

UK collaboration in Malaysia: institutional case studies

Imperial College London: Malaysia-Imperial Doctoral Programme

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Collaboration at doctoral programme level: a case study in development and adaptation

- The case study considers the Malaysia-Imperial Doctoral Programme (MIDP), which is a split research degree programme between Imperial College London (Imperial) and the five leading research and teaching universities in Malaysia: Universiti Kebangsaan Malaysia (UKM); Universiti Malaya (UM); Universiti Putra Malaysia (UPM); Universiti Sains Malaysia (USM); and Universiti Teknologi Malaysia (UTM). It may provide signposts for other institutions considering establishing similar arrangements with collaborative institutions overseas. The case study was written in May 2010.
- The study draws on documentation provided by Imperial, and discussions between the key staff involved in the development, management and quality assurance of the MIDP at Imperial and a visiting team from the Quality Assurance Agency for Higher Education (QAA). QAA is an independent body funded by subscriptions from universities and colleges and through contracts with higher education funding bodies. The QAA team also visited one of Imperial's Malaysian partner universities to discuss the MIDP with senior staff involved in its development and management, and also to meet local supervisors and a student currently on the MIDP. The team is grateful to the Malaysian university for their ready participation in the discussions and for the welcome and hospitality extended to the team.
- The key features of the collaborative arrangement are:
- MIDP students are registered solely for an award of Imperial
- the students are normally tutors, teaching staff or promising students at their home Malaysian institutions who have been granted scholarships and study leave to pursue the award
- the programme is only available to candidates proposed by one of the Malaysian partner universities, and accepted by Imperial for admission as a PhD student by meeting the college's admission requirements. Staff from other Malaysian institutions may be proposed for the MIDP if they are granted study leave from their home university and are approved to be of an appropriate standard by one of the five Malaysian partner institutions
- all MIDP students are full time and must spend a minimum of 12 months of their PhD programme - usually 36 months in duration - at Imperial. They may spend up to 18 months at Imperial
- the students must satisfy the same requirements as all other Imperial PhD students, including attendance at the Imperial College Graduate Schools' transferable skills training courses. Although students normally undertake this training when based at Imperial, the college does organise annual skills training programmes in Singapore and Hong Kong that MIDP students can attend should participation at events held at Imperial be impractical
- students have a lead supervisor at Imperial and a co-supervisor at their home Malaysian partner university. Under the Implementation Agreement (see paragraph 4), supervisors at Imperial shall normally hold the grade of Reader or Professor
- students may undertake the PhD programme in any department or research group within Imperial, subject to the identification of appropriate supervisors at both Imperial and the host Malaysian institution
- sponsored students are required on graduation to teach at their home Malaysian university for seven years.

In addition to the MIDP, Imperial's Register of Collaborative Provision records a Partner Research Institution (PRI) research degree (PhD) programme in Singapore. The college has also established three joint award PhD programmes with institutions in Singapore and Hong Kong, which start in 2010. All involve only small numbers of students.

- A Memorandum of Agreement was signed in July 2005, following visits in March 2005 to Imperial by the Deputy Prime Minister of Malaysia, and in April 2005 by the deputy vice chancellors of the five Malaysian partner universities. Staff at Imperial said that proposals for new collaborative programmes could either arise following such high-level discussions or, more commonly, as a result of initiatives developed at departmental/faculty level. The programme was developed:
- to support the Malaysian Ministry of Higher Education's aim to increase the proportion of Malaysian university academic staff holding a PhD to a minimum of 70 per cent by 2020
- to increase the level of collaboration between Imperial and the five Malaysian universities In June 2006 an MIDP Implementation Agreement was signed on behalf of Imperial and the five Malaysian partner universities. This governs the practical operation of the collaboration.
- 5 Imperial identified a number of factors that had influenced the development and shape of the collaboration:
- the agreement formalised pre-existing doctoral collaborations between Imperial and the Malaysian institutions
- the programme fell under Imperial's well-established split PhD scheme
- the programme provided Imperial with a stream of high quality PhD students
- it contributed to the capacity building of staff in the Malaysian institutions
- while Imperial did not necessarily seek to make a financial surplus from such arrangements, all costs of running the partnership needed to be covered.
- At Imperial all proposals for new collaborative doctoral programmes are initially scrutinised by the Pro Rector (Education), Pro Rector (International Affairs), Academic Registrar and Director of Planning. Where the proposal has been developed by a department or faculty, the principal of the relevant faculty would also be involved at this stage. Subject to initial strategic approval by this group, the college's Strategic Education Committee (SEC) would then consider the academic benefits, strategic benefits and potential risks of the proposal. Following approval by SEC, the graduate schools' Postgraduate Quality Committees take responsibility for considering the academic quality and operational detail of the proposed programme and processes for quality assurance. The Postgraduate Quality Committees make recommendations to Senate once final approval has been given by SEC. Proposals can be, and have been, turned back at any stage in this process. Imperial noted that as the MIDP was an early example of this type of collaborative arrangement, its approval predated the current systematic approval process and therefore did not follow it exactly.
- The first step in approval of the proposed MIDP was by the then Rector, Pro Rector (Postgraduate Affairs) and Pro Rector (International Relations) in 2005. Formal approval of the collaboration through Imperial's committee structure took place in late 2006. In December 2006 the college's Quality and Academic Review Committee (QARC)¹ considered the MIDP and confirmed that the arrangements complied with the college's regulations for split PhD study. QARC reported the scheme to Senate in February 2007. Imperial noted that at that time the MIDP was essentially a consolidation of arrangements under the college's well-established split PhD scheme. Recently, Imperial had revised its procedures for collaborative provision, and any future initiatives of this nature would be subject to these procedures.
- As there were already well-established links between Imperial and the five participating universities, it was not necessary to undertake any formal due diligence exercises at the time of establishing this programme. As the collaborative arrangement comes under the direct auspices of the Malaysian Ministry of Higher Education, formal permission to run the programme in Malaysia has not been an issue.

¹ The QARC was disbanded with effect from 1 October 2009 when a revised committee structure was introduced by Imperial.

- 9 For the purpose of this case study, the way in which Imperial has developed and adapted the management of the MIDP, and its engagement with its Malaysian partner universities, has been grouped under four broad headings:
- management of the MIDP
- student recruitment and marketing of the programme
- supervisory arrangements
- the student experience.

Management of the MIDP

- The Implementation Agreement established two committees to be responsible for the monitoring and review of the MIDP: the MIDP Council and the MIDP Academic Board. The MIDP Council gives strategic advice to the Malaysian government and Imperial on the MIDP and its future development. It receives an annual report from the MIDP Academic Board. The Council has three members: the Director General of the Higher Education Department, Ministry of Higher Education in Malaysia; the Rector of Imperial; and one vice chancellor drawn from the five partner Malaysian universities.
- The MIDP Academic Board is responsible for setting the overall direction of the programme within the parameters of Imperial's policies and procedures. It has six members: three from Imperial and three representing the five Malaysian universities. The Board originally had specific responsibilities for the approval of students, supervisors and co-supervisors, and for monitoring a range of other activities. It was expected to convene twice each year. However, as the MIDP has developed, it has become apparent that many of the matters originally specified for consideration by the MIDP Academic Board can be addressed more effectively through more informal means during meetings and visits to Malaysia. Experience has also shown that the selection of students is most appropriately undertaken by the supervisors; the Imperial department's Director of Postgraduate Studies; the heads of the academic departments concerned at Imperial and the Malaysian university; the head of the relevant Malaysian university's training unit/Human Resources department; and the Malaysian Ministry of Higher Education. The role of the MIDP Academic Board in managing the day-to-day operation of the programme is significantly less involved than was anticipated, not least because the volume of students enrolling has been much smaller than planned.
- A review of the MIDP is being undertaken by Imperial and its five partner universities in Malaysia. The review subsumes discussion of the extension of the current agreement, which is due to expire at the end of the 2011-12 academic year. A revised version of the Implementation Agreement will incorporate changes to the management of the MIDP based on the experience of running the programme. It is envisaged that the arrangement will continue for a further five years with the existing partner universities; there are no plans to add further Malaysian university partners, although the original Implementation Agreement did make provision for this. The annual recruitment target for the MIDP will remain in the region of 20 students per year.
- In accordance with the Implementation Agreement, Imperial has appointed an MIDP Coordinator to oversee the administration of the programme. The Coordinator is the first point of contact for the Malaysian partner institutions and provides advice on non-academic matters to MIDP students. The Coordinator is expected to make at least an annual visit to Malaysia. It is clear that the Coordinator's role is pivotal to the successful running of the programme, and the current post holder is both committed and enthusiastic.
- 14 Imperial is aware of the reliance placed on the knowledge and experience of the MIDP Coordinator, the loss of whom might cause problems for the running of the MIDP. The college recognises that as the size of the programme increases additional central support for both the

MIDP students and their supervisors would be beneficial, and has recently appointed an additional support post to address this. In addition, Imperial plans to appoint an Academic Director for the MIDP.

15 Each of the five Malaysian partner universities has appointed a Programme Coordinator to take responsibility for the day-to-day operation and administration of the MIDP, and to be the primary point of contact for the Imperial MIDP Coordinator. Through frequent visits to the partner universities, Imperial's MIDP Coordinator has also developed contacts at pro-vice chancellor level with each Malaysian university.

Student recruitment and marketing of the programme:

- Contractually, the Malaysian partners must obtain approval from Imperial for any publicity material that they issue. In practice, they are primarily using materials produced by Imperial. The MIDP Coordinator at Imperial reviews the English language content used to publicise the MIDP on the partner university websites. The Malaysian partner university visited by the team plans to launch a website for the MIDP, which would enhance its profile amongst the staff and students of the university.
- The Implementation Agreement stated that intake numbers during the period of the agreement would be determined by the parties on a year by year basis. Admissions were planned on the basis of an initial entry of 10 students per year in the academic years 2006-07 and 2007-08, and an entry of 20 students per year for the academic years 2008-09 and 2009-10. In practice, 'uptake has been slower than anticipated'. There are 10 students on the programme, including the cohort for the academic year 2009-10, which constitutes the total number of students who have enrolled on the programme. An additional three students transferred from the MIDP to become full-time students at Imperial because the nature of their research made it impractical for them to remain on a split PhD programme. No students have yet graduated from the MIDP, although several students are in their fourth year of study and submission of their theses is imminent. No students have withdrawn from the MIDP.
- It would be reasonable to assume that recruitment to target would be relatively straightforward, given the backing for the MIDP at government level in Malaysia, and the fit of the programme with the Malaysian government's policy objective of raising the proportion of university staff holding a doctoral level qualification. In practice this has not been the case. Imperial has identified a number of factors that have constrained the recruitment numbers. This includes regular staffing changes at the Malaysian universities, which have led to changes in programme coordinators and consequently limited marketing of the scheme. Imperial is currently working with the Malaysian universities to address this; for example, a leaflet publicising the programme was circulated in autumn 2009.
- The MIDP Coordinator at Imperial usually visits Malaysia three times each year. Through these visits the Coordinator has built links with the Human Resources and training departments that coordinate the programme in the Malaysian universities. In addition, the MIDP Coordinator gives presentations to potential students about the opportunity for development presented through the MIDP. Imperial has also invested in promotional materials to be used to raise awareness of the MIDP across the five participating universities. There has been a recent increase in expressions of interest in the MIDP, which Imperial hopes will lead to increased numbers of student registrations on the programme in due course.
- As part of its centennial celebrations in November 2007, Imperial held The Imperial College Centenary Symposium in association with the MIDP in Malaysia. This one day research symposium looked at science, engineering and medicine in the twenty-first century, and covered a range of issues including: cancer and infectious disease, bioengineering, imaging science, engineering and medicine. The opportunity was taken to highlight research objectives and give exposure to the MIDP.

Supervisory arrangements

- The MIDP operates on the basis of joint supervisory teams, with a lead supervisor drawn from Imperial and a co-supervisor from the Malaysian partner university. Both supervisors must be approved by the two institutions. Supervisory teams are often formed on the basis of pre-existing professional academic contacts and complementary research areas. Where such contacts are not already established, the MIDP Coordinator will alert academic staff to potential supervisory opportunities. The Coordinator may approach several staff before a partnership is finalised to ensure that the most suitable supervisory arrangements are made. All PhD proposals, including the MIDP proposals, must go through the standard scrutiny and approval process within the relevant Imperial department (and the equivalent at the Malaysian university). This scrutiny includes the supervisory team. The quality of this approval process is overseen by the graduate schools. There are plans to publicise supervisory opportunities more widely at Imperial and in the Malaysian partner universities. There is a growing level of interest in the MIDP amongst research staff both at Imperial and in Malaysia.
- There is specific provision for both supervisors to visit the student while he/she is away from their respective institution. Funding is provided for three such visits to be made over the duration of the student's programme of studies. The timing of these visits is largely subject to individual agreement between the supervisors and the student. The co-supervisor from Malaysia may visit Imperial early in the student's period of study, with the Imperial supervisor visiting Malaysia midway through the programme, and the Malaysian supervisor making a final visit to Imperial when the student is preparing to submit their thesis. Experience in running the programme has shown that it is beneficial for the Malaysian co-supervisor to visit Imperial at the time of the student's MPhil to PhD transfer examination so that he/she may have direct input into the process.² Supervisors both at Imperial and in Malaysia confirmed that supervisory teams had frequent email contact as well as occasional face-to-face meetings. Academic staff involved with Imperial's international collaborative research degrees also meet once a year at an informal reception to discuss their experiences and share good practice.

The student experience

The QAA team learned about how students decided to join the MIDP programme and their experience of registration. The team was told by a student that she had undertaken her undergraduate studies at the Malaysian partner university and had originally intended to register for a PhD award of the Malaysian university. The Dean of Faculty at the student's Malaysian university had drawn her attention to the MIDP and the scholarships available to undertake the programme. The student was attracted to the idea of having a UK university PhD award, and found the process of registration with Imperial relatively straightforward and trouble free. She confirmed that she had spent an initial period of study at Imperial, which she described as a good experience and grounding for her research. She also confirmed that she had undertaken the graduate schools' research training programmes while she was at Imperial.

² Following a Senate ruling that students admitted to Imperial to study for a PhD should normally have obtained a master's degree or equivalent qualification, Imperial's Senate agreed changes to the regulations for the award of PhD and MPhil in May 2010. From January 2011 all new PhD students will register directly for a PhD and undertake formal assessments at nine and 18-24 months. For those departments that have agreed their assessment processes, this date will be brought forward to October 2010.

- Like all Imperial PhD students, MIDP students must produce an initial plan of study, normally within their first three months of registration. Each student and supervisor must also produce, in consultation, a progress report at six-monthly intervals. The student is also provided at these times with the option to complete a second, confidential report; this report would be reviewed by the Director of Postgraduate Studies and/or Postgraduate Tutor in the department in which the student is based, and would not be seen by either the supervisor or co-supervisor. MIDP students also receive non-academic support and advice from the MIDP Coordinator, who is well known to the students.
- Careful project selection is critical to the success of the MIDP. All staff concerned stress that projects must be sustainable across two locations, and the research work must be capable of being transferred between Imperial and the Malaysian university. This transferability was relatively easy in some areas, for example computer science, but more challenging in other disciplines, such as biological sciences. In the early stages of the MIDP, three students registered on the programme moved from the scheme to become full-time students of Imperial because, as their work developed, it became impractical for them to split their time between Imperial and their home Malaysian institution. Close attention is now paid to the suitability of proposed projects when applications for the MIDP are considered. Supervisors at the Malaysian university also stressed the importance of forward planning and scheduling of research. Imperial has learned that it is important to ensure at the outset that there is sufficient funding of specialist equipment and consumables, and that all facilities required by the student are available not only at Imperial but also at the partner Malaysian university.
- Students on the MIDP must spend a minimum of 12 months of their registration period at Imperial. Imperial suggests that this could include the first and final three months of study, but this is not prescribed. The phasing of the periods spent at Imperial and at the Malaysian institution can, for many students, be a critical decision for the effective conduct of their research. There may be aspects of the student's research project where the work would not be readily transferable, and it is often important to identify discrete parts of the research to be conducted at Imperial and at the Malaysian university. In some cases, whether through availability of specialist equipment or research materials, there was a comparative advantage in undertaking an aspect of the research at one location rather than the other. As with the sustainability of research projects between the two institutions, problems with phasing work in Malaysia and at Imperial were more difficult in some discipline areas.
- 27 Students on the MIDP are well integrated into a vibrant research community, both at Imperial and at their Malaysian university. They do not experience academic isolation, despite the small numbers on the programme and the split nature of their research. They interact with other research students and post-doctoral researchers at both institutions. The MIDP students may apply for funding from their home Malaysian institution in order to attend relevant research conferences in both Malaysia and the UK an opportunity taken up by many.
- There is no expectation for students on the MIDP to undertake teaching duties, either at the Malaysian university or at Imperial. The question of training and support for such activity does not therefore arise.
- In the unlikely event of a partner university withdrawing from the programme Imperial would take over all supervision of the students.
- 30 Degree certificates issued to students completing the MIDP are identical to those issued to students undertaking a full programme of study on campus at Imperial; there is currently no indication of the involvement of the Malaysian university partner. This matter is under review.

³ These procedures are currently being reviewed in light of the recently agreed changes to the regulations for the award of PhD and MPhil at Imperial, to be introduced with effect from January 2011 (see footnote 2).

Conclusion

- The MIDP is a prestigious programme supported at a high level within the Malaysian government. It provides participants who are or will become lecturers at Malaysian universities with an international doctoral experience. There are also opportunities to build on the relationship created by the MIDP to develop other forms of research collaboration to the mutual benefit of all participants.
- The development and operation of the MIDP has set challenges for Imperial and its Malaysian partner universities, and important lessons have been learned. The original plans for the programme have been modified in the light of experience, and processes and procedures have been adapted accordingly.
- Imperial has reviewed its approach to marketing and recruitment for the MIDP as student numbers have not met original targets.
- Imperial has increased the central support available for the MIDP, having recognised the increasing demands of this growing programme and the reliance placed on the MIDP Coordinator.
- Imperial recognises that it is important at the application stage to appraise the feasibility of the proposed PhD project, which will be supervised on a split-site basis, and to confirm that appropriate staff, equipment and financial resources will be available to support the research project.
- It is essential to plan the phasing of the time spent at Imperial and at the partner institution in Malaysia so that it enhances, rather than inhibits, the progress of students' research projects.

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