

Original article

Lessons learned from transnational joint doctoral and cotutelle doctoral programs: strategies for sustainable development

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Background: To enhance the global impact, the universities shall ally deeply with their collaborators. Transnational educational programs are crucial modes to build a successful partnership and to make the collaboration sustainable.

Objectives: To report and conceptualize the important issues about transnational joint doctoral degree and cotutelle doctoral programs.

Methods: We reviewed and conceptualized the lessons learned from joint doctoral degree and cotutelle doctoral programs at the Graduate Affairs, Faculty of Medicine, Chulalongkorn University (CU) during the period of the past 4 years (October 2015 to September 2019).

Results: CU launched its first joint doctoral program in 2012. The curriculum was co-built by CU and the University of Liverpool, United Kingdom. The strong support from the university-level as well as from the faculty-level is crucial for success. Graduates are well accepted to a variety of high profile universities. The administration of the program at the faculty-level needs careful attention from the students, perseverance of the joint program management team, and dedication from the supervisors of both universities. A cotutelle doctoral program of CU with Macquarie University in Sydney, Australia is also studied. The cooperation of the personnel at multi-level is essential for transnational educational program establishment.

Conclusion: CU has established a rather well-developed system in operating the transnational educational programs at the doctoral level. In order to keep these inceptions persistent, a multi-level supporting framework, a solid foundation of joint research along with joint capacity building of human resources are vital.

Keywords: Transnational program, joint degree program, cotutelle program, doctoral program, sustainable development.

Academic excellence, student achievement, and impactful multilateral research collaboration with social responsibility are mainstays of university missions, which are usually set to align with the government and university policies, with the ambition to reach the vision of the organizations. Generally, the major purposes of standard educational programs are to produce competent graduates in each field, to enable the students to actively learn and up-skill to support their future professions, to facilitate the

students and faculties to build up productive cooperation and then to co-generate new knowledge and wisdom for the society.

One-university academic programs are convenient to administer, however, the disruptive advancement of technology as well as the diversity of learning ecosystem in each university has made sole-university educational programs less competitive. In the current situation, universities and programs may not be able to generate groundbreaking knowledge efficiently unless they collaborate with their local and international partners.

Student mobility, by contracted part-time student exchange and free movers, is the solid ground for university networking. Research collaboration, joint meetings and joint seminars are the following steps to build up stronger ties. Full academic cooperation may

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be leveraged by co-creation of joint degree, double degree or cotutelle programs which undoubtedly sustain long-term research partnership between universities. A cotutelle program denotes a jointly supervised scheme offered to selected candidates.

Transnational higher educational programs are emerging rapidly in the past two decades.⁽¹⁾ Nevertheless, the discrepancy among partners in terms of local legislations, rules and regulations as well as the variability of stakeholders may interrupt the flow of effective administration of these joint academic collaborations.

Chulalongkorn University (CU) is a first university in Thailand, established in 1916. The university has been ranked first in Thailand for 12 consecutive years (QS World University Rankings®).⁽²⁾ CU has successfully become members of various university networks, e.g. Academic Consortium 21, Association of Pacific Rim Universities, Asian Universities Alliance, ASEAN University Network.

Faculty of Medicine at Chulalongkorn University is one of the most prominent medical schools in Thailand. The 42 graduate programs at the faculty include 6 international programs (among these are 1 joint PhD program and 1 cotutelle PhD program) and 2 bilingual programs.⁽³⁾ The faculty has collaborated with numerous renowned institutes around the world (Figure 1).

The objectives of this report were to describe the important issues about transnational joint doctoral degree and cotutelle doctoral programs and to conceptualize the lessons learned from our institution.

Methods

We reviewed and conceptualized the lessons learned from joint doctoral degree and cotutelle doctoral programs at the Graduate Affairs, Faculty of Medicine, Chulalongkorn University (CU) during the period of the past 4 years (October 2015 to September 2019). Since the double degree programs at our institution were not fully established during the aforementioned period, therefore we neither had sufficient information nor adequate experience about the double degree programs to share in this report.

Results

The transnational educational programs highlighted the top-level academic collaboration among leading universities. Two programs are described in this study: 1. Joint PhD program in Biomedical Sciences and Biotechnology, which is the first joint doctorate program of Chulalongkorn University. The University of Liverpool had co-founded this program, which was first launched in 2012. To date, the program has successfully produced 7 qualified researchers for the academic and research community. All of our



Figure 1. Examples of international collaborators of Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand.

graduates are now working for leading academic institutions in USA, UK, Myanmar and Thailand.

2. Cotutelle program of the PhD program in Clinical Sciences of the Faculty of Medicine, CU with PhD Program in Clinical Medicine of the Faculty of Medicine and Health Sciences, Macquarie University (MU) in Sydney, Australia, which has started its collaboration since 2017. CU and MU executives, faculties including potential advisors and selected students had met with and had visited their counterparts many times before the official program was launched in the academic year of 2018.

Potential constraints of collaborative academic programs

Definitions of collaborative academic programs may vary among education providers.⁽⁴⁾ In general, these programs are aimed to produce graduates, especially in higher educational level, by collaboration of all partners involved. The prime advantage results from a combination of distinctive points from every parts so as to make the program more efficient and also more attractive to students.

Factors that may hinder the successful academic cooperation are mostly predictable but not all of these obstacles are preventable. Predictable factors are usually caused by the diversity of students and faculties of each university. On the other hand, a spectrum of capabilities of students and faculties attracts the cooperation, and quite frequently the fruitful outputs are eventually achieved. The discrepancies of rules and regulations are also predictable causes of delay in establishing and managing collaborative programs. These factors are often resolved by strong support from high-tier university executives, effective communication among collaborators and dedication of administrative staff. Unpredictable incidents are the most difficult and unpleasant ones; occasionally these incidents are uncomfortable for administrative staff to deal with. Program directors, program administrators and executive team of every parties have to work together to reach the solutions in a timely fashion.

Lessons learned from a joint doctoral degree program

Government policy and university rules change over time. The education program has to adapt itself accordingly. The major obstacle is that any major change of the joint degree needs to be approved by multiple levels of each university. A number of new

and revised documents has to be generated, settled, and approved. The long lag period may affect the quality of the program and also there is a possibility that when every committees have finally approved the program, the curriculum is already outdated. Our suggestion to this problem is that each university should set a common goal to hasten the processes by making approval of setting up new or revising the existing educational programs more comprehensive and more flexible. One way to achieve this mission is to set up a working group at the executive level to particularly work on these types of special academic programs with the ultimate determination to facilitate the programs rather than to let them move forward slowly by routine sequences.

Another struggle about the joint degree program is the research work produced by the students, which should be simultaneously co-supervised by every party. Due to the possibility of difference of research interest among advisors and the lack of compatibility in the research facilities in each university along with the strict conditions of some research funding agencies, it is sometimes extremely difficult to perfectly match the students to advisors from each university. Research questions may also alter during the study period, the students then have to work much more diligently and carefully in order to finish their theses than in the sole-university programs. Our suggestion to this problem is that each university should primarily promote the joint research collaboration among their faculty members. Recruitment of new faculty staff to be engaged in joint degree program of study is crucial for its sustainability. When there is a well-established relation among the universities, research grants will be easier to be sought and obtained. The student-faculty matching will then be easier. It will be guaranteed that the students are co-supervised in the same direction as well because the research will be in line with the advisors' interest.

Lessons learned from a cotutelle doctoral program

A cotutelle program is usually offered to the existing students in one university by another university. The main concern is about the research work which has to be co-supervised by both parties. Some of the selected students have already started their research before the entrance into the cotutelle program. The students then have to revise their thesis proposals in order to fit in with the advisors from each university.

Our suggestion to this matter is about the student selection process. Those candidates who would like

to enter into this program should be very flexible with their research work. The students should be selected at the beginning of their study to make sure that they still can adjust their work after consultation with their supervisors. However, the students should not enter too early into the program because they have to learn enough content to establish their own research questions, before making further decisions. The appropriate time point of student selection is therefore crucial.

Cotutelle programs may not start and end concurrently because there is room for freedom of each university to manage their own study period. This is different from a joint degree program where the programs have to be aligned since the inception. The timing incompatibility can be a risk because the students may choose to graduate from only one university, not from all parties as they have intended at first. Our suggestion is about the careful selection of the students. Home university where the students have originally entered may also sign a contract with the students before the offer of cotutelle student status.

For a single-thesis cotutelle program, the struggle of the students to match their theses with the supervisors in each university is similar to that encountered in the joint degree programs. A double-thesis cotutelle program might be a better option. But another issue would arise instead, i.e. the students have to conduct two theses in a rather limited period of study. This situation will then make the students not able to graduate in time, if not resigned from home university to avoid harder work and conflicts. A preventive measure to this problem relies on the executives to envisage the situation and then make the agreement among universities beforehand; the documents carefully written for each cotutelle program is very important to ensure sustainable collaboration among institutes.

Discussion

Universities need to collaborate with international partners to be more competitive. Transnational joint degree, double degree and cotutelle programs are among the highest level of cooperation. The Faculty of Medicine at Chulalongkorn University has developed a rather well-established system in designing, executing, and evaluating the transnational educational programs at the doctoral level. Nonetheless, qualitative and quantitative surveys from all stakeholders such as faculties teaching in the program, alumni and employers will definitely benefit the quality assurance, accreditation and

sustainability of the study programs. In order to keep these inceptions persistent, a multi-level supporting framework, a solid foundation of joint research along with joint capacity building of human resources are vital. Insights from joint PhD and cotutelle PhD programs at Faculty of Medicine, Chulalongkorn University shared in this article will help other programs foresee the situations, prepare the strategies to prevent the problems and make the university development more sustainable.

Author contributions

Both the authors made substantial contributions to the conception and design, acquisition of data, and interpretation of data. WT drafted the manuscript. TT critically revised it. Both the authors approved the final version and took full responsibility for statements made in the published manuscript.

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Conflict of interest

The authors, hereby, declare no conflict of interest.

References

1. Wilkins S. Transnational higher education in the 21st century [Special Issue Editorial]. *J Stud Int Educ* 2016;20:3-7.
2. Chula Makes World's Top 100 Universities for Academic Reputation in QS World University Rankings 2021 [Internet]. 2020 [cited 2020 Sep 9]. Available from: <https://www.chula.ac.th/en/news/31803/>.
3. Graduate Affairs, Faculty of Medicine, Chulalongkorn University. Curriculum: program [Internet]. 2016 [cited 2020 Sep 9]. Available from: <http://grad.md.chula.ac.th/curriculum.php>.
4. Kasuya H, Aleksic B, Sumigama S, Bustos I, Hasegawa H, Kasai MP, et al. Joint degree program for graduate students at the Nagoya University Graduate School of Medicine. *Nagoya J Med Sci* 2019;81:183-92.