacity Development	$164,359.30			$164,359.30
	Engaging Higher Education Institutions in Development	$96,232.31			$96,232.31
	Professional Development	$246,216.98	$1,576,798.97	$2,588,713.57	$4,411,729.52
Kyrgyzstan		$1,604,600.84	$782,996.02	$1,250,000.00	$3,637,596.86
	Policy Development and Reform	$34,812.00	$8,804.00		$43,616.00
	Institutional Capacity Development	$1,423,178.00	$773,900.00	$1,250,000.00	$3,447,078.00
	Professional Development	$146,610.84	$292.02		$146,902.86
Lebanon		$10,125,577.70	$15,232,472.33	$10,507,890.70	$35,865,940.73
	Professional Development	$6,917,773.39	$12,311,169.12	$8,881,481.15	$28,110,423.66
	Construction/Educational Infrastructure	$3,207,804.31	$2,921,303.21	$1,626,409.55	$7,755,517.07
Liberia		$830,790.81	$3,933,790.84	$2,704,755.03	$7,469,336.68
	Institutional Capacity Development	$543,012.61	$3,933,790.84	$2,704,755.03	$7,181,558.48
	Construction/Educational Infrastructure	$287,778.20			$287,778.20

Malawi	$544,632.81	$413,049.95		$957,682.76
Institutional Capacity Development	$544,632.81	$413,049.95		$957,682.76
Mexico	$246,432.03	$17,334.02	$4,510.32	$268,276.37
Engaging Higher Education Institutions in Development	$175,215.36	$147.83	$4,510.32	$179,873.51
Professional Development	$71,216.67	$17,186.19		$88,402.86
Multiple Countries - Africa	$7,867,017.35	$1,700,312.58	$3,575,922.24	$13,143,252.17
Policy Development and Reform	$100,000.00			$100,000.00
Institutional Capacity Development	$970,451.67	$504,822.74		$1,475,274.41
Engaging Higher Education Institutions in Development	$6,396,565.68	$42,575.89		$6,439,141.57
Professional Development	$400,000.00	$1,152,913.95	$3,575,922.24	$5,128,836.19
Multiple Countries - Asia	$18,173.21	$175,545.51	$440,489.00	$634,207.72
Institutional Capacity Development			$440,489.00	$440,489.00
Engaging Higher Education Institutions in Development	$18,173.21	$175,545.51		$193,718.72
Multiple Countries - Latin America and Caribbean	$9,922,193.33	$8,576,953.29	$4,590,919.98	$23,090,066.60
Engaging Higher Education Institutions in Development	$277,448.12	$1,359,064.49	$127,220.93	$1,763,733.54
Professional Development	$9,644,745.21	$7,217,888.80	$4,463,699.05	$21,326,333.06
Namibia	$1,718,742.41	$533,078.97	$168,892.36	$2,420,713.74
Policy Development and Reform	$1,718,742.41	$533,078.97	$168,892.36	$2,420,713.74
Nigeria	$70,004.00			$70,004.00
Institutional Capacity Development	$70,004.00			$70,004.00
Pakistan	$7,942,386.75	$3,149,404.85	$4,215,026.60	$15,306,818.20
Policy Development and Reform			$476,309.02	$476,309.02
Institutional Capacity Development	$5,126,064.64	$186,406.00	$423,156.28	$5,735,626.92
Engaging Higher Education Institutions in Development	$161,115.11	$907,762.85	$1,231,701.30	$2,300,579.26

	Professional Development			$226,860.00	$226,860.00
	Construction/Educational Infrastructure	$2,655,207.00	$2,055,236.00	$1,857,000.00	$6,567,443.00
Philippines		$315,492.92	$2,688,690.30	$3,791,822.46	$6,796,005.68
	Policy Development and Reform			$23,162.18	$23,162.18
	Institutional Capacity Development	$64,980.07	$2,575,528.60	$3,518,680.72	$6,159,189.39
	Engaging Higher Education Institutions in Development			$117,821.11	$117,821.11
	Construction/Educational Infrastructure	$250,512.85	$113,161.70	$132,158.45	$495,833.00
Senegal		$599,848.39	$204,499.14	$236,388.90	$1,040,736.43
	Institutional Capacity Development	$599,848.39	$204,499.14	$236,388.90	$1,040,736.43
South Africa		$394,202.09	$312,499.48	$4,462.60	$711,164.17
	Institutional Capacity Development	$394,202.09	$312,499.48	$4,462.60	$711,164.17
South Sudan		$1,197,583.65	$2,378,702.44	$1,233,729.91	$4,810,016.00
	Institutional Capacity Development	$1,197,583.65	$2,378,702.44	$1,056,590.40	$4,632,876.49
	Engaging Higher Education Institutions in Development			$177,139.51	$177,139.51
Sudan		$744,800.63	$106,401.66		$851,202.29
	Institutional Capacity Development	$744,800.63	$106,401.66		$851,202.29
Tanzania				$150,617.69	$150,617.69
	Professional Development			$150,617.69	$150,617.69
Thailand			$948,212.22	$91,298.00	$1,039,510.22
	Construction/Educational Infrastructure		$948,212.22	$91,298.00	$1,039,510.22
Timor-Leste		$476,471.44	$1,059,210.58	$844,312.25	$2,379,994.27
	Professional Development	$476,471.44	$1,059,210.58	$844,312.25	$2,379,994.27
Turkmenistan		$257,243.09	$102,434.01		$359,677.10
	Professional Development	$257,243.09	$102,434.01		$359,677.10

Uganda	$2,710,808.32	$5,793,421.87	$3,206,113.43	$11,710,343.62
Institutional Capacity Development	$985,171.89	$1,067,262.44	$1,324,964.50	$3,377,398.83
Engaging Higher Education Institutions in Development	$1,725,636.43	$4,726,159.43	$1,881,148.93	$8,332,944.79
Ukraine	$2,494.57	$3,766.70		$6,261.27
Institutional Capacity Development	$2,494.57	$3,766.70		$6,261.27
United States	$4,822,578.43	$16,777,847.81	$12,460,415.93	$34,060,842.17
Institutional Capacity Development		$475,000.00	$280,000.00	$755,000.00
Engaging Higher Education Institutions in Development	$4,822,578.43	$15,633,667.71	$11,720,700.47	$32,176,946.61
Professional Development		$669,180.10	$459,715.46	$1,128,895.56
Vietnam	$2,233,180.50	$1,733,817.82	$1,610,812.62	$5,577,810.94
Institutional Capacity Development	$2,233,180.50	$1,733,817.82	$1,000,633.98	$4,967,632.30
Engaging Higher Education Institutions in Development			$110,178.64	$110,178.64
Professional Development			$200,000.00	$200,000.00
Construction/Educational Infrastructure			$300,000.00	$300,000.00
West Bank and Gaza	$1,669,694.30	$2,798,535.80	$2,743,679.87	$7,211,909.97
Professional Development	$1,669,694.30	$2,732,860.80	$2,591,490.34	$6,994,045.44
Construction/Educational Infrastructure		$65,675.00	$152,189.53	$217,864.53
Worldwide	$528,972.25	$7,353,817.10	$4,508,139.68	$12,390,929.03
Institutional Capacity Development	$233,620.12	$68,325.99	$1,705.85	$303,651.96
Engaging Higher Education Institutions in Development	$222,724.39	$7,251,608.05	$4,460,098.83	$11,934,431.27
Professional Development	$6,510.80			$6,510.80
Construction/Educational Infrastructure	$66,116.94	$33,883.06	$46,335.00	$146,335.00
Total	$90,772,235.70	$123,654,136.01	$102,689,698.70	$317,116,070.41

APPENDIX J

NON-U.S. UNIVERSITIES WITH PROJECT NAMES

Non-U.S. University
American College of Greece
ASHA - American College of Greece
American Farm School
ASHA - American Farm School
American Farm School
ASHA - American Farm School
American Friends of the Heberew University, Inc.
ASHA - American Friends of the Heberew University, Inc.
ASHA - Heberew University
American University Bulgaria
ASHA - The American University Bulgaria
American University Central Asia
AUCA MOVING FORWARD
American University in Bulgaria
ASHA - American University in Bulgaria
American University in Cairo
ASHA - American University in Cairo
American University in Kosovo
Scholarships
Transformational Leadership Program
American University of Afghanistan
Support of Establishment of American University of Afghanistan
American University of Armenia Corp
ASHA - American University of Armenia
ASHA - American University of Armenia
ASHA - American University of Armenia Corp
American University of Beirut
ASHA - American University of Beirut
Scholarships
University Scholarship Program
ASHESI University Foundation
ASHA - Ashesi University Engineering Construction
ASHA- Ashesi University Engineering Construction
Cuttington University Graduate School
Cuttington University Training

Earth University Foundation
ASHA - EARTH University
Escuela Agricola Panamericana
ASHA - Escuela Agricola Panamericana
Feinberg Graduate School of Weizmann
ASHA - Feinberg Graduate School of Weizmann
Forman Christian College
Construction of 360-Bed Women Hostel at Forman Christian College
FRIENDS OF THE AMERICAN UNIVERSITY OF AFGHANISTAN
ASHA - Equipment for American University of Afghanistan
Ghana Institute of Management and Public Administration
YALI Regional Leadership Training Centre - Ghana
Haigazian University
University Student Assistance Program
Lebanese American University
ASHA - Lebanese American University
University Scholarship Program - II
University Scholarship Program - III
University Scholarship Program - V
University Scholarship Program - VI
University Student Assistance Program
Makerere University
Higher Education Solutions Network - ResilientAfrica Network
Mehran University of Engineering and Technology
Center for Advanced Studies in Water at MUET
National University of Sciences and Technology
Centers for Advanced Studies in Energy (CAS-EN)
Nazareth Academic Institute Inc.
ASHA - Nazareth Academic Institute Inc.
STKIP Kebangkitan Nasional (STKIP National Awakening)
Smart Lab Program Under University Program
Tel Aviv University
ASHA - Tel Aviv University
Trustees of Anatolia College
ASHA - Anatolia College
U.S. Foundation of the University of The Valley of Guatemala
ASHA - University of the Valley of Guatemala
Universidad de la Cordillera/Observatorio del Racismo en Bolivia
Strengthening the Capacity of the Network of Observatories on Racism in the Americas
University of Agriculture, Faisalabad, Punjab

Center for Advanced Studies in FSA at UAF
University of Central Asia
Cross-Border Vocational Education Program in Badakhshan (CVEB)
University of Engineering and Technology, Peshawar
Center for Advanced Studies in Energy at PUET
University of Johannesburg
Strengthening Foundation Phase Teacher Education Program
University of the Philippines - UPecon Foundation, Inc
Energy Policy and Development Program

APPENDIX K

DESCRIPTIONS OF SELECTED HIGHER EDUCATION DEVELOPMENT ASSISTANCE PROJECT, 2013-2015

Program/Project Name	Description
Adaptation to Climate Risk in Indonesia (Acri)	On July 8, 2011, USAID/Indonesia (USAID) awarded a three-year University Partnerships (UP) cooperative agreement No. AID-497-A-11-00011 totaling US$636,549 to Columbia University (CU) and Institut Pertanian Bogor (IPB) to provide support for the partnership entitled "Adaptation to Climate Risk in Indonesia." The purpose of this cooperative agreement is to help build capacity to strengthen Indonesia's capacity for climate change adaptation in meeting its development challenges. (http://pdf.usaid.gov/pdf_docs/PA00JRCZ.pdf)
Advancement and Development through Entrepreneurship Program and Training (ADEPT)	Advancement and Development through Entrepreneurship Programs and Training (ADEPT) Global Development Alliance, is a public-private partnership funded by USAID with the IIB, in collaboration with major alliance partners Hewlett Packard (HP), the VinaCapital Foundation's Lotus Impact fund, and Business for Social Responsibility (BSR). This program is designed to bring a lasting legacy of entrepreneurship skills, opportunities and capacity building to the business and higher-education community of Burma/Myanmar. The ADEPT partnership is a flagship program under the US Government's first bilateral agreement with the Government of Burma/Myanmar since 1957. (http://kelley.iu.edu/IIB/ProgramsandIntitiatives/ADEPT/page43597.html)
Advancing Democracy and Producing Transformations in Information & Technology for Burma (ADAPT-IT)	This USAID Higher Education Partnership grant, called Advancing Democracy and Promoting Transformations with Information Technology (ADAPT-IT), brings together University of Washington's (UW) Jackson School of International Studies and the Information School with Burma-based public and private sector stakeholders, along with a close collaboration between Microsoft and the U.S. Government. (https://jsis.washington.edu/news/university-of-washington-and-microsoft-corp-unite-on-major-usaid-initiative-to-strengthen-higher-education-and-sustain-reform-in-burma-myanmar/)

American Educators for Africa (AEFA) Program	The USAID-funded American Educators for Africa (AEFA) Program (Cooperative Agreement # AID-OAA-A-12-00037) being implemented by IFESH supports USAID's efforts to improve reading skills at the basic education level in Ethiopia and Liberia. The program focuses on improving teacher effectiveness, increasing availability and use of reading materials; and strengthening classroom and school management. (http://www.schoolleadership20.com/forum/topics/american-educators-for-africa-aefa-program?xg_source=activity)
ASHA - Catholic University of Sudan	Catholic University of Sudan will construct the second phase of the Library Information Technology Center and classroom complex. (https://www.usaid.gov/sites/default/files/documents/1866/2011%20USAID-ASHA-Annual%20Report.pdf)
Association for the Development of Education in Africa Working Group on Education Management and Policy Support (WGEMPS)	The Working Group's main objective is to support the African Union and its Member States in developing sustainable institutional capacity for results-based policy and management of the education sector. (http://www.adeanet.org/en/working-groups/education-management-and-policy-support)
AUCA MOVING FORWARD	AUCA is an international, multi-disciplinary university in the American liberal arts tradition. The AUCA Moving Forward project focuses on fostering faculty development; recruiting a more diverse student body; providing scholarships for students across Central Asia; upgrading technology systems for academic and admissions processes and for distance learning; and developing the university as a resource for the wider community. (https://www.usaid.gov/news-information/fact-sheets/auca-moving-forward)
Avansa Agrikultura (AVANSA) Project	Over the next five years, USAID's Avansa Agrikultura Project will focus on improving the country's horticulture value chain—including farm inputs, agricultural extension, storage, transportation, trade, and policies—by providing technical assistance and facilitating market linkages within the vegetable and fruit sectors in over 250 communities throughout five districts (Aileu, Ainaro, Bobonaro, Dili, and Ermera). (https://www.usaid.gov/timor-leste/press-releases/apr-6-2015-usaid-announces-award-usaid%E2%80%99s-avansa-agrikultura-project)

Burma Outreach and Distance Education Project (BODEP)	BODEP aimed to address the increasing need for civil society leaders who can manage change, create networks, mobilize communities and build coalitions in Burma. This program fit within the space that was opening for civil society activities in Burma particularly following the natural disaster of cyclone Nargis in 2007 and has taken advantage of the more recent positive political changes moving away from a military form of government. The goal of the project, as articulated in the program description in 2011, is to develop a diverse cadre of competent community leaders through participatory training and networking to foster the growth of civil society. This has been addressed through five major components, including: (1) English teacher training, (2) training of trainers, (3) distance education, (4) leadership, and (5) networking. Project activities are nearly wholly capacity-building inputs to a range of individual Burmese community leaders, with some support to Burmese civil society organizations. (http://pdf.usaid.gov/pdf_docs/PBAAC197.pdf)
Career Development Activity	Through this effort, USAID seeks to increase access to quality employability services in Morocco for university and vocational school students and recent graduates. The Career Development Activity (CDA) will have two components including the establishment of a series of career development centers and the incorporation of work readiness training into the Moroccan tertiary education system. In implementing the CDA, the Contractor shall work with USAID/Morocco staff, other USAID implementing partners, the Government of Morocco's Ministry of Higher Education, Scientific Research and Executive Training (MHE), the Ministry of National Education and Vocational Training (MNE), the private sector, business associations and other donors present in the field of workforce development. (https://www.fbo.gov/index?s=opportunity&mode=form&id=b96f0d734315b3f56f2d9113be4aca1c&tab=core&_cview=0)
Center for Advanced Studies in FSA at UAF	Under the Centers for Advanced Studies (CAS) Program, universities from U.S. with expertise in agriculture, water, and energy will be connected as sister schools with Pakistani universities and conduct joint applied research, student and faculty exchanges, joint revision of curriculum, and conferences. By the end of the program, the three centers will be ready to serve as research hubs, policy think

	tanks, and incubators for innovation to mitigate Pakistan's key development challenges. The Center for Advanced Study of Agriculture and Food Security will be set up at University of Agriculture, Faisalabad; Center for Water at Mehran University of Engineering and Technology, Jamshoro; and Center for Energy at National University of Science and Technology, Islamabad, with a satellite center at University of Engineering and Technology, Peshawar. (https://www.usaid.gov/news-information/fact-sheets/centers-advanced-studies-program)
Center on Child Protection at the University of Indonesia	The center contributes to child protection in Indonesia by researching, analyzing, and evaluating information collected by the government. (http://beta.global.columbia.edu/institutes-programs-initiatives/center-child-protection)
Centers for Advanced Studies in Energy (CAS-EN)	NUST entered into a USD 14.98 M Cooperative Agreement with USAID to establish Center for Advance Studies in Energy at NUST (CAS-EN) to address some of the outstanding challenges faced by the energy section in Pakistan and to facilitate applied research and education partnership between USA and Pakistan. (http://www.nust.edu.pk/INSTITUTIONS/Centers/CES/AboutUs/Pages/Welcome-to-CES.aspx)
Connecting the Mekong through Education and Training (COMET)	The U.S. Agency for International Development (USAID) Connecting the Mekong through Education and Training is a five-year program activity that enables teachers to better prepare youth for employment in the Lower Mekong countries of Burma (Myanmar), Cambodia, Laos, Thailand and Vietnam through the use of innovative training approaches (https://www.usaid.gov/asia-regional/fact-sheets/connecting-mekong-through-education-and-training)
Construction of 360-Bed Women Hostel at Forman Christian College	Construction of 360-Bed Women Hostel at Forman Christian College.
Cooperation in Research and Education in Science and Technology (CREST) Center for Energy Efficiency	CEET allows established researchers, as well as graduate and undergraduate students, to conduct research on energy efficient technologies to international standards using equipment and materials purchased with Global Development Alliance (GDA) funds.
Cross-Border Vocational Education Program in Badakhshan (CVEB)	Youth across Central Asia face limited employment opportunities, and as a result, there is increasing demand for high quality and relevant postsecondary vocational and technical education opportunities. This is especially true in

	the border regions of Tajikistan and Afghanistan where AKF USA, along with USAID, supports the University of Central Asia's School of Professional and Continuing Education (SPCE) in Khorog, Tajikistan through the Cross-Border Vocational Education program in Badakhshan (CVEB). CVEB delivers short vocational training courses for young men and women in the region and fosters cross border cooperation and job creation between Afghan and Tajik Badakhshan. CVEB also increases access to postsecondary education by providing scholarships for Afghans and Tajiks to take SPCE courses in Khorog, Tajikistan, and increases the quality of human resources in the region. The long-term impact of CVEB will be improved quality of professional and vocational teaching in the Badakhshan region, as well as increased cross-border cooperation between Afghanistan and Tajikistan. (http://www.akdn.org/usa_education_cveb.asp)
Doctoral Program at CSB	The goal of this program is to assist the graduate of the doctoral program of CSB at CU in developing higher level of competence in conducting research and in teaching business disciplines.
Emerging Markets Development Advisers Program (EMDAP)	Under the USAID/E3, Office of Education, funded Job Opportunities for Business Scale-up (JOBS) Program (Leader with Associate Agreement (LWA) EEM-A-00-04-00002-00, Associate Cooperative Agreement No. AID-OAA-A-11-00062), the Volunteers for Economic Growth Alliance (VEGA), in association with the Institute of International Education's (IIE) Emerging Markets Development Advisers Program (EMDAP), were responsible for placing Advisers to support JOBS activities. The scope of the position includes advisers providing expertise and assistance in the assessment, implementation, and evolution of the JOBS Program. The advisers were based in Washington, DC and sought to initiate the JOBS Program and assist in the design of higher education partnerships and relationships with micro- and small-business enterprises. The period of performance for the contract is September 30, 2011-September 29, 2014. (http://pdf.usaid.gov/pdf_docs/PA00K61D.pdf))
Energy Policy and Development Program	The Energy Policy and Development Program (EPDP) is a four-year, PhP218 million ($5 million) project started in October 2014 to strengthen policymaking for environmentally sound energy sector development. Few academic and policy programs exist in Philippine

	universities and economic organizations to develop and promote knowledge, research and best practices in the energy sector. EPDP supports development of an independent energy sector policy think tank, development and implementation of energy sector policy and reform programs for climate change mitigation and low-emission development, and establishment of an academic and policy program at the University of the Philippines. (https://www.usaid.gov/philippines/partnership-growth-pfg/epdp)
Entrepreneur Seed Grant Competition	The objective of these research partnerships is to build capacity in the sciences and technology at the institutional level in Pakistan and to strengthen U.S.-Pakistan cooperative relationships. (http://pdf.usaid.gov/pdf_docs/PA00K48G.pdf)
Focus on Results: Enhancing Capacity across Sectors in Transition II (FORECAST II)	The purpose of FORECAST II - PT is to provide a comprehensive package of short and long-term, degree and non-degree earning participant training, exchange visitor and education interventions, workforce development, and youth program services, from design through implementation and evaluation, promoting greater sustainability and effectiveness of all USAID assistance. (https://govtribe.com/contract/vehicle/idiq-forecast-ii-pt)
HED - Agro-Ecosystem Services (AgESS): Linking Science to Action	Agro-Ecosystem Services (AgESS): Linking Science to Action in Malawi and the Region, a USAID-funded Higher Education for Development Capacity-Building Africa-U.S. Partnership Project. This project builds on Michigan State University's 25-year relationship with the University of Malawi (UNIMA). An extensive strategic planning process using the Human and Institutional Capacity Development (HICD) framework identified gaps between UNIMA's actual and desired performance. Based on this assessment, a 10-year strategic plan was developed to build the capacity of Bunda and Chancellor Colleges in AgESS-related fields. (http://cgc.msu.edu/projects/agro_ecosystem_services_linking_science_to_action_in_malawi_and_the_region)
HED - Building capacity through quality teacher preparation	The partnership between Kenyatta University (KU) and Syracuse University (SU) entitled, "Building capacity through quality teacher preparation," enhanced the capacity of Kenyatta University faculty, educational programs, research, and engagement with stakeholders to result in improved secondary education in Kenya. The partnership built capacity at the KU Department of Educational Communication and Technology (ECT) and contributed to

	advancing secondary school education through quality teacher preparation—from pre-service teacher preparation, to novice teacher induction, to practicing teacher continual growth. (http://pdf.usaid.gov/pdf_docs/PA00K7DK.pdf)
HED - CAFTA-DR Environmental Law and Policy Capacity-Building Partnership	The overall goal of this regional higher education partnership was to strengthen the teaching and implementation of environmental law in three of the Central America Free Trade Agreement Dominican Republic (CAFTA-DR) countries: the Dominican Republic, Guatemala, and Nicaragua. (http://pdf.usaid.gov/pdf_docs/pdacy465.pdf)
HED - Capacity Building in Integrated Management of Trans-boundary Animal Diseases and Zoonoses (CIMTRADZ)	The award provided funding for a partnership between Makerere University (MAK) in Uganda and Mississippi State University (MS State), effective February 15, 2011, titled "Capacity Building in Integrated Management of Trans-Boundary Animal Diseases and Zoonoses" (CIMTRADZ). The partnership worked to enhance the capacity of MAK and higher education institutions in Eastern and Central Africa (ECA). The partners also developed and tested evidence-based strategies for socioeconomic development through Integrated Health Management (IHM) and sustainable food security. (http://pdf.usaid.gov/pdf_docs/PA00KP5V.pdf)
HED - Center for Excellence in Health and Life Sciences in Liberia	Cognizant of the dire healthcare situation in Liberia and of higher education's unique position to make a powerful and long-lasting contribution to international development, USAID/Liberia generously provided support to ACE/HED through a four-year, $3,088,251 Associate Award for a partnership between IU, UMMS and UL titled: "Center for Excellence in Health and Life Sciences in Liberia." The U.S. university partners in this initiative include Indiana University (IU) as lead institution (for the basic and advanced life sciences, nursing and public health), and University of Massachusetts Medical School (UMMS) as the secondary institution (for medical sciences education and nursing). (http://pdf.usaid.gov/pdf_docs/PA00KP39.pdf)
HED - Centre for Sustainable Drylands: A University Collaboration for Transforming Higher Education in Africa at the	The partnership between UoN and CSU entitled "Centre for Sustainable Drylands: A University Collaboration for Transforming Higher Education in Africa at the University of Nairobi" strengthened capacity for establishing and sustaining dryland ecosystems and human livelihoods in Kenya through higher education transformation.

University of Nairobi	(http://pdf.usaid.gov/pdf_docs/PA00KBBC.pdf)
HED - Cross-Border Training in HIV/AIDS Prevention	The project developed a bi-national infrastructure for training Mexican nationals in HIV/AIDS prevention and program evaluation to meet the demands of the emerging HIV epidemic in these regions. The partners offered master's-level educational opportunities in HIV/AIDS prevention, program evaluation, and policymaking to Mexican students in Tijuana and set up a visiting scholars program at the University of California San Diego and San Diego State University for Mexican researchers. (http://archive.hedprogram.org/ourwork/partnerships/MEX-2005-09-14b.html)
HED - Development of Agronomy and Crop Production Academic Programs, Research, and Need-based Extension Programs for Sustainable Food Production	This collaboration between UGB and OSU, in partnership with national research institutions, nongovernmental organizations (NGO), and other stakeholders was designed to create the long term professional capacity to solve agricultural management challenges in the fragile northern Senegal and Sahelian ecosystems. The partnership developed an innovative agronomy and crop production degree program and established the University of Gaston Berger Agricultural Research and Development Center (UGB-ARDC) based at UGB in St. Louis, Senegal. The Center has positively impacted agricultural higher education in Senegal and throughout the Sahel. (http://pdf.usaid.gov/pdf_docs/PA00KP2R.pdf)
HED - Egypt: Enhancing Capacity for Research in Economics	The purpose of the partnership between GSU's Andrew Young School of Policy Studies (AYSPS) and Cairo University's Department of Economics, Faculty of Economics and Political Sciences (DOE-FEPS) was to expand the capacity of the faculty in economics research and to strengthen CU's ability to serve as a regional hub for teaching, research, and service in economics and economic policy development. (http://pdf.usaid.gov/pdf_docs/PA00JK3J.pdf)
HED - Enhancing Behavior Change through Conservation Programs	This agreement promotes the development of a university partnership between the University of Texas at El Paso (UTEP), Universitas Mulawarman (UNMUL), and a conservation organization, Rare, to integrate practice-based expertise with research and teaching.

HED - Guyana: Strengthening Mass Communication and Journalism	HED made one award of $300,000 to Ohio University (OU) for a three-year partnership project titled: "Guyana: Strengthening Mass Communication and Journalism" for a collaboration with the University of Guyana (UG). The overall goal of the partnership between OU's Scripps College of Communication and UG's Center for Communications Study (CCS) is to strengthen CCS's effectiveness in preparing undergraduate students to meet workforce demands in the media and communications industries after graduation. (http://pdf.usaid.gov/pdf_docs/PA00HPTJ.pdf)
HED - John Garang Memorial University of Science and Technology	This development partnership will support JG-MUST as a platform to train the future leaders in Southern Sudan and be an example of community service and development outreach. The overarching program goal of this cooperative effort is to transform education and extension in Jonglei state to meet the needs of individuals and communities leading to economic opportunity and reduced internal conflict. (http://borlaug.tamu.edu/sub-saharan-africa/82-jg-must-john-garang-memorial-university-for-science-and-technology)
HED - Lead Award	Higher Education for Development (HED) was an organization that worked in close partnership with the United States Agency for International Development (USAID) and operated with the advice and counsel of the six major U.S. higher education associations to support the engagement of higher education in development issues worldwide. The contract with USAID came to a close at the end of FY 2015, and HED operations ceased at that time. (http://www.acenet.edu/higher-education/topics/Pages/higher-education-development.aspx)
HED - Lead Award	HED, under a Leader with Associate Agreement (LWA), provides resources across each of the U.S. Agency for International Development's program areas. Through Associate Awards, HED works directly with Missions to design programs that access the expertise and resources of an estimated 2,800 higher education institutions and their overseas partners. (http://archive.hedprogram.org/agencies/index.html)
HED - Lead Award	On May 16, 2011, the American Council on Education (ACE) and USAID/Ghana An associate award totaling $1,374,806. This award was for the creation of a partnership aimed at enhancing the capacity of the

	University of Ghana in its educational programs, research, and community engagement that will result in improved response to HIV/AIDS challenges in Ghana. Under Associate Award # AID-641-LA-11-00001, HED made an award totaling $1,100,000 to Brown University (BU) for a two-year partnership titled "University of Ghana-Brown University Academic Partnership to Address HIV/AIDS in Ghana "to collaborate with University of Ghana (UoG) in Ghana. The Ghana – Brown partnership was designed to develop University Of Ghana's capacity to train a multidisciplinary HIV/AIDS workforce through the College Of Health Sciences. (http://pdf.usaid.gov/pdf_docs/pbaaa248.pdf)
HED - Mathematics Teacher Education, Tourism, and Supply Chain Management/ Transportation	In accordance with USAID's priority on increasing the capacity of local higher education institutions to contribute more effectively to local and regional development, all three South Africa-US partnerships worked to strengthen both human and institutional capacity at the host country universities for the ultimate benefit of the local community and host country. (http://pdf.usaid.gov/pdf_docs/pdact738.pdf)
HED - Rebuilding Higher Education in Agriculture to Support Food Security, Economic Growth and Peace Efforts in South Sudan	The collaboration between Virginia Polytechnic Institute and State University (VT) and University of Juba (UoJ)/ Catholic University of Sudan (CUoSS) was designed to implement a comprehensive plan to restore higher education curriculum and research capacity in South Sudan, in partnership with stakeholders, national research institutions, and NGOs. (http://pdf.usaid.gov/pdf_docs/PA00K83C.pdf)
HED - South Carolina State University-Ngozi University Partnership for Strengthening Educational Capacity and Rural Development	The partnership strengthened the capacity of Ngozi University's Department of Agronomy and the Centre for Agricultural and Rural Development Research to enhance student learning, conduct applied research, strengthen community outreach, and provide extension services to small famers. (http://pdf.usaid.gov/pdf_docs/pbaaa242.pdf)
HED - South Sudan Higher Education Initiative for Equity and Leadership Development (SSHIELD) Program	The goal of SSHIELD was to equip an ethnically diverse group of faculty and female leaders with skills and knowledge in the field of education in emergencies that will assist South Sudan's educational institutions in promoting social cohesion, peace building, and conflict mitigation. The SSHIELD project consisted of two major components: 1) prepare a network of women leaders with the skills and knowledge to contribute to peacebuilding and social cohesion through South Sudanese educational

	institutions and 2) prepare South Sudanese university faculty members to support master's program graduates to affect change in educational institutions upon return to South Sudan. (http://docplayer.net/3486075-Final-performance-report-south-sudan-higher-education-initiative-for-equity-and-leadership-development-sshield.html)
HED - Strengthening Business Management Education and Technology Competence	A widening gap exists between the professional skills needed by private sector companies and the skill level of graduates from Nigerian universities. To address this need, Kansas State University and the University of Lagos (UNILAG) collaborated to produce high-quality business graduates who meet the needs of Nigeria's current business environment. With a growing presence of international corporations operating in Nigeria, demand for skilled business workers at all levels will continue to rise. The partners strengthened UNILAG's business curriculum at the undergraduate and graduate level so that it meets national and international standards. They modernized teaching practices, engaged the private sector, developed faculty capacity, built state-of-the art computer facilities, strengthened IT competence for faculty and students, stocked UNILAG libraries with up-to-date texts and journals, and offered career counseling services. (http://archive.hedprogram.org/ourwork/partnerships/NIG-30-03-2007.html)
HED - Strengthening Early Childhood Education in Jordan	Under the Associate Cooperative Agreement, HED established a three-year partnership between the University of Jordan (UJ), Petra University (PU), and Utah State University (USU) to strengthen the childhood education undergraduate programs at both Jordanian institutions by improving the early childhood education system for training kindergarten teachers and increasing the collaboration between the universities and the Ministry of Education. (http://pdf.usaid.gov/pdf_docs/pdact783.pdf)
HED - Strengthening Indonesia's Climate Change Mitigation	On July 8, 2011, USAID/Indonesia (USAID) awarded a three-year University Partnerships (UP) cooperative agreement No. AID-497-A-11-00011 totaling US$636,549 to Columbia University (CU) and Institut Pertanian Bogor (IPB) to provide support for the partnership entitled "Adaptation to Climate Risk in Indonesia." The purpose of

	this cooperative agreement is to help build capacity to strengthen Indonesia's capacity for climate change adaptation in meeting its development challenges. (http://pdf.usaid.gov/pdf_docs/PA00JRCZ.pdf)
HED - Support for Two African Partnerships Promoting Clean Drinking Water and/or Hygiene	The purpose of the award was to provide funding for two partnerships between higher education institutions in the United States and Africa to address issues of clean drinking water and water management related to improved sanitation and hygiene outcomes. (http://pdf.usaid.gov/pdf_docs/pdacy321.pdf)
HED - Sustainable Water Resources: Capacity Building in Education, Research and Outreach	Based on Ethiopia's critical need for sustainably managed water systems and resources and the need for faculty to train future generations of water managers and researchers, Addis Ababa University and the University of Connecticut (AAU-UCONN) formed a partnership to establish a new institute for water resources management. The purpose was to develop graduate programs (both Master's and Ph.D.) to train students to conduct research related to managing water resources, and to engage communities in improving water access and systems. (http://pdf.usaid.gov/pdf_docs/PA00KNBJ.pdf)
HED - University of Cincinnati and Cape Town University Partnership "Nano power Africa"	A new approach to solar energy production could change that scenario. Partners at the University of Cape Town in South Africa and the University of Cincinnati sought to use a nanotechnology-based apparatus that employs low-cost titanium dioxide (widely used as a base for white paint) and organo-metallic pigments in flexible plastic packaging to create a more affordable solar cell. The partners set up student exchanges between the institutions, studying models for research capacity and developing technical models for the solar energy devices. (http://archive.hedprogram.org/ourwork/partnerships/ZAF-2011-02-21.html)
HED - University of Ghana-Brown University Academic Partnership to Address HIV/AIDS in Ghana	On May 16, 2011, the American Council on Education (ACE) and USAID/Ghana An associate award totaling $1,374,806. This award was for the creation of a partnership aimed at enhancing the capacity of the University of Ghana in its educational programs, research, and community engagement that will result in improved response to HIV/AIDS challenges in Ghana. (http://pdf.usaid.gov/pdf_docs/pbaaa248.pdf)

HED - University Partnership Linking Out-of-School Youth to AgriEntrepreneurship and Development to promote Job Opportunities and Business Scale-up for Mindanao (UPLOAD JOBS)	Few academic and policy programs exist in Philippine universities and economic organizations to develop and promote knowledge, research and best practices in the energy sector. EPDP supports development of an independent energy sector policy think tank, development and implementation of energy sector policy and reform programs for climate change mitigation and low-emission development, and establishment of an academic and policy program at the University of the Philippines.
Higher Education for Economic Growth	USAID Higher Education for Economic Growth ("the Activity") provides technical assistance to enhance the contributions of higher education institutions (HEIs) to the productivity of the private sector and long-term economic growth in El Salvador...The over-arching principle, or goal, of the Activity is to build the human and institutional capacity of Salvadoran HEIs and increase the effectiveness of key government and higher education entities so that they can provide educational programs and research that contribute to the El Salvador's economic growth. (http://pdf.usaid.gov/pdf_docs/PA00KSJK.pdf)
Higher Education Leadership, Management, and Policy (HELM)	HELM aims to support and sustain reforms in the Indonesian higher education sector which will result in, as stated by the sub IR "increased management capacity of Indonesian Higher Education Institutions (HEI)." (http://pdf.usaid.gov/pdf_docs/PA00HVGG.pdf)
Higher Education Network Ring Initiative (HENRI) Program	The goals of the Higher Education Network Ring Initiative (HENRI) are to develop a sustainable training program in higher education in public health that is rooted in: (1) active use of local data to inform policy decisions, (2) a practice-based training curriculum, (3) development of university faculty able to replicate and expand the framework. It is anticipated that HENRI will create a cadre of Indonesian scientists and public health professionals who are well trained in the analysis and use of country level data for decision-making. (https://www.hsph.harvard.edu/world-map/research_project/the-higher-education-network-ring-initiative-henri/)

Higher Education Project in Afghanistan	The rapid expansion of university education since 2002 has placed extra demands on an education system much in need of development. Universities must have the facilities and skills to train leaders in education and to improve the quality of education at every level throughout Afghanistan. USAID established the Higher Education Project (HEP) to help address these needs by building sustainable capacity at the tertiary level and by developing capacity at the Ministry of Higher Education (MOHE) to develop and implement the National Higher Education Strategic Plan 2010-2014. Both USAID and the MOHE credit HEP with successfully contributing to improving the quality of Higher Education instruction and learning in Afghanistan.
Higher Engineering Education Alliance Program (HEEAP)	In collaboration with an expanding industry consortia, the Ira A. Fulton Schools of Engineering's Higher Engineering Education Alliance Program (HEEAP) is revolutionizing and modernizing the top engineering and technical vocational universities in Vietnam. This modernization process includes developing experienced university leadership, constructing innovative and effective curriculum, and promoting university engagement. (http://www.heeap.org/who-we-are)
Human and Institutional Capacity Development Assessment: Kosovo	USAID/Kosovo contracted Aguirre/JBS International, Inc. to conduct multiple sector-wide HICD assessments to address and inform the design of an Education Legacy Program. This legacy program will provide higher education opportunities for Kosovar students as well as establish a mechanism that will sustain those opportunities. For this program, required elements and considerations include the development of a cadre of leaders and added workforce skills that are relevant to Kosovo's development goals. (https://www.usaid.gov/sites/default/files/documents/1863/Human%20and%20Institutional%20Capacity%20Development%20Assessment.pdf)

InnovATE	The Innovation for Agricultural Training and Education (InnovATE) project is a Feed the Future Initiative supported by U.S. Government assistance, with the mission to achieve sustainable food security, reduce poverty, promote rural innovation and stimulate employment by building human and institutional capacity. The program focuses on all aspects of agricultural training and education including: youth, gender, and workforce development, at the primary, vocational/technical, university and post-graduate levels. (http://www.oired.vt.edu/innovate/about/)
Innovative Development through Entrepreneurship Acceleration (IDEA)	USAID/Philippines' Innovative Development through Entrepreneurship Acceleration (IDEA) Project is a three-year public-private partnership with the Philippine Development S&T Foundation, Inc. IDEA will bring a culture of entrepreneurship into the growing engineering and science programs in the Philippine higher education system. It brings a market-oriented lens to the university curriculum for research-oriented science and engineering higher education programs, which will strengthen human capacity and effectiveness of market-relevant workforce skills in the country. The project is focusing on the second-tier cities of Batangas, Cagayan and Iloilo to strengthen local universities and provide opportunities to establish business, commercialize products, and attract venture capitalists. (https://www.usaid.gov/philippines/education/idea)
Innovative Solutions	The main goal of the Center is to develop and strengthen the educational capabilities of Armenian higher educational institutions in IT/High-Tech, to enhance their research potential in educational context, as well as creating a favorable environment for formation of sustainable businesses. http://www.eif.am/eng/projects/ibm/)
Learning for Community Empowerment Program (LCEP2)	Learning for Community Empowerment Program (LCEP2) is a large scale community-based direct impact development intervention by USAID, to improve the livelihoods of urban and rural populations through an integrated literacy and productive skills program. LCEP2 has responsibilities for building the "capacity of the Ministry of Education to enable individuals and their communities to develop functional literacy and numeracy, stimulate growth in their local economies, and strengthen social and political capital."

	(http://pdf.usaid.gov/pdf_docs/Pdact399.pdf)
Lower Mekong Public Policy Initiative	In a memorandum of understanding signed on July 6, 2012, the Ash Center and USAID agreed to work together to strengthen public policy analysis capacity in the countries of the Lower Mekong Region—including Cambodia, Laos, Thailand, and Vietnam—by planning new policy research projects focused on some the most vexing dilemmas in the region, including promoting knowledge-intensive economic activity, stewarding natural resources, and forging more effective regional cooperation mechanisms. A special emphasis will be placed on protecting the region's shared water resources, including the Mekong River watershed. (http://www.hks.harvard.edu/news-events/news/press-releases/ash-center-usaid-mekong-region-mou)
Making a Difference for Myanmar	Making a Difference for Myanmar: Through this partnership, Johns Hopkins University, Exxon, Luce Foundation and Serge Pun & Associates (SPA) will bring American visiting professors to Yangon University to revitalize and expand the teaching of international relations and political science, and enable students to apply this knowledge in government, legislature and civil society. (https://www.usaid.gov/news-information/press-releases/nov-13-2013-usaid-announces-three-higher-education-partnerships-burma)
Mobiles for Reading: A Landscape Research Review	This landscape review takes the broad domain of new information and communications technologies (ICTs) for education, and focuses on the fast-evolving sub-domain of mobiles for reading, or M4R. The 'mobiles' in this review primarily refer to mobile technologies—ICTs that are portable, typically battery powered, and may be connected to cellular networks and/or the Internet. The term 'reading' refers to the joint abilities of understanding and producing written language, for children, youth and adults. This review of M4R focuses primarily on the use of mobile

	ICTs designed to help children learn to read, practice reading (reading to learn), and acquire a broader range of learning skills that support a literate society. (http://literacy.org/sites/literacy.org/files/publications/wagner_mobiles4reading_usaid_june_14.pdf)
MOOC	An evaluation of the efficacy of MOOCs
Palestinian Faculty Development Project (PFDP)	Launched in 2005, the Palestinian Faculty Development Program (PFDP) is an initiative that aims to increase capacity within the Palestinian higher education sector and address long-term issues of reform in teaching and learning practices at colleges and universities in the West Bank and Gaza. Funded by USAID and the Open Society Institute, the $25.7 million program will encourage the professional development of promising young academics who are teaching in the social sciences and humanities; revitalize and reform teaching in these areas; and promote an institutional culture of teaching and learning to ensure that the PFDP's impact will continue beyond its ten-year lifespan.
PEER Science and PEER Health	Administered by the U.S. National Academy of Sciences (NAS), PEER is a competitive grants program that invites scientists in developing countries, partnered with USG-supported collaborators, to apply for funds to support research and capacity-building activities on topics with strong potential development impacts. This innovative program is designed to leverage the investments other USG-supported agencies have made in scientific research and training while supporting the initiatives of developing country scientists. (http://sites.nationalacademies.org/pga/peer/index.htm)
Pre-Service Teacher Education Program in Pakistan (Pre-STEP)	Pre-STEP is a five year effort to improve the quality of basic education in Pakistan through reforming Pakistan's pre-service teacher preparation systems and institutions.

Promoting Sustainable Forest Management and Biodiversity	The central goal of this USAID supported project is to create a partnership between Rutgers University and Universitas Nasional that will increase the quality of and access to education, training, and research opportunities within Indonesia for both Indonesian and foreign students while promoting the conservation of orangutans and their critical habitats. (http://peatland.rutgers.edu/)
Promotion of Information and Communication Technology in Turkmenistan	The PICTT program was a 4.25 year, $1.03 million USAID funded education development project implemented by Counterpart International and IREX, comprised of four main objectives: 1. The adoption of ICT in higher education through advocacy, policy support and research. 2. Equip higher education administrators and faculty with skills to meet their professional needs and contribute to organizational effectiveness through ICT. 3. Develop a virtual network that links higher education faculty, administrators, and students with other institutions in Turkmenistan and with regional and international partners and resources. 4. Foster technological advances that promote educational development and access to free information among higher education students, faculty, and administrators that promote educational development.
Promotion of Information and Communication Technology in Turkmenistan	The core of program activities centered on providing ICT trainings to students, faculty and staff or higher education institutions (HEIs) throughout Turkmenistan. Over the course the project, 2,742 beneficiaries received formal instruction on computers, internet, and software technologies, 5,109 graduate students received individual technical consultations, and 12,073 individuals were able to access free internet. The project was able to reach beneficiaries from over 80% of HEIs in Turkmenistan, and conduct program activities in all five regions of the count
Scholarships to Lebanon	The United States seeks to promote a stable, sovereign, independent and prosperous Lebanon that is at peace with its neighbors and which can counter Iranian, Hizballah, and Sunni extremist influences. To this end, the U.S. government provides a spectrum of military, law enforcement, and civilian support to strengthen credible, accountable, and responsive state and municipal institutions, boost civil society, and develop an economy that offers opportunities to all Lebanese citizens. The

	continuing spillover effects of the crisis in Syria are likely to remain and have required re-orientation of foreign assistance to meet those challenges and promote Lebanese stability. The United States continues to work with international organizations and other donors to provide support to Lebanese communities. The $155.2 million FY 2015 request will be used to build the capacity of the Lebanese Armed Forces (LAF) and the Internal Security Forces (ISF), improve the delivery of public services such as clean water and education, expand economic growth, and build the capacity of local government and civil society. This assistance advances the U.S. strategic objectives by helping Lebanon respond to the needs of its citizens, maintain internal stability, and meet its international obligations. Current U.S. economic and development assistance is provided through international and local Non-Governmental Organizations (NGOs) and in certain cases, in coordination with the Ministry of Education and Higher Education. With the formation of a new government in February 2014, and scheduled elections for the presidency and parliament in 2014, new opportunities may emerge for direct cooperation and assistance with a government that shares U.S. values and interests.
Scholarships for Education and Economic Development (SEED)	The SEED Program is a USAID sponsored exchange initiative that provides U.S.-based technical training to youth and community leaders enabling them to become important players in key development sectors of their home countries. Moreover, the program creates productive and mutually beneficial academic, economic, and social relationships that benefit people of the United States and the Latin American/Caribbean region. (http://cied.georgetown.edu/programs/scholarship-for-education-and-economic-development-seed/)
School Action for Innovation in Science	The purpose of this program is to improve the teaching of science, technology (particularly Information and Communication Technology (ICT)), engineering, and mathematics in secondary schools in Indonesia. Columbia University will implement this program in collaboration with Institut Pertanian Bogor and Teachers College, Columbia University. (http://cees.columbia.edu/node/196)

Science, Technology, Research and Innovation for Development (STRIDE)	The Science, Technology, Research and Innovation for Development (STRIDE) is a five-year, Php1.3 billion ($32 million) program that will strengthen applied research activity in Philippine universities and industry. The project aims to create a dynamic network of researchers in universities and private companies who continuously innovate; entrepreneurs and investors who turn discoveries into products and companies; and a government supportive of initiatives that enables these partnerships to flourish. (https://www.usaid.gov/philippines/partnership-growth-pfg/stride)
Seeding Labs	Our Flagship Program Instrumental Access, Seeding Labs' flagship program, gives talented scientists in developing countries donated equipment and supplies to pursue life-changing research. To be selected, universities must meet rigorous screening standards and prove their potential to advance if provided with additional equipment. (http://seedinglabs.org/)
Smart coalition to improve high-value crops in Indonesia	On March 16, 2012, USAID awarded a three-year University Partnership cooperative agreement No.AID-497-A-12-00007 to Washington State University, Institut Pertanian Bogor (IPB) and the Indonesian Institute of Sciences (LIPI) Bogor in the amount of US$995,583 to provide support to the partnership entitled "Smart Strategic Coalition for Sustainable Agricultural and Economic Development in Indonesia." The purpose of the cooperative agreement is to address institutional capacity building for strengthening the agricultural value chain in Indonesia, specifically through agricultural biotechnology. (http://pdf.usaid.gov/pdf_docs/PA00K33N.pdf)
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Social Work Education Enhancement Program (SWEEP)	Through the Social Work Education Enhancement Program, the United States Agency for International Development (USAID), San Jose State University, and Cisco Systems Inc. are collaborating with top universities in Vietnam to strengthen Vietnam's higher education social work programs to deliver quality education and prepare trained, job-ready, social workers. The program aims to develop systems to strengthen higher education management and administration, devise processes to enhance faculty development opportunities and programs, and develop and employ relevant curriculum adaptable to the changing knowledge and needs of the field.(https://www.usaid.gov/sites/default/files/documents/1861/FS_Social_Work_Education_Enhancement_Program_Eng.pdf)
Stem Higher Education Activity	The program supports the modernization of science, technology, engineering, and math education by offering high-quality bachelor degree programs that boost productivity and increase employment opportunities. (https://www.mcc.gov/where-we-work/program/georgia-compact-ii)
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Strengthening Education in Afghanistan (SEA)	The Strengthening Education in Afghanistan (SEA) Project strengthens the programmatic and operational capacity of four organizations working in basic and higher education activities and has a small grants program to fund innovative basic and higher education activities for Afghan governmental and non-governmental organizations. In higher education, SEA strengthens the operations of the Afghanistan Center at Kabul University (ACKU) to enable it to expand and preserve its collection of Afghan historical, academic, and literary materials, including digitizing library holdings and making them available via on-line to qualified researchers. Additionally, SEA works with college students and school administrators to make campuses safe and inclusive for girls, while promoting a culture of tolerance and appreciation for diverse cultures, languages, and peoples in Afghanistan. (https://www.usaid.gov/node/50586)
Strengthening Foundation Phase Teacher Education Program	The overall objective of this activity is to strengthen foundation phase (FP) teacher education in South Africa with a view to ultimately benefit foundation phase learners in terms of literacy and maths development.
Strengthening Health Systems in Indonesia (SHSI)	On July 22, 2011, the Harvard Medical School entered a three-year Cooperative Agreement No. AID-497-A-11-00017 with USAID/Indonesia totaling US$436,685 plus a cost share of $169,840 to build interuniversity partnerships between Harvard Medical School, Gadjah Mada University, and Syiah Kuala University, in order to conduct a program of “action research” linking university researchers with the public health system to build capacity for public mental health care in Indonesia. This program is to build on a unique set of relationships that have grown up among faculty members from these three institutions who have worked with national, provincial, and district health

	officials to develop and test innovative models for providing mental health services in the Indonesian public health system. (http://pdf.usaid.gov/pdf_docs/PA00JRCZ.pdf)
Strengthening the Capacity of the Network of Observatories on Racism in the Americas	Observatories are watchdog agencies that monitor social issues and recommend steps toward reform. UNICOR will support the consolidation and expansion of the Red de Observatorios del Racismo en las Americas [Network of Observatories Against Racism in Latin America] and will develop in its members' the skills necessary to document racism and work to eliminate it in Bolivia, Brazil, Colombia, Guatemala and Mexico. (http://www.iaf.gov/resources/publications/annual-reports/2012/latin-america-regional)
Support of Establishment of American University of Afghanistan	The American University of Afghanistan was established as a result of the generosity of both Afghan and American donors. As a private university, it relies on contributions from governments, organizations, and private individuals, both in Afghanistan and around the world, to continue providing high-quality education to Afghanistan's future leaders. (https://www.auaf.edu.af/giving/)
Supporting Equal Opportunities for People with Disabilities Project	Was implemented by Save the Children and aimed at fostering the conditions for equal opportunities and full participation of people with disabilities (PWD) in the political, economic and social life of Georgia. As part of this program, a BA and MA university curriculum in special education was developed and implemented at Ilia University.
Teacher Education Project (Pre-STEP)	Pre-Service Teacher Education Program, or Pre-STEP) works with the Government of Pakistan, Higher Education Commission, provincial government education departments, universities and government elementary colleges to institutionalize specific reforms in pre-service education as desired by the Government of Pakistan through its National Education Policy. (http://idd.edc.org/projects/usaid-teacher-education-project)
Textbooks and Learning Materials Program	The Textbooks and Learning Materials Program (TLMP), a component of the Africa Education Initiative was launched in 2002 to work with African governments and Ministries of Education to create substantial solution to the many pressing educational challenges in six sub-Saharan countries, including lack of adequate educational materials and insufficient training for

	teachers.(http://www.csu.edu/TLMP/)
The Aceh Polytechnic Program (TAPP)	The USAID funded project (2007-2012) targets to establish a new Polytechnic in Banda Aceh. The Polytechnic shall host 240 students per year in 4 study streams, running 3-years programs. Curriculum development, staff recruitment and training, procurement of laboratory, workshop, classroom equipment and furniture and economical feasibility are main areas of focus for the project. (http://www.swisscontact.org/en/indonesia/projects/project-archive/tapp-the-aceh-polytechnic-project.html)
The Excellence in Higher Education for Liberian Development	The Excellence in Higher Education for Liberian Development (EHELD) seeks to sustain the positive institutional developments that came out of Liberia's 2005 elections. Fourteen years of civil war destroyed much of the country's trained workforce, and the educational system is still recovering. RTI and its partners, through EHELD, are improving the country's education, skills, and labor force capacity in order to better equip top-performing young Liberian women and men for careers within agriculture and engineering, two identified critical development sectors for Liberia. To achieve the vision of EHELD, RTI is collaborating with a number of partners, including the University of Michigan, Rutgers University, North Carolina State University, and Associates in Rural Development. RTI and its partners are developing Centers of Excellence in agriculture at Cuttington University and in engineering at the University of Liberia to meet current and future workforce and build local capacity at all levels. (http://www.rti.org/page.cfm?obj=DE528FA3-5056-B100-0C8DB1E1C927FB52)
Tibet Education Project (TEP)	The Central Tibetan Administration (CTA) is pleased to announce the launch of the Tibet Education Project (TEP), a two-year program funded by the U.S. Agency for International Development (USAID) to help improve the quality of education opportunities for Tibetan refugee students in India and Nepal. Earlier this September, USAID awarded USD 2 million to Tibet Fund, a U.S.-based NGO operating out of New York City, to implement TEP. (http://tibet.net/2012/11/tibet-fund-department-of-

	education-launches-tibet-education-project-tep/)
Timor-Leste Hillary Clinton Scholarship	The Timor-Leste Hillary Clinton Scholarship Program is a USAID-sponsored scholarship program that aims to strengthen the base of skilled, high performing professionals in Timor-Leste to contribute to the country's economic and social development. The program includes opportunities in education and training with the expectation that the scholar returns home better equipped with formal qualifications as managers, civic and government leaders, subject matter specialists and/or entrepreneurs. (http://www.iie.org/Programs/Timor-Leste-Hillary-Clinton-Scholarship-Program)
U.S.-Egypt Higher Education Initiative	The U.S.-Egypt Higher Education Initiative (HEI) is an investment in Egypt's future that provides educational opportunities for high-achieving Egyptians to learn skills that will better meet the needs of a 21st century economy. In partnership with the Government of Egypt and the private sector, the U.S. Government is providing thousands of Egyptians with access to higher education opportunities in Egypt and the United States and facilitating strategic partnerships in key fields to strengthen Egypt's economy. (https://www.usaid.gov/egypt/fact-sheets/us-egypt-higher-education-initiative)
U.S.-Egypt Science & Technology Joint Fund	The U.S. - Egypt Science and Technology (S&T) Joint Fund was established under an agreement between the Government of the United States of America and the Government of the Arab Republic of Egypt to strengthen scientific and technological capabilities between both countries. To support activities of the Joint Fund, each country jointly matches funds provided by the United States Agency for International Development (USAID) and the Ministry of Scientific Research (MOSR). The program is implemented in the U.S. by the National Academy of Sciences (NAS) and in Egypt by the Science and Technology Development Fund (STDF). (http://sites.nationalacademies.org/pga/dsc/egypt/index.htm)
U.S.-Indonesian Geothermal Education Capacity Building	The Goal of this project is to build capacity for the geothermal educational program at Institute Technology Bandung (ITB) which will provide for expanding the number of graduates who focus on geothermal energy development and broaden the exposure of students and faculty to the global geothermal power business. The project is also intended to provide opportunities for USC to

	further develop and expand its geothermal education programs through a partnership in one of the most resource rich geothermal areas of the world. (http://cgs.usc.edu/r-d-projects/us-indonesian-geothermal-education-capacity-building.htm)
UCSC/Indonesia Marine Biotechnology Collaboration	On July 12, 2011, the University of California Santa Cruz (UCSC) entered a three-year Cooperative Agreement, No. AID-497-A-11-00014, with USAID-Indonesia totaling US$649,803 plus a cost-sharing amount of $201,718 to improve scientific ties between the two nations and develop an interwoven program of marine drug discovery and training/technology transfer between the University of California Santa Cruz, Universitas Diponegoro (Semarang, Central Java), and Universitas Hasanuddin (Makassar, South Sulawesi). (http://pdf.usaid.gov/pdf_docs/PA00JRCZ.pdf)
University Student Assistance Program	University Scholarship Program offers university-bound students a unique opportunity to pursue quality higher education.
University Support Workforce Development Program	The USAID Afghanistan University Support and Workforce Development Program supports the Ministry of Higher Education and 11 selected public universities to support the establishment of higher education that is relevant to the job market for Afghan students. (https://www.usaid.gov/node/96081)
USAID Indonesia, Educating and Equipping Tomorrow's Justice Reformers in Indonesia Program	The Asia Foundation's justice sector programs have supported Indonesian efforts to strengthen legal institutions, improve legal education, and drive reform for more than 40 years. The Educating and Equipping Tomorrow's Justice Reformers (E2J) program furthers this aim. This four-year initiative, funded by USAID, is working to improve the performance of Indonesia's justice system by partnering with university law schools, civil society organizations, and formal justice institutions to provide a new generation with the knowledge, skills, opportunities, and incentives to pursue careers in public service and to contribute to justice sector reform. (https://asiafoundation.org/resources/pdfs/E2JENGLISHFINAL.pdf)
US-Indonesia Influenza Collaborative Study	The University of Colorado and University of Padjadjaran will establish a system to monitor influenza virus infections in humans and poultry in West Java and delineate the role of human-poultry interactions in the transmission of influenza viruses. (https://usaid.gov/indonesia/press-

	releases/united-states-provides-6-million-support-joint-research-indonesian)
Vocational University Leadership and Innovation Institute	VULII is designed to contribute directly to Vietnam's national goal of increasing the quality of higher education while strengthening human and institutional capacity to contribute to Vietnam's economic growth.(http://www.heeap.org/vocational-and-university-leadership-and-innovation-institute-vulii)
Washington Fellowship for Young African Leaders	The Mandela Washington Fellowship for Young African Leaders, begun in 2014, is the flagship program of President Obama's Young African Leaders Initiative (YALI) that empowers young people through academic coursework, leadership training, and networking. In 2016, the Fellowship will provide 1,000 outstanding young leaders from Sub-Saharan Africa with the opportunity to hone their skills at a U.S. higher education institution with support for professional development after they return home. (https://youngafricanleaders.state.gov/washington-fellowship/)
YALI Regional Leadership Training Centre - Ghana	The YALI Regional Leadership Center West Africa-Accra (RLC), a part of President Obama's Young African Leadership Initiative (YALI), will offer an innovative and game changing leadership training program in Africa. The program will be hosted by Ghana Institute of Management and Public Administration (GIMPA), and the first cohort will walk through the doors on the 31st July 2014. The program is two-pronged by design with the Emerging Leaders Program targeting Africa's young leaders and the Executive Leadership Program targeting the more experienced African leader group. The overall program entails a combination of taught content as well as practical and in-the-field leadership engagements. (http://yaliwestafrica.org/about.html)