



Final Report

Higher Education Partnerships Programme

March 2020

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Acknowledgement

On behalf of the British Council Thailand, we would like to express our sincere thanks to the Office of the Permanent Secretary for Ministry of Higher Education, Science, Research and Innovation (MHESI).

The generous and kind support from all partners allows us to foster incredible and sustainable programmes like 'Thai-UK Higher Education Partnerships (HEP)'.

Secondly, we are also extremely grateful for the time taken by all representatives from Thai and UK universities and other participating institutions who took part in this programme, offered their views, and played an important role in project accomplishments.

Last, but not least, the committee members, each of whom has greatly contributed and provided patient advice throughout the project management and delivery.

Thank you, again, for partnering with us on this important project.

Executive summary

In 2018, the Thai-UK Higher Education Partnerships (Thai-UK HEP) programme was developed in partnership with the Office of the Permanent Secretary for Ministry of Higher Education, Science, Research and Innovation (formerly known as the Office of Higher Education Commission).

The programme was designed in alignment with national policy to respond to Thailand's education priorities with a focus on the country's economic and social development. The aim was to equip academic and staff at all levels to meet industry demands and enable internationalisation of the education environment.

We selected Thai-UK partnership projects from a pool of eligible candidates that were previously funded by the British Council's Trans-national Education (TNE) Development programme and the Newton Fund. The institutions selected from Thailand and the UK were broadly split between those with an education focus and those with a research focus in the HEP programme. We also aimed to develop fresh partnerships and networks between different Thai-UK partners in the programme.

The two-year HEP programme comprised three workshops in Thailand, two visits to the UK, public dissemination, and a funding scheme called HEP Grants. The programme was divided into two phases. Phase one was a workshop for academics on the topic of Internationalising Higher Education (IHE), which focused on 'Academic Partnerships', followed by a UK visit. Phase two comprised a second workshop and a visit to the UK focusing on 'University-Industry Partnerships'. The third workshop, on 'Leadership Capacity Building', was designed specifically for international project officers.

The programme succeeded in building on these two existing TNE links and extending four research partnerships under the Newton Fund Institutions Links, which has increased the level of engagement with the industrial sector and boosted social benefits. Universities and industries learned to collaborate in order to translate research findings into practices which improve economic outcomes and quality of life.

The Thai-UK TNE links comprise of two dual-degree undergraduate programmes in Tourism, to respond to the workforce demand of the tourist industry. The remaining four partnership projects supported under the programme are joint research programmes in the fields of Agricultural and Agri-tech, and Medical research, which align with the country's S-Curve priority industries.



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Key Facts – Higher Education Partnerships



For 2 years

the Higher Education Partnerships **Programme has built**

6 Thai-UK collaborative projects:

Trans-National education programmes

research programmes

3 areas under

Thailand's S-Curve industries supported

- Tourism
- Agriculture and Agri-tech
- Medical research



Over 30

HE institutions

in Thailand and the UK participating in the HEP programme



from Thailand and the UK engaged Number of faculty/academic staff mobilised/ will be mobilised as a

result of this partnership project

45 Number of students mobilised/ will be mobilised as a result of this partnership project

joint research publications

in progress / have been published internationally as a result of this partnership

joint training programmes developed as a result of this



18 October 2018

TNE Forum and Stakeholder Meeting
Knowledge and experience sharing as well
as networking opportunities between Thai
and UK universities to further strengthen the
delivery of partnership programmes.



13-15 February 2019

First workshop: Academic partnership under the theme 'Internationalising Higher Education'. The workshop is delivered by Andy Gibbs (European Higher Education Expert) and Darren McDermott (Senior Advisor to the Global Impact Institute).

24 February - 1 March 2019

UK visit: Academic partnershipBuilding Thai-UK academic partnerships and links

22-24 May 2019

Second workshop: University-Industry engagement

Increasing leaderships for IHE delivered by Professor Vickers (Head, School of Computer Science and Electronic Engineering, University of Essex)

Capacity building for international officers by Andy Gibbs and Darren McDermott

14-18 July 2019

UK Visit: University-Industry engagement
Understanding the UK's experience and
practices in developing university-industry
collaboration



22 November 2019

Public Disseminatio

To offer knowledge sharing and networking opportunities among higher education institutions and industry sector



11 December 2019

Higher Education Partnerships Grants
Small-scale funding scheme by the
British Council

Project activities

The 6 collaborative projects between Thai and UK institutions under the Higher Education Partnerships Programme

	UK Universities	Thai Universities	Project name
1	Coventry University	Bangkok University	Bangkok University International-Coventry University Partnership
2	Coventry University	Walailak University	Embedding Work-Integrated Learning in Global Tourism, Hospitality, and Wellness Management Curriculum
3	University of Liverpool	Chulalongkorn University	SCRAN: Sensors for CRops & Agri-tech Network
4	London School of Hygiene & Tropical Medicine (LSHTM)	Chulalongkorn University	Business engagement in development of novel diagnostics and vaccines against melioidosis, tuberculosis and other mycobacterial infections
5	Imperial College London	Mahidol University	BART LAB-Hamlyn joint research programme for Medical Robotics
6	National Institute of Agricultural Botany (NIAB EMR)	Nakhon Phanom University	Developing a joint research programme and partnership for managing the rhizosphere microbiome for sustainable crop production in the central Mekong River Basin



Activities were delivered and led as follows:

1. First workshop: Academic partnerships

During the first phase of the HEP programme, we aimed for participating institutions to learn how Thai-UK partnerships link to build 'Academic Partnerships' between Thai and UK universities, and to sustain Thai-UK cooperation for institutional partnerships. In order to achieve that aim, two experienced trainers in Higher Education, Andy Gibbs and Darren McDermott, were brought in to train academics from Thai and UK universities.

The first academic partnerships workshop was hosted on 13-15 February 2019 at ibis Bangkok Riverside, followed by a UK visit and peer presentations in the



following weeks. Each participating partnership needed to develop a plan for peer review during the UK visit.

Profile of UK trainer

Andy Gibbs

is a European Higher Education expert and former UK Bologna expert with wide-ranging involvement in supporting Higher Education reforms in the UK and beyond. He has led curriculum and policy development events and projects on Higher Education reforms for ministries and universities in more than 30 countries worldwide.





Darren McDermott

is based in Singapore and works as an independent consultant and Senior Advisor to the Global Impact Institute. Darren's work focuses on internationalisation evaluation and capacity development. Darren has also served as a consultant on the European Commission-funded Support to Higher Education in the ASEAN Region (SHARE) programme to strengthen regional cooperation of ASEAN higher education institutions.

· Workshop contents

Day 1 covered several areas from introductions of each participating partnership project, to communities of practice for internationalisation, developing shared goals between Thai and UK partners, networking activities, and groupwork.

Day 2 covered quality assurance, business model generation process and planning, as well as how to sustain and disseminate the project outcomes.

Day 3 covered topics of maximising value through innovation process management, an introduction to industry-university engagement, preparing for the UK visit and a pre-departure briefing.

Key achievements

Number of participants: 21 people Overall, most participants from Thailand and the UK found the academic partnership workshop useful. However, challenges were generated by the various types of projects, wide-ranging needs and backgrounds.

Increased understanding of internationalisation

A combination of cross-working groups and discussions among their partners and participants led to exchange of knowledge among partnership stakeholders.

Crucial elements for internationalisation, international collaboration and partnership strategy were covered in this capacity building.

Subjects proposed in the next stage included practical guidelines and more opportunities to involve industry and to learn more about university-industry links, as well as funding and legal requirements for collaboration.



2. UK visit: Academic partnership

The first workshop on academic partnerships was followed by a visit for participating partnership representatives to the UK on 24 February - 1 March 2019.



About the visit

The UK visit focused on building Thai-UK academic partnerships and links through a series of forums touching upon current issues facing higher education. Presentation sessions were given on funding opportunities by the Royal Academy of Engineering, on the UK quality assurance system by the Quality Assurance Agency for Higher Education, and on university-industry (U-I) engagement by the British Council; while activities comprised

networking opportunities and split-group visits to UK partner institutions. Most importantly, the visit concluded with a peer-review session moderated by Andy Gibbs to develop plans for each participating partnership projects.

Key achievements

- Number of participants: 21 people
- Increased knowledge of building partnerships and the essence of U-I engagement

Overall, UK practices were a good starting point in understanding how to make academic activities, including research translation, more relevant to industry demand, and to equip staff with the right skills in order to provide the right workforce and innovative solutions for the country.





The visit was followed by feedback on university-industry engagement in terms of processes, case studies and success stories of industrial partnership, etc.

3. Second workshop: University-Industry engagement

In the second phase of the programme, we aimed to not only broaden academic partnerships but also to develop industry engagement and extend research collaboration to industry partnerships. The 3-day workshop was delivered on 22-24 May 2019 at the Mandarin Hotel Bangkok, Thailand.

The U-I interface has two distinct elements: the development of creative and imaginative students from undergraduates, through master's students, to doctoral candidates; and the exchange of problems, ideas and solutions generated through research that delivers real impact to society.



· Profile of UK trainer

Professor Anthony Vickers is Head of the School of Computer Science and Electronic Engineering at the University of Essex.

As well as being active in research, he is a keen educator and has given workshops around the world (Germany, France, Russia, Thailand) on a range of topics including module and degree course design and university-industry engagement. He is currently an external evaluator to the Erasmus Without Paper (EWP) project. In this role he oversees the project development and quality-controls the deliverables of the project.





Workshop contents

The first day of this workshop was dedicated to university-industry collaboration on the development of industry-ready graduates. Guest speakers from the Office of National Higher Education Science Research and Innovation Policy Council (formerly known as STI), the British Embassy and the industrial sector were also invited to give presentations. The second day of the workshop covered university-industry collaboration on research, as we have several research collaborations in this HEP programme, some involving industry and others with a desire to do so.

The last day of the workshop drew on the first two days and built real plans for future university-industry collaboration across the various partnerships.

This workshop provided the participants with an insight into the experience gained by Professor Vickers over a 34-year period working in a UK university.



4. Leadership capacity building for international project officers

Held on the same dates was a leadership capacity building workshop hosted for international project officers. The focus was on strengthening institutional leadership, research, and international cooperation. The workshop was designed and led by Darren McDermott and Andy Gibbs to build leadership for stronger collaboration while improving the strategic direction of internationalisation of both Thai and UK higher education institutions.

- Key achievements from 2 workshops (U-I engagement and Leadership capacity building)
- Number of participants: 27 people
 Number of future university-industry links built: 6
- Achieved deeper understanding of university-industry collaboration on the development of industry-ready graduates and research

Most participants agreed that this was an opportunity to meet and share experiences with industrial partners. They were keen to know more about the UK's expertise and practices for university-industrial engagement to collaborate more effectively in the next step.

5. UK Visit: University-industry engagement

The UK study visit of the second phase on 14-18 July 2019 aimed to provide participants with better understanding of the UK's experience and best practices in developing university-industry collaboration, as well as existing support from different agencies to promote such partnerships. This was achieved via knowledge and experiences gathered throughout the workshop and study visit, and opportunities to meet face-to-face with the UK partners and other stakeholders.

The visit incorporated a combination of presentation sessions, meetings and visits with several UK organisations, starting with the Royal Academy of Engineering (RAEng) which highlighted its roles and policies in supporting UK industrial strategy and existing programmes and other opportunities that support university-industry collaborations, such as the Leaders in Innovation Fellowship (LIF), Industry-Academia Partnership Programme, and Transforming systems through partnerships programme (formerly the IAPP).

There followed a visit to Cranfield University where participants learned about U-I engagement at a leading UK university with the highest income from the industry sector. Next came a trip to the University of Essex's innovation centre, and School of Computer Science and Electronic Engineering to meet with collaborating companies, and to Studio X which facilitates students who are interested in tech start-ups. Participants also learned about Knowledge Transfer Partnerships (KTP) – a partnership programme by Innovate UK. The next visit took place at Brunel University to learn more about innovation frameworks, business engagement and research commercialisation.



Then, participants were split into groups to visit their UK partner and discuss plans. The UK visit concluded with project participants giving presentations to the rest of the teams on their action plans following the two workshops in Thailand and two UK visits, followed by a wrap-up session.

- Key achievements
- Number of participants: 21 people
- Increased understanding of the mechanisms of university-industry collaborations
- Identified new opportunities for extending existing collaborations





6. Public dissemination

Public dissemination of the Thai-UK Higher Education Partnerships programme was organised by the British Council in partnership with the Office of the Permanent Secretary for the Ministry of Higher Education, Science, Research and Innovation (MHESI) on 22 November 2019 at Pathumwan Princess Hotel, Bangkok.

Around 55 participants attended this half-day public seminar including academics and researchers from 15 higher education institutes, representatives from five government agencies and from five industrial companies, namely Bangchak Corporation, SCG Chemicals Co., Ltd., Thai Union, KBP Incorporation, and Boon Rawd Brewery Co., Ltd.

We aimed to learn from the reflections, knowledge and skills resulting from the six partnership projects designed to promote the internationalisation of higher education, to extend and sustain collaboration between Thailand and the UK, as well as increase engagement between universities, the government and industrial sector.

- Key achievements
- Number of participants: 55 people (15 HEIs, and 5 companies)
- Shared knowledge built from HEP and communicated project impacts

7. HEP Grants

In December 2019, the British Council Thailand distributed small-scale funding to the six Thai-UK collaborative partnerships to foster and expand project development to ensure impacts and boost the level of engagement of the programmes to wider audiences and stakeholders.

The project can start utilising this funding from 2 January 2020 until 31 March 2021.

The amount of the grant awarded to each recipient is 77,600 THB, equivalent to £2,000 as of December 2019. Participating partnerships need to submit an application form to apply for the grant.



Developing "Thai-UK Higher Education Partnerships"

Below are highlights from the six collaborative projects between Thailand and UK institutions in the HEP programme:

1. Embedding Work-Integrated Learning in Global Tourism, Hospitality, and Wellness Management Curriculum

Thai University: Walailak University led by Dr. Jidtima Sunkhamani UK University: Coventry University led by Dr. Hanna Yakavenka

This project enabled the design of a new Dual Bachelor of Business Administration Programme in International Hospitality and Tourism Management, co-developed by Walailak University International College and Coventry University London. Both universities worked closely with local hotels in Southern Thailand and a medical tourism hospital, to source internship opportunities, understand the requirements, and incorporate the skills, sought-after by employers into taught university curriculum.

Thailand is among the world's top resort destinations, offering the students from both institutions a unique opportunity to work in leading hotels and practice a multitude of roles across the range of stations while learning from highly qualified professionals. Globally focused taught curriculum enriched with sector relevant skills, aimed to place the learning experience in the centre of the design. The dual degree programme is geared towards enhancing the employability potential of university graduates. as the demand for qualified graduates in Thailand is increasing, as well as the specific demand within hospitality industry for employees who have the understanding of global trends and who are able to quickly integrate into multifunctional hotel and resort teams. The programme will be open for admissions in 2020.

The "embedding work-integrated learning components into dual undergraduate curriculum in global tourism, hospitality, and wellness management" is a 3+1 programme emphasising the collaboration of university academics and tourism industry professionals to design globally relevant work-integrated learning experience for university students.

Outputs

- The development of an MoU focusing on university-industry links between Walailak University International College and Coventry University.
- Faculty visits to the hospitality and health tourism industry in southern Thailand to discuss integrating Work-Integrated Learning (WIL) in the dual programme.

Expected outcomes:

- Structures for supporting WIL practices, liaising and building partnerships with the tourism industry.
- The WIL component added to the established joint undergraduate programme will enhance the competitiveness of graduates, professors, and the tourism sector.

2. Bangkok University International-Coventry University Partnership

Thai University: Bangkok University led by Dr. Somyot Wattanakamolchai UK University: Coventry University led by Dr. Marin Selby

Coventry University also introduced a Bachelor of International Tourism and Hospitality Management (Dual Degree) in partnership with Bangkok University International.

The focus of this collaboration is on developing a digital marketing curriculum in response to market demand. The "Digital Marketing" course enjoys the highest demand in tourism education as one of the most important industries in Thailand, while Coventry University is a recognised leader in the teaching of marketing. The programme provides students with international opportunities under the exchange programme, and the COIL (Collaborative Online International Learning Programme) project launched in mid-October 2019, in which students in Thailand and the UK study together in the same class via online platforms such as Skype.



A number of international exposure trips and events were delivered to encourage international academic collaboration and internationalisation at home for students of the two countries.



Collaborating on digital marketing curriculum development within the International Tourism Management programme — Bangkok University (International programme) and Coventry offers a dual degree and in-class teaching with Coventry students via an online platform under the Coil project.

Outputs:

- Signed MoU between Bangkok University International and Coventry University.
- The launch of COIL project in October 2019.
- International exposure trip to Bangkok, Thailand in January 2020.



Outcomes:

- Digital marketing curriculum development within the International Tourism Management programme in alignment with the Coventry course and assistance from industry partners.
- Students given the opportunity to learn digital marketing in tourism from one of the top UK universities in the field.
- Development of internationalisation at home.

3. SCRAN: Sensors for CRops & Agri-tech Network

Thai University: Chulalongkorn University led by Asst. Prof. Thanit Praneenararat UK University: University of Liverpool led by Dr. Simon Maher

Shifting from purely academic study in order to bridge the gap between cutting edge research and industrial needs, Chulalongkorn University and the University of Liverpool have developed the research collaboration partnership SCRAN: Sensors for CRops & Agri-tech Network.

The partnership builds on the foundations of a Newton Fund Institutional Links-funded research collaboration in the food industry, which is fundamental to the country's economy and livelihoods. Additional support from CPF and Sun Group, one of the world's leading agro-industrial companies, also helped enable successful collaboration between academia and industry. The project generates an exchange of knowledge among experts from the two research units and industrial partners to provide sensitive, effective, on-site detection of food contaminants using sensor technology. By interacting with world-leading research groups across several disciplines, this partnership could enrich the quality and diversity via exchange programmes, research visits and potential industrial secondments, etc.



"SCRAN: Sensors for Crops & Agri-tech Network": the sensoring tool developed for this project was implemented in the industrial sector and partnering with the industry helped Thai scientists understand how to apply their knowledge within the industry.

Outputs:

- Students were sent to the UK to work in the partner institution's lab for 6 months in July 2019.
- Arrangements in place for a joint training programme for the principal investigator at the University of Liverpool on the developed sensoring technique called Ion Mobility Spectrometer (IMS), and to deliver a new version of the ion mobility spectrometer to Thai partner.

Outcomes:

- Developed substance to help identify certain bacteria before processing through the sensoring tool.
- New sensor technological solutions to improve the quality, safety and efficacy of foodstuffs and water.
- A conduit to bridge the gap between research and industry needs.

4. Business engagement in development of novel diagnostics and vaccines against melioidosis, tuberculosis and other mycobacterial infections

Thai Universities: Chulalongkorn
University, Khon Kaen University
and Mahidol University led by
Dr. Tanapat Palaga,
Dr. Narisara Chantratita, and
Dr. Ganjana Lertmemongkolchai
UK University: London School of
Hygiene and Tropical Medicine
(LSHTM) led by Dr. Gregory Bancroft

The programme features another research partnership that extended the already established and successful linkage of the three research groups at Chulalongkorn University, Khon Kaen University and Mahidol University and the London School of Hygiene and Tropical Medicine (LSHTM).

This collaboration tackled a wide public health concern both in Thailand and other countries including the UK. The universities carried out research activities, business engagement, and shared knowledge of developing novel diagnostics and vaccines against severe infectious diseases, namely, melioidosis, tuberculosis and other mycobacterial infections. The ultimate aim is to translate the research knowledge into market applications. Progress towards meeting the aim was made by conducting a market survey on the developed test kits for infectious diseases in order to gauge demand for the products and feasibility of commercialisation. The next step is to engage more with the industry sector.

"Business engagement in the development of novel diagnostics and vaccines against melioidosis, tuberculosis and other mycobacterial infections" resulted in the development of test kits for each disease. These kits are easy to use and very effective. However, finding a private sector concern to invest in these kits has proved more difficult than expected. The representative of the project still sees opportunities in the market.

Outputs:

- Following the UK visit, the test kit is now in development. A market survey of the test kit was conducted to gauge product demand and feasibility.
- Arrangements in place to to find and engage with industry partners.

Outcomes:

- The project has facilitated knowledgesharing in development of novel diagnostics and vaccines against melioidosis, tuberculosis and other mycobacterial infections via research activities.
- It has also fostered long-term research links between Thai and UK research institutions.

5. BART LAB-Hamlyn joint research programme for Medical Robotics

Thai University: Mahidol University led by Dr. Jackrit Suthakorn UK University: Imperial College London led by Prof. Guang-Zhong Yang

In addition to collaboration in diagnostics and vaccines, a partnership has been formed and fostered through a joint research programme on medical robotics between BART LAB, Mahidol University and the Hamlyn Centre, Imperial College London in response to demand from the healthcare business.

Both institutions are also collaborating with the Med Club, Federation of Thai Industries and Orthopeasia Company Limited, a manufacturer and distributor of orthopaedic implants, instruments and fixators. A researcher from the university and engineer from industry shared knowledge and worked together in order to develop medical robotics parts.

BART LAB has limited research in and experience of product commercialisation, but the centre has resources such as including in-country doctors to conduct technology trials. On the other hand,

Hamlyn Centre has sufficient experience in research development and product commercialisation, but is limited in terms of clinical trials. The partnership has helped to bridge the gap between the two partner institutions through its exchange programme, international mobility and a symposium.



"BART LAB — Hamlyn Joint Research programme for medical robotics": it was noted that the plan for solving the problems suffered by both sides in the technical trials of medical robotics technologies is now progressing. Partnerships with medical device companies would help push this research forward.

Output

- Established BART LAB-Hamlyn Joint medical robotics research.
- Promoted regional Medical Robotic research forum UK-ASEAN community.
- Established Researcher Exchange
 Programme among BART LAB, Hamlyn and industrial partners.
- Incorporated the industrial sector in research collaboration, targeting translational research for commercialisation.

Outcomes

- The development of a medical robotics joint research lab in Thailand.
- Reached next level for research collaboration, staff exchange, product development sharing.

6. Developing a joint research programme and partnership for managing the rhizosphere microbiome for sustainable crop production in the central Mekong River Basin

Thai Institution: Nakhon Phanom University led by Dr. Cherdchai Phosri UK University: National Institution of Agricultural Botany (NIAB) led by Dr. Louisa Robinson Boyer Under a signed MoU, Nakhon Phanom University and Srinakharinwirot University in partnership with the National Institution of Agricultural Botany (NIAB) are undertaking joint research for managing the rhizosphere microbiome for sustainable crop production in the central Mekong River Basin (MRB).

The research topic is 'The effect of rhizosphere microbiome on organic rice in Nakhon Phanom'. The study aims to increase soil biodiversity to achieve strong yields by applying 'Regenerative Agriculture' practices. Nakhon Phanom University's strength is rice cultivation while NIAB has expertise in agricultural farming. The two institutions agreed to share their expertise and technology to forge a research hub in MRB for sustainable crop cultivation. A range of professional researchers will be participating in capacity-building and international mobility during and beyond this partnership.



Developing a joint research programme and partnership for managing the rhizosphere microbiome for sustainable crop production in the central-Mekong River basin" aims to help a group of farmers increase the organic rice yield per rai and become a research hub in the central-Mekong River basin area with help from a partner.

Outputs

- The MoU was signed.
- Students from the universities under this partnership were sent to work in a UK lab for research capacity-building.

Outcomes

 Laid foundations to launch a newly developed research network in the region for sustainable technology for crop cultivation using a platform of co-investment in techniques and knowledge exchange.

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