



## **International Academic Collaboration: Why it May or May not work?**

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On the research side, I have been fortunate enough to secure a number of grants and have served on numerous international Ph.D. Thesis committees, been a member of the editorial boards for 7 international journals, and served as the Chair and Co-Chair for 12 international conferences. For recognition of my research activities, I have been invited to a number of international conferences as Invited Speaker, chaired panel discussions and numerous international conference sessions. I have served on more than 150 international conference program committees. Furthermore, I have published number of articles in peer-reviewed international journals and conferences. I am also an active member of ACM, ASEE, ASEE/PSW and CSAB.

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## ABSTRACT

*In this paper we try to explore different factors impacting establishment of an academic partnership. We plan to examine the expectations, dynamics, and particulars of academic partnerships and the reality of expectations of universities on both sides of the globe. International collaboration may not just serve as a trend, but it is almost an obligatory practice for some of the private universities in developing countries, in few cases individual research group, in order to seek visibility on the science and technology scene internationally, also have international collaboration at the group level. This paper presents an effort, as a case study, towards academic collaboration among two universities from a developing country and a large private non-profit university in the United States. This study also aims to highlight issues regarding trust and expectation from both sides and lack of reliable technical, communication as well as organizational infrastructure that may contribute to the inability to partner and collaborate. These systemic issues sometimes also create a tension between partners in their approach to collaboration.*

## Collaboration and Motivation

Collaborations and signing Memorandums of Understanding (MOU) between universities is one of the new trends. Generally, in case of international collaborations it may not only serve as a trend but it is almost an obligatory practice for most of the private universities in the developing countries. These private universities through these collaborations are looking for some kind of recognition and hoping to gain a competitive advantage among the perspective students and their parents. In some cases it is also possible that individual research group, in order to seek visibility on the science and technology scene internationally, also have international collaboration at the group level.

International collaborations also include few additional factors, which may not be important to consider for local collaboration, namely historical and socio-cultural traditions. These factors sometimes play very critical role in the success and sustainability of such international collaborations. It is our understanding that because of social-cultural and traditions collaborations generally occur more naturally as a result of increased opportunities for interactions with colleagues from other countries during international workshops, conferences and symposia. Since now a days most of the schools have faculty with very diverse cultural background so sometimes cultural relationship of faculty and researchers also influence facilitation in collaboration. Finally, no matter what type of collaboration we are working on informal contacts are just as important (if not more important) as any kind of formal connections in terms of innovative outcomes for the perspective collaboration. However, some of us may still put more emphasis on more formal collaborative mechanisms to be used for establishing any kind of initial connection for establishing collaborations.

Once the collaboration is established then the next step is maintaining this collaboration. One of the important factor that can help in maintaining strong relationships among collaborating institutions is to always stay in touch and keep regular communication channels open. Authors<sup>1</sup>

report importance of feedback and sharing of ideas. Any such feedback will have no impact if collaborating institutions are not listening to each other. International collaborations may include accepting various and at times opposing ideas that could be the result of difference in culture and other factors that are local to that institute part of the collaboration.

In the following sections we will explore different factors impacting establishment of an academic partnership between different universities. We plan to examine the expectations, dynamics, and particulars of academic partnerships and the reality of expectations of universities on both sides of the globe. We will also present efforts, as a case study, towards academic collaboration among two universities from a developing country and a large private non-profit university in the United States. The assumptions characterizing the partnership between the participants and their counterparts will also be discussed.

### **Globalization and Impact:**

Globalization in almost every aspect of life is now a days very common, so like in any other field higher education institutions are also pushed to grow their scope beyond the boundaries of their home country. Most of us would agree that academic globalization will have positive impact on the educational institutes. However, on the other hand some researcher attribute reduced support from the governmental institutions, outsourcing of services and narrow focus of curricula to the globalization thus negatively impacting operation and working of local institution<sup>2</sup>. In addition, some countries and governments may think of these collaborations as one of the source of brain drain from the country thus jeopardizing their economic and technological growth. Thus local institution will find themselves in a very challenging position and find it hard to keep their talented faculty as well as good students to stay. This can be attributed to the fact that local university administration, in most cases, is unable to offer attractive salary and benefit package in order to retain highly qualified faculty. Many of the developing countries had suffered because of this brain drain phenomenon thus finding it difficult to keep home grown talents within the country which in turn also negatively impacts the economic growth of the country. Brain drain often leaves education institutions in developing country with fewer qualified faculty members and in some cases talented students In<sup>3</sup> authors reported that a huge number of faculty from Ethiopian academic institution resigned from their profession and started taking jobs in other fields or went abroad for improving their qualification or other personal reasons with no intention to return. Although the number of such faculty varies from institution to institution, the rough estimate of this brain drain from Ethiopian academic institution reported to be as much as 50 percent.

### **Collaborations for Research:**

The area of faculty research interests is one of the avenues for international collaboration. In general, researchers from the developing countries are most of the time seeking collaboration with researchers in the developed countries. The reason for such attraction for these researcher is that there are more research opportunities in the developed countries as well as because researchers have access to larger financial resources, superior technical resources and established infrastructure. Sometimes researchers, research groups or even university upper management in the developing countries would like to seek international collaboration in order to get more

visibility and recognition among its peers. In addition the upper management also realizes that such collaboration will also expose their researchers to advanced technology and superior services that may not be available locally. This exercise also helps in enhancing local research and scientific capabilities and can also benefit both countries as well entice others to also become part of such collaborations<sup>4</sup>.

Nowadays universities even in the developed countries with strong research focus are also encouraging their faculty to establish international collaboration with researchers even if they are from the developing countries. In addition, the scientist in the developed countries themselves have started realizing the benefits in initiating collaborations with the developing countries. The developing countries have improved research capabilities and impact of local context on research findings<sup>5</sup>. Another interesting observation quoted in research<sup>6,7</sup> indicates that research citing for papers with authors from several countries is higher than papers with authors from the same country or papers with single authors. It is also reported that multiple author papers have higher percentage of publication within higher impact articles, this can be double if authors are not from the same country<sup>8</sup>. However, this leads to a different discussion of its kind with many questions for further research for example, how much recognition will be earned by each author of a paper with multiple authors from various countries? We will not be addressing this issue as it is beyond the scope of this paper.

### **Collaboration for Enrollment**

Like any other partnership a collaboration among universities has to produce mutual benefit to the institutions involved. This type of collaboration is driven by the fact that universities involved want to increase their respective enrollment in programs. There are not many articles analyzing education partnership or academic collaboration<sup>9,10</sup> and how far these partnerships were able to serve mutual interests. Even the collaboration between USA and European universities have not produced concrete outcomes or have not delivered the expected results<sup>11</sup>. However, authors in<sup>2</sup> report a different reason for global partnership and present a scenario in African region. Countries like Kenya, Tanzania, Uganda, South Africa were having high enrollments in their public as well as private universities in late 1990s. Therefore, to lower pressure on their universities these countries tried to sort collaboration with other neighboring countries to facilitate the needs of the students they could not accommodate. However, in the same article authors also report that these efforts did not prove to be productive.

### **Collaboration for Other Reasons**

One of the possible reasons for collaboration can also be the poor infrastructure of universities in the developing countries which means poor lab facilities, library, network and computer technology. University with poor infrastructure find it even harder to find a partner for collaboration in a developed country with advanced technology and better infrastructure<sup>12</sup>. On the other hand, it is very important for all the concerned parties to have access to resources that each institution interested in collaborative work will bring to the collaboration. One of the many benefits for collaboration can be the increase in library, technology and knowledge resources and more access to increased expertise.

In some cases higher education institutions, from developing countries, may attempt to establish collaboration with universities of other countries in order to project an image of an institute that is very well connected with the rest of the world<sup>13</sup>. It is worth mentioning that such collaboration may not lead to any financial gains however, it may result in enhanced research exposure and capabilities as well competitive advantage<sup>14</sup>.

Another form of collaboration is based on teaching method, called Blended Online Learning (BOL) <sup>15</sup>. This involves shared education that happens across several university settings. Authors in<sup>16</sup> present ideal features for BOL to have a effective collaborative learning is to: (1) provide technical and resources support, (2) get familiar with each system, (3) launch effective and sustained communication, (4) build mutual trust, and (5) get organized in all aspects of the collaboration. In this type of collaboration using BOL can have various types of communications (a) Discussions with other instructors teaching classes in the program at two institutes involved in the collaboration. (b) Lecturing or chatting with students in the class, may be from different institutes. Communication in a BOL typically takes three forms: (i) communicating with other instructors, (ii) communicating with students, and (iii) self-communication. It is also important to formalize the communication channel and all the related protocols. Such protocol is very important while communicating with students in the class that includes students from the collaborating institutions. It is possible that the students from one institute may be used to a specific way of communication that the instructor from another institute teaching the class is not familiar with. Therefore, it will be helpful if the communication protocol is already discussed and decided so that both student and instructor are well prepared. The technology used for this communication will also play an important role during collaboration, therefore it is important that all parties involved must familiarizes themselves with the technology as well as protocols. Such an arrangement will create mutual respect and trust among the collaborating institution and will also avoid any unilateral decisions. The basis of success of BOL collaboration is to have an extensive plan for and at every stage. Many students and faculty will be going through BOL for the first time. Such plan will, if not eliminate, may reduce their anxiety as well as avoid their confrontation if all guidelines and expectations are clear.

## **Case Study**

The University chosen for this case study was founded in 1971 and is one of the largest private nonprofit institution of higher learning and the 16th largest in the United States. It comprises five schools and one college: the schools of Business and Management, Education, Engineering and Computing, Health and Human Services, and Professional Studies, and the College of Letters and Sciences. The University is committed to accessibility and offers programs at 28 campuses and is focuses on adult learners. The average age of students is early to mid-thirties and are self-motivated. A majority of students are working adults with full-time jobs and families. They put a high value in being able to learn when it fits their schedule. At this University, courses are taught in a one-course-per-month format, giving students the ability to focus on learning one course at a time and the flexibility to pursue an academic plan at their own pace. Students complete the program by taking a sequence of consecutively offered monthly classes. Classes meet twice per week over a four-week period in the evenings. The university responds to student learning needs with two approaches for accelerated learning: intense onsite classes or intense online classes.

Each approach offers certain advantages. The programs are offered online through University's online learning platform. This learning platform is the Pearson Learning Studio, formerly eCollege. The lectures for online classes are delivered to the student via Class Live Pro, which is a custom version of the popular Elluminate software (live chat sessions). Class Live Pro (Elluminate) is a state-of-the-art conferencing system with audio, video and document-sharing capabilities.

It is surprisingly strange that so little work has been published on the role that is played, as well as the problem faced by the faculty of the institutions involved in establishing collaborations<sup>18</sup>. The faculty of institutions participating in collaboration in the classes they teach encounter a daunting task of dealing with students from not only different cultures but with varying educational backgrounds and learning styles. Following are some of the things that faculty has to deal with when their institutes enter into international collaborations<sup>12</sup>;

- Leave the comfort of their usual classroom and move on to more challenging class environment generated as a result of, may be, market driven global international collaboration.
- May be ill prepared for cross cultural challenges that may not be expected in a traditional class room.
- Exposure to challenges in the use of technologies associated with international collaboration.

In order to expand our access to student population outside USA and tap some of the resources and opportunities that have not been explored by our competitors, in the past few years we have been making efforts to establish a collaboration with one public sector and one private university in one of the developing country. One of our faculty member who had personal contacts with upper managements of these international institutes actively initiated these efforts. Unfortunately both the attempts were not successful and efforts could not be translated in a working collaboration. Following are few of the lesson learned from this experience;

- It must be realized that it is the faculty who are able to build and sustain long-term collaborations and can play a key role in any of the collaboration. In some cases collaboration discussions are handled by administration that is less enthusiastic and holds poor understanding of the programs. This situation is further complicated when decision are made by the administration, especially upper administration, that is not fully knowledgeable about the inner details of the program. Sometimes the problem for faculty working on collaboration, is that faculty may not agree with these decisions made by the administration. Because of lack understanding at the program level these decisions are made based on factors other than the benefit for the students of both the institutes.
- It is interesting to note that key factor in any collaboration is the motivation of an individual faculty at the institute. Faculty involved in such collaboration may have incentive for such activity resulting in some sort of recognition and/or promotion and/or any other benefit that one may have not even realize. Some of the key issues recognized by faculty while working on international collaboration basically deal with establishing

and sustaining relationships, getting things done, as well as shared and differing views on certain things<sup>17</sup>. These views may be on various aspects of the collaboration.

- Systemic issues regarding trust and expectation from each side and lack of reliable technical and communication as well as organizational infrastructure may also contribute to the inability to partner and collaborate. These systemic issues sometimes create a tension between partners in their approach to collaboration. Our study and analysis of our collaboration efforts also reveal basic assumptions of partnerships and impressions of international university as well as unrealistic expectations of the university on either side.
- A better and deeper understanding of historical and socio-cultural traditions of international university is very helpful to comprehend cultural differences and how they can impact the success and sustainability of such international collaborations.
- In our case the difference in the academic calendar was also one of the major challenges for collaboration. For example, our institution has one month one class accelerated format that makes collaboration with other institution even more difficult. Our collaboration cannot work unless there is a strong commitment from students from other institute to devote themselves for longer class sessions and lesser time to submit assignments and project work.
- Another reason that needs consideration and attention is the difference in time zones. This issue was not only for initial meeting but had impact on meeting times later in the negotiations. Therefore any kind of international collaboration may make this as one of the difficult aspect since it may involve up to 12 hours time difference and in some cases difference in working days of the week. For example, most of the Middle Eastern countries have Sunday to Wednesday as working week thus leaving only three days to hold meetings.

It is our experience that any type of collaboration activity is both time consuming and requires lot of effort so it is important that one stays focused and remain in touch through any form of communication and do not let anything fall through the cracks. To start towards an academic collaboration that would be successful it is important that we have committed, energetic and cooperative people on both sides of the negotiation teams. Another equally important deductions from this study is that at no time we must disregard the perceptual and behavioral aspects of university management on both sides during such interactions.

### **Analysis and Conclusion**

It is our understanding that international collaborations generally occur more naturally as a result of increased opportunities for interactions with colleagues from other countries during international workshops, conferences and symposia. Sometimes cultural kinship of faculty and researchers also influence facilitation in collaboration. In addition, we also think that informal contacts are just as important (if not more important) as any kind of formal connections in terms of innovative outcomes for the perspective collaboration. Although some may still put more emphasis, in policy terms, on more formalized collaborative mechanisms to be used for

establishing any kind of initial contact for establishing collaborations. Another equally important deduction from our experience is that, at no time we must disregard the perceptual and behavioral aspects of university management on both sides during such interactions.

It is our hope that the lessons learned from our experience in this study will be invaluable. Colleges and universities need to understand what entices faculty to begin cross-national collaborations and what sustains their work over time. In addition, the barriers to success will need to be clearly anticipated and understood in the hope that faculty and their institutions can avoid the pitfalls of their predecessors.

## References:

- [1] Amey, M. J., Eddy, P. L., and Ozaki, C. C. "Demands for Partnership and Collaboration in Higher Education: A Model." In M. J. Amey (ed.), *Collaborations Across Educational Sectors. New Directions for Community Colleges*, no. 139. San Francisco: Jossey-Bass, 2007, 5–16.
- [2] Ladislaus M. Semali<sup>1</sup>, Rose Baker<sup>2</sup> & Rob Freer<sup>3</sup> 2013. Multi-Institutional Partnerships for Higher Education in Africa: A Case Study of Assumptions of International Academic Collaboration, *International Journal of Higher Education*, Vol 2(2).
- [3] Teferra, D., & Altbach, P. G., (2004). African higher education: Challenges for the 21st century. *Higher Education*, 47(1), 21–50.
- [4] Giudice, Gian Francesco. 2012. Big science and the Large Hadron Collider. *Physics in Perspective* 14, no. 1: 95–112.
- [5] Marcelo Knobel , Tania Patricia Simões & Carlos Henrique de Brito Cruz (2013): International collaborations between research universities: experiences and best practices, *Studies in Higher Education*, 38:3, 405-424.
- [6] Pečlin, Stojan, Primož Južnič, Rok Blagus, Mojca Čížek Sajko, and Janez Stare. 2012. Effects of international collaboration and status of journal on impact of papers. *Scientometrics* (online first).
- [7] Lancho-Barrantes, Bárbara S., Vicente P. Guerrero-Bote, and Félix de Moya-Anegón. 2012. Citation increments between collaborating countries. *Scientometrics* (online first).
- [8] Jeong, Seonkyoon, Jae Young Choi, and Jaeyun Kim. 2011. The determinants of research collaboration modes: Exploring the effects of research and researcher characteristics on co-authorship. *Scientometrics* 89, no. 3: 967–83.
- [9] Hamrita, T. K. (2011). Building a holistic international educational partnership: Collaboration between The University of Georgia and the Tunisian Higher Education System. *Journal of Community Engagement and Scholarship* 4(1): 5-14.
- [10] Williams, J. E., Wake, C., Hayden, L., Abrams, E., Hurtt, G., Rock, B., Graham, K., Hale, S., Porter, W., Blackmon, R., LeCompte, M., & Johnson, D. (2011). Building a model of collaboration between historically black and historically white universities. *Journal of Higher Education Outreach and Engagement*, 15(2), 35-55.
- [11] Jowett, A. & Dyer, C. (2012). Scaling-up successfully: Pathways to replication for educational NGOs. *International Journal of Educational Development* 32(6), 733-742.
- [12] J Cooper, R Mitsunaga, "Faculty perspectives on international education: The nested realities of faculty collaborations" *New Directions for Higher Education*, 2010



[13] Higgitt, D., Donert, K., Healey, M., Klein, P., Solem, M., and Vajoczki, S. "Developing and Enhancing International Collaborative Learning." *Journal of Geography in Higher Education*, 2008, 32(1), 121–133.

[14] Altbach, P. G., and Knight, J. "The Internationalization of Higher Education: Motivations and Realities." *Journal of Studies in International Education*, 2007, 11(3/4), 290–305.

[15] Andrea Perkins Nerlich, James L. Soldner, and Michael J. Millington, *Inter-University Collaboration for Online Teaching Innovation: An Emerging Model*, Rehabilitation Research, Policy, and Education, Volume 26, Number 4, pp. 321-344, 2012.

[16] Tseng, H., Ku, H., Wang, C., & Sun, L. (2009). Key factors in online collaboration and their relationship to teamwork satisfaction. *The Quarterly Review of Distance Education*, 10, 195–206.

[17] Shore, S., and Groen, J. "After the Ink Dries: Doing Collaborative International Work in Higher Education." *Studies in Higher Education*, 2009, 34(5), 533–546.

[18] Dewey, P., and Duff, S. "Reason Before Passion: Faculty Views on Internationalization in Higher Education." *Higher Education*, 2009, 58, 491–504.