INTRODUCTION

The importance of research collaboration among universities in the region cannot be overly stretched in view of the agreement on ASEAN economic community integration (ASEAN, 2009). While the call for ASEAN integration basically veers towards a sustainable economic community, universities are correspondingly challenged to play their triadic functions on research, academics and extension services vis-à-vis other partner institutions in the region with intentions of greater impact.

Research significantly plays a key role on the development of technologies, products and services that help ensure the competitiveness on priority sectors, both as individual member countries of ASEAN and collectively for the region. Of interest to universities are those cited under a number of areas of cooperation like human resource development and capacity building. The agreement likewise allows for free flow of professionals and talents within the region and strengthen institutional mechanisms which have important implications to universities.

THE ROLE OF INTERDISCIPLINARY RESEARCH FOR ASEAN INTEGRATION

Interdisciplinary research will play a vital role for universities in ASEAN to converge in the spirit of developing a single market production
base for priority areas. Universities with interest to collaborate with others in the region must ensure that they agree with well-defined, prioritized areas within the distinctive competence of their respective institutions. Similarly, it enables the universities to develop their research capacity, both human and otherwise, in a wide range of disciplines and specializations.

What is interdisciplinary research and how does it differ from multidisciplinary research? Jacqueline Resnick (2012) says that these often interchanged words have different meanings. While there are diverse ways of defining interdisciplinary research, there is an emerging consensus, especially from National Academies (2004), that its focus lies on particular problems and issues, and requires support from various disciplines. Solutions for such problems are usually beyond the scope of any single discipline. Thus, the collaborative work of scholars of various disciplines allows for the creation of new products, processes and technologies. By contrast, multidisciplinary research forces the various disciplines to study the same problem from their own perspectives (Resnick, 2012).

The culture on academic freedom in universities allows both for the conduct of interdisciplinary and multidisciplinary researches. But product and solutions focused interdisciplinary researches which are intended to support the needs of the ASEAN economic community are expected to be high on the list. Collaborations on such type of research are aligned with the agenda of developing ASEAN competitiveness.

**PROMOTING INTERDISCIPLINARY RESEARCH CAPACITY**

Universities in ASEAN can do collaborative interdisciplinary research and develop their capacities in tandem with their partner universities in the region. Such arrangement will provide for the mobility of professionals, researchers and students within the framework of ASEAN integration. Equally, with common activities between universities, their academic and research programs may correspondingly strengthened.
SOME RESEARCH COLLABORATION MODELS

A number of research collaboration arrangements can serve as models for ASEAN universities.

Research Linkage Program Model

This model (Figure 1) derives from a linkage program between two institutions that have a common mission to support a sector in line with the recipient country’s national development goals. The arrangement for a research linkage program usually originates from the proponent (recipient institution) or the foreign institution submitting its proposal for research grants. In the case of the recipient institution as a proponent, foreign funding agencies will match it with a local university from its side. In the latter’s case, it will identify the institution that it wants to work with after they have evaluated the best fit for the proponent.

Figure 1. Research Linkage Program Model

This arrangement usually provides for an Interagency Advisory Body consisting of policy makers, subject matter experts and research
specialists with the identified focal national institution providing the human resources and doing the coordination activities for the program. The foreign institution usually provides capacity building efforts to the national institution while both partner institutions do joint research.

**Large and Small Scale Inter-Country Studies**

Large or small scales research studies across countries (Figure 2) usually involve the development of a concept for research by a team of experts from various nationalities and such is shared with countries interested in participating. If the research idea is generally acceptable, then the following committees are formed: the Advisory Committee, as a policy making body of internationally respected academics and research specialists; and a Technical Committee, with researchers and experts of extensive research experience representing the disciplines needed to oversee the operations of the research project. An international research coordinator, usually from the institution that conceptualized the proposal, is designated and given administrative supervision over the national research coordinators that the participating countries will identify.

![Figure 2. Large Scale Research Model](image-url)
This model guided large scale international research studies like the series on the Trends of International Mathematics and Science Study (TIMSS), the Teacher Education Study and significant others conducted by the International Association on the Assessment of Educational Achievements (IEA) as well as other studies of global nature. Besides, small scale research studies done by UNESCO and universities together with their partner institutions follow this model.

**Secondment in R&D Institutes**

Secondment is a term used for assigning a faculty member or researcher on temporary basis to another institution with the mutual consent of the person and both the sending and receiving institutions. Faculty members who are scheduled for their sabbatical, a career break usually given on the seventh year of continuous exemplary service, may spend their time also in another university or research institution.

![Secondment Model Diagram]

- Full of partial funding for R & D projects
- Joint research and publications with seconded researchers
- Provide data or venue for sabbatical engagement

**Figure 3. Secondment Model**

Ogena, E. (2015). Perspectives on building collaboration to promote ...
This model (Figure 3) has a host institution that accepts faculty members and researchers coming from universities, R&D institutes and companies who allow them to work with their own faculty and staff, especially on research projects. Those accepted by the host institutions may benefit from partial or full funding for their research projects. Those seconded to host institutions are expected to do joint research and publication with the full time faculty and/or research staff of the aforesaid institution. Significant research collaborations are usually forged through this research model.

**Joint PhD Program Model**

Recent developments for close collaboration among foreign universities allow for joint doctoral program arrangements. The model below (Figure 4) facilitates the implementation of a common program in a similar discipline that permits cross-credit arrangement scheme. In some instances, universities will have defined responsibilities for certain subjects/courses and flexible arrangements for subjects and advisers. Joint PhD programs assign co-advisers from partner universities to a graduate student doing his dissertation. Moreover, these universities work for joint research and publication among their faculty members, research staff and students. The European Erasmus program uses this model in a broader sense for its identified programs.

![Figure 4. Joint PhD Program Model](image-url)
**Product-Oriented Research Model**

The product-oriented research model (Figure 5) presupposes that there is a common end goal for research among universities – products, processes or technologies.

This model considers the multi-disciplinary and interdisciplinary approaches to product development and distributes the tasks to researchers of universities and research institutions equipped with the competence – both manpower and facilities – to deliver the desired outputs.

![Figure 5. Product-Oriented Research Model](image)

**TOWARDS AN ACROSS BOARDER ASEAN RESEARCH CONSORTIUM**

Vision 2020 of the ASEAN Economic Community strongly encourages a convergence of interests of its member countries to deepen and broaden economic integration through existing and showing new initiatives. Research in general, and interdisciplinary research in particular, serves as a vehicle for cooperation and collaboration among universities in the region. Engaged in interdisciplinary research, universities will be positioned to improve their capacity and human resources and the product, technologies...
and services that they can provide together to the ASEAN community impact greatly on development across economic sectors.

A consortium arrangement among universities in ASEAN fosters cross-border arrangement along the models cited in this paper. Hopefully, it can serve as a mechanism for pushing their institutional and geographical limitations or boundaries and in participating actively as valued agents of change in the region.

REFERENCES


