

Toronto Addis Ababa Academic Collaboration (TAAAC): a successful partnership model for capacity building between a high- and low-income university

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Abstract

The Toronto Addis Ababa Academic Collaboration (TAAAC) is an educational partnership between the University of Toronto (UofT) and Addis Ababa University (AAU).¹ It represents a model collaboration between two universities, one in a high-income and one in a low-income country. It addresses the crucial need for increased university faculty to teach in the massive expansion of universities in Ethiopia. This paper describes the TAAAC model as an example of an innovative collaboration.

Introduction

Education has always been a cornerstone of development and advancement. Creating excellent higher education programs is essential for growth as African countries emerge from the complex sequelae of poverty and colonization.² This paper describes the Toronto Addis Ababa Academic Collaboration (TAAAC), an innovative educational partnership between the University of Toronto and Addis Ababa University. The goal of the TAAAC model is capacity building and sustainability across all programs.¹ TAAAC was founded in 2008, expanding from an initial partnership in psychiatry³ to address capacity building for health professions education and other graduate programs. The model helps to ameliorate the serious problem of “brain drain” with significant outward migration of educated Ethiopians.^{4,5}

Background and Rationale

In 2008 the Government of Ethiopia recognized the central role of higher education in development, and despite limited infrastructure and human resources made the bold decision to open over 30 new universities under the initiative called the Ethiopian University Capacity Building Programme 2008 (UCBP).⁶ This massive expansion from 3 to over 30 universities has created an urgent need for teaching faculty to populate each new department in each new university. AAU, the oldest and most established university in the country, was given the mandate to train 5,000 PhDs and medical specialists, and 10,000 Master level graduates over a 10 year period. This required significant investment to deal with limited human resources and address infrastructure limitations e.g. administrative offices and lecture halls to accommodate an ever-increasing student body.⁷ Ethiopia’s gross enrolment ratio (GER)⁸ is estimated as having increased by 800 percent between 2000 and 2010.⁹

The fast growth of higher education in the face of scarce material resources is not without risk: there is concern about quality at all levels of the graduate education process, including curricula, assessment, and models of clinical training.² In addition to the significant challenges of infrastructure and equipment, in order to continue academic growth, Ethiopia has an urgent need for qualified faculty members.^{4,10}

Prior to the launch of TAAAC in 2008, UofT had already developed a successful psychiatric partnership. This first graduate program to train psychiatrists in the country was envisaged by three Ethiopian psychiatrists and realized through the commitment of psychiatrists from the Departments of Psychiatry at both AAU and UofT.³ The subsequent TAAAC model was built upon the principles and values of the psychiatry model. TAAAC now includes over 20 graduate program partnerships and one undergraduate program.

Overview of the TAAAC education model

The TAAAC model is deliberately designed to support the educational capacity building efforts of AAU by providing teaching and training at AAU. Newly graduated specialists become faculty at AAU, and graduates who have been sponsored by universities throughout the country to study at AAU return to become faculty at their own institutions. While TAAAC helps facilitate occasional one year fellowships and several brief observerships for Ethiopian graduate learners at UofT, this is a small part of the overall project.

A set of well-delineated structures, principles and processes guide the development of each new TAAAC program. The TAAAC partnership has a flexible governance structure with coordina-

tion of each program involving specific program leads from both sides. There is an overarching Memorandum of Understanding signed by the two universities and specific Letters of Intent between each of the faculties, departments and divisions involved. Both partners have been able to manage sustained commitment in the face of various uncertainties and complications; this forms the most important foundation for governance.

There is a clear differentiation of the duties and responsibilities of each institution. AAU is the host university, so each AAU department has full autonomy and ownership over all aspects of program design, development, approval and implementation. Each of the supportive departments/divisions at UofT provides technical support in any area of curriculum delivery as requested by AAU. Requests can include the provision of expertise for curriculum review or direct participation in teaching, supervision and evaluation. TAAAC does not participate in direct clinical service delivery except when good teaching demands it: surgery and emergency medicine, for example, require more hands-on engagement in clinical teaching than some other specialties.

TAAAC has followed a four-step approach to the eventual establishment of each of its 20 working partnerships between a department or division involving the two universities. We provide a detailed description of these usual steps in Table 1.

Table 1: Partnership steps, objectives, processes and responsibilities

Objectives	Processes	AAU responsibilities	UofT responsibilities
STEP 1: Initiating a new program			

Identify the educational needs of the AAU program.	Contact is made between AAU program faculty lead and UofT program lead.	AAU program faculty lead makes contact with the AAU and UofT TAAAC coordinators.	The Canadian TAAAC coordinator contacts the appropriate UofT program head to determine interest, capacity, timing etc.
STEP 2: Partnership development			
Discuss the proposed partnership, determine existing resources, identify enablers, barriers and gaps, thus guiding the development of a plan of engagement. Perceptions and assumptions are clarified, and realistic, achievable program goals are set.	A meeting is held between UofT discipline-specific TAAAC lead and his/her AAU counterpart at AAU.	AAU discipline specific TAAAC lead meets with incoming UofT faculty to thoroughly explore partnership possibility.	The UofT discipline-specific TAAAC partner lead visits his/her counterpart at AAU. Travel and accommodation are paid for by UofT Dean/Chair.
STEP 3: Program design			
Part 1: Development of syllabus			
Collaboratively develop each one month syllabus relevant to the needs of the AAU specialty curriculum, considering local contexts and the community being served.	There is a system of one-month training modules. Each one-month syllabus is taught by UofT faculty volunteers, based on requests for explicit expertise aimed at specific gaps identified in local teaching capacity by Ethiopian colleagues who provide context and determine cultural relevance. The final syllabus is sent ahead of time to the AAU program director with PDFs of required readings so that learners can be prepared in advance.	Co-design and guide the development of each syllabus with UofT TAAAC lead.	Work closely with the AAU faculty to co-design and develop each specific one-month syllabus, which UofT faculty volunteers will teach at AAU.
Part 2: Delivery of syllabus			

<p>Ensure effective learning through the building of educational relationships with adequate time for fully understanding the context within which individual students work and learn</p>	<p>Although some TAAAC programs have shorter onsite teaching, TAAAC emphasizes the need for one month on site modules for programs requiring both practical and didactic training.</p> <p>These one month onsite training modules are repeated in each of the TAAAC programs 2-4 times per year with different UofT faculty and UofT trainees taking part.</p>	<p>AAU facilitates TAAAC teaching by advising and assisting the UofT faculty to adapt to the local context.</p>	<p>Two UofT faculty teach the syllabus and provide practical supervision in-person. They are accompanied by a UofT senior resident/fellow/PhD candidate.</p> <p>The number of UofT teaching faculty is purposely kept small to ensure maximal engagement with Ethiopian students and faculty.</p>
<p>Part 3: Observerships at UofT</p>			
<p>Participation in short-term observerships at UofT provides a benchmark for developing appropriate organizational infrastructure in Ethiopia as fellows become faculty leaders in their field. Ethiopian trainees sometimes fear that their training programs are sub-standard. Through their experience at UofT, students can appreciate the quality of their local programs.</p>	<p>AAU graduate fellows/PhD students participate in short-term (1-3 months) observerships at UofT; or occasionally one year fellowships.</p>	<p>Funding of flights and other travel expenses.</p>	<p>Facilitate learning experiences at UofT for AAU learners.</p>
<p>STEP 4: Transition to local program delivery</p>			
<p>Ensure the successful transition of each AAU program to full faculty teaching capacity.</p>	<p>Once enough graduates have been produced to run the program locally, the number and diversity of the required facul-</p>	<p>AAU directs the ongoing involvement of UofT to specific needs that</p>	<p>UofT shifts to joint research projects and more support for overall educa-</p>

	ty is determined by AAU.	follow from graduate program capacity and supporting sustainability.	tional capacity building.
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What has been achieved?

TAAAC has involved six UofT faculties, one institute, several academic hospitals in the Toronto Academic Health Sciences, and the UofT Libraries System (Gerstein Science Information Centre). TAAAC has involved over 200 faculty and staff from UofT and 50 residents and learners who have visited AAU to participate in learning and teaching in the various Residency, Fellowship, Masters and PhD programs in Health Sciences, Engineering and Social Sciences. 197 AAU faculty have graduated with assistance from TAAAC, 25 have attended UofT for a period of training, and 140 students are currently enrolled in TAAAC supported programs [see Table 2].

Table 2. Participants in TAAAC supported programs

Supporting Faculty/Institute at UofT	Supporting Program at UofT	Start date	Nature of partnership with AAU	No. of fellowships/observerships	No. of AAU graduates	No. of currently enrolled AAU students
Faculty of Medicine	Department of Anesthesia	2010	Support existing residency		8	12

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	2016	One year UofT Fellowship	1		
Department of Family and Community Medicine	2012	New residency program		7	20
	2013	Observerships UofT	4		
Department of Medicine	2011	One year UofT fellowship (hematology)	1		
	2012	Fellowship in Endocrinology		3	1
	2012	Fellowship in Hematology		2	1
	2012	Fellowship in GI		7	2
	2013-5	Observerships UofT	4		
Division of Emergency Medicine	2010	New residency program (no existing EM faculty at AAU)		15	29
Department of Paediatrics	2011	Pediatric emergency training into the new adult emergency residency program		15 ^a	
	2014-6	One year UofT Fellowships	3		
Department of Psychiatry (TAAPP)	2003	New residency program		50	23
	2004-16	One year UofT fellowships and one year sabbaticals	8		
	2004-16	One nine month fellowship	1		
Department of Medical Imaging	Sept 2011	Fellowship in Abdominal imaging		2	3
	2012	Observerships UofT	4		

		Mar 2014	Fellowship in Chest/Vascular/Thoracic imaging			2
		Sept 2015	Fellowship in Musculo-skeletal imaging			2
	Department of Occupational Science and Occupational Therapy	2012	Mental health rehabilitation training to staff and psychiatry residents		30 ^a	
	Wilson Centre	2015	Master of Health Sciences Education		15	14
Faculty of Nursing		2010	Research training in Nursing Master's Program		90 ^a	
		2014	Critical care training into Nursing Master's Program		10 ^a	
Faculty of Pharmacy		2011	PhD in Social Pharmacy		2	3
		2014	Observerships UofT	4		
Faculty of Dentistry		2015	Teaching into the DDS program		21	25
		2016	New fellowship program in oral and maxillary surgery			6
Faculty of Applied Science & Engineering		2011	Training into Masters and PhD development		1	3
		2012-6	UofT Fellowships	2		
UofT Library System		2008	Medical library literacy skills		Over 1000 trained onsite	

Total				25	133	140
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^a TAAAC training into programs rather than individual graduates.

The TAAAC model demonstrates that a successful partnership can be established and maintained to support educational capacity building for graduate programming in Ethiopia. Despite having no AAU department and/or faculty, TAAAC supported the development, launching and implementation of two new graduate programs: Emergency Medicine and Family Medicine. In the other programs there were between 1-3 AAU faculty when TAAAC started. In addition to the clear ongoing commitment of both partners to continue existing relationships and build new programs, the model (by providing training in-country), has a very positive outcome in that almost all TAAAC graduates have stayed in Ethiopia.

Challenges

The TAAAC program has achieved some significant outcomes, but it also faces ongoing challenges. Coordination of joint efforts is hindered by AAU's limited number of well-trained administrative personnel, overstretched university infrastructure and relatively inflexible bureaucracy. Department chairs and program leaders run most programs with minimal administrative support. Despite the high motivation of the Ethiopian faculty, the increase in workload that each partnership brings is significant. Although some of the TAAAC program leads are supported by a stipend, all faculty (UofT and AAU) must devote personal time to attend to the numerous tasks TAAAC requires.

Second, Ethiopian telecommunication infrastructure (while improving annually) remains limited. What services there are, including cell phones and texting networks, are quickly overloaded. Power interruptions without automatic generator back-up can limit access to the Internet. Meetings via Skype and conference calls are not yet reliable. Western partners are often unaware and consequently unsympathetic about technologies which are unavailable or inefficient in Ethiopia. The relative irregularity of Internet access puts a stronger emphasis on the need for UofT teachers to teach onsite, and with text references. While eventually courses will be able to run online, this simply is not the current reality. Furthermore, even when online courses are routinely possible, the question of appropriate contextualization of Western courses for Low Income Country students without onsite visits to tackle thorny contextualization issues will remain.

Finally, as Ethiopia modernizes, views are changing. The West is increasingly seen by the younger generation as more attractive than the traditional ways of Ethiopia. Currently the combination of the availability of good in-country graduate training and mentorship from committed Ethiopian faculty has meant that students have not had to leave the country to pursue their academic ambitions. New graduates are able to find the right balance between their obligation to public duty as socially responsible health professionals and their desire for a middle-class lifestyle by working in private or alternative public institutions which offer better salaries. This helps mitigate impact of the “brain drain” on Ethiopian health care. Currently over 90% of TAAAC graduates remain in Ethiopia. Within TAAPP, the oldest partnership in TAAAC, of the 50 psychiatrists who have graduated, 1 (2%) is deceased, 2 (4%) stayed in Canada following their fellowship, and 2 (4%) migrated to the USA.¹¹

Discussion

From informal beginnings, TAAAC has demonstrated an increasing number of negotiated partnerships, the ability to supplement AAU graduate training and assist in building local faculty capacity. The regular well negotiated and prepared UofT faculty training visits provide a bolus of teaching and supervision into new graduate programs which are led and run by the very few local faculty. Moreover, since it is the Ethiopians who lead each of the projects, there is a built-in cultural contextualization that occurs to counterbalance the otherwise wholesale imposition of Western values and principles. Academic preparation for each trip is co-developed with the Ethiopian context in mind, including attention to the prevalence of diseases and disorders in the country, the availability of material and technical resources, and the use of local journal articles when available for teaching and journal clubs. Mandatory pre-departure TAAAC briefing and the sustained relationship of each of the UofT TAAAC partnership leads with their Ethiopian counterparts, secure a shared vision and purpose and contribute to the stability and continuity of each of the developing partnerships.

While the ongoing growth and sustainability of TAAAC is dependent on sufficient funding from AAU, TAAAC is not reliant on grant funding for its operation. Freed to run without grant deadlines there is a sustained process of acquisition of experience and familiarity between the universities. This provides the opportunity for innovation, creativity, patience and flexibility. Through this process mutually beneficial learning occurs as each university gains from the experience in different ways. AAU gains as excellent graduate programs are developed, while UofT gains experience from educational engagement with a low-income country university while assisting in the development of its graduate programs. Both universities' faculty and students grow in cultural competency and skill, and both partners make research gains.

TAAAC is a good example of a partnership between the plural sector, previously called the non-profit or third sector and a respected public sector.¹² TAAAC is neither imposed by government nor do the university faculties, departments or hospitals involved enforce a corporate structure on the partnership. TAAAC is run and populated by educators, who believe that education is not a market commodity, but a way to share and exchange knowledge. For those UofT faculty involved, this work reinvigorates the experience of teaching and the sense of being a global citizen. Unlike some other institutional partnerships, the TAAAC model is not religiously faith-based, and it is not mandated by Canadian foreign policy. As an academically-rigorous partnership it avoids the more haphazard and unsystematic volunteering that well-meaning people undertake in low-income countries in their spare time. It has provided departments and divisions at both universities with an example of a global health project that they have chosen to accommodate and through which they have developed global expertise. At the same time, the partnership has remained committed to the principle that only programs that support AAU's requests are developed. In so doing, this model has avoided imposing potential UofT desires for research and student placements.

Conclusions

TAAAC has established itself as a sustainable model of educational partnership between two universities; one situated in a low income country and the other in a high-income country. It has demonstrated that a dearth of university faculty, a key challenge to Ethiopia's investment in higher education, can be addressed through the systematic engagement of willing and capable partners. While acknowledging that TAAAC's contribution is quite modest in the greater scheme of the needs of Ethiopia, some valuable lessons have been drawn from the partnership experience.

Our findings are neither conclusive nor authoritative. The limitations of the model include the fact that the TAAAC experience may not be generalizable to other host contexts and other Western partners. As well, it is not certain how this model will hold up once implemented on a larger scale, and although TAAAC has been in operation for 13 years and appears to be running sustainably, only time will tell how the project will evolve.

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Disclaimer

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Previous Presentations

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