

Institution: University of Gloucestershire (UoG)		
Unit of Assessment: Business and Management Studies		
Title of case study: A triangular one-stop approach to implementing entrepreneurial capacity building in the Indonesian education sector		
Period when the underpinning research was undertaken: 2014 - 2021		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Neil Towers Nadine Sulkowski Marin Marinov Colin Simpson Maggie Zeng	Professor Senior Lecturer Professor Senior Lecturer Senior Lecturer	2014 – to date 2005 – to date (left UoG 2014) (retired UoG 2019) (left UoG 2015)
Period when the claimed impact occurred: 2017 – 2021		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact		
<p>The Indonesian Ministry of Education recognised the need for enterprise, small business creation in the economy, and public service organisations for social science and science education that produce undergraduates with developed entrepreneurship and innovation capacity. Research at the University of Gloucestershire has been used to change Indonesian universities' approach to entrepreneurship and innovation education using a novel triangular framework and associated methodology that has significant economic and social impact at a local, national and international level. The sustainable national Indonesian Higher Education Institute multi-stakeholder learning model integrates entrepreneurial curricula development, enterprise skills and incubation creation, and university-enterprise cooperation.</p>		
2. Underpinning research		
<p>Research by Towers et al. (2020) reconceptualises the entrepreneurial learning context as well as the role and contribution of staff, students and external industry partners to add significant value in the combination of integrated experiences typified by an empirical approach rather than a theoretical reductionist approach. The pedagogy identifies, develops, and assesses entrepreneurial opportunities to create social and economic value and analyse both the local and global context as they relate to entrepreneurial opportunities. An integrated framework was developed with a triangular approach that embeds entrepreneurship in curricula design, the development of university-enterprise collaboration to gain applied knowledge, and creating enterprise incubation capacity. The research demonstrates that student entrepreneurial capacity building needs to be combined with real world enterprise creation activities through university incubators and business creation units that support real-life projects and real-life engagement with external industry partners.</p> <p>The research addresses the need to move away from generic to contextualised entrepreneurship education, teaching and learning approaches, particularly where business schools normally provide standardised tactics that fail to address students across different disciplines. Research at UoG by Zeng et al. (2017) found that compared to firms in developed countries, those from emerging economies often face unique challenges in developing their capabilities due to resource scarcities and ideology-based institutional imprinting. Also, Simpson and Marinov (2015) identified that societal expectations of universities include the delivery of</p>		

highly-skilled career-ready graduates who are prepared to serve knowledge economy demands, R&D outputs leading to technological innovation and commercial utility, as well as providing an attractive learning environment that meets the needs of increasing student numbers. The research concluded that a shift in entrepreneurship education was needed to respond to subject discipline and locational specifics.

Hence, more rigorous and co-ordinated strategic planning needed to take place at an institutional and policy level to ensure that universities adequately prioritise, resource and develop core dimensions of entrepreneurial capacity building (Towers et al, 2019). These included the nurturing of graduate entrepreneurship through appropriately designed curricula and personal development frameworks, the development of university-business collaboration for knowledge transfer purposes, and enterprise incubation activities.

Further, the research evidences that to be successful the methodology concentrates on enterprise formation and opportunity exploitation processes, with students developing an entrepreneurship learning, mentality and agility in responding to challenges that enable them to cope with, and enjoy, uncertainty and risk management. Mapping all HEI study programmes against specific competences of taking the initiative, resources, and ideas and opportunities embeds entrepreneurship in teaching and learning pedagogies. Entrepreneurial career paths and opportunistic recognition processes have also been shown to be impactful in developing enterprising behaviours, attributes, skills and competences - such as creative thinking, communication, problem-solving, decision-making, opportunity seeking, autonomy and self-confidence (Lourenco et al., 2013).

The triangular framework for entrepreneurial capacity building leads to graduate entrepreneurship, university-business collaboration, and enterprise start-up incubation and development within one strategic framework. Further, this methodology is also being applied in building resilience in disaster management education and HEI senior management leadership development post REF period in the Indonesian education sector.

3. References to the research

Lourenço, F., Taylor, T. G. & Taylor, D. W. (2013). Integrating “education for entrepreneurship” in multiple faculties in “half-the-time” to enhance graduate entrepreneurship. *Journal of Small Business and Enterprise Development*, 20(3), pp.503-525.

Simpson, C. & Marinov, M. (2015). University Autonomy in the Age of Marketisation. In R. V. Turcan, J. E. Reilly & L. Bugaian (Eds.), *(Re) Discovering University Autonomy: The Global Market Paradox of Stakeholder and Educational Values in Higher Education* (pp.73-84) Palgrave Macmillan, Basingstoke.

Towers, N., Santoso, A. & Sulkowski, N. (2019, April 5th-6th). Embedding Entrepreneurial Capacity Building in HEIs for Entrepreneurship and Enterprise Creation – a Triangular Approach. In American Collegiate Retailing Association Conference 2019 Proceedings, Tucson, Arizona.

Towers, N., Santoso, A.S., Sulkowski, N. & Jameson, J. (2020). Entrepreneurial capacity-building in HEIs for embedding entrepreneurship and enterprise creation – a tripartite approach. *International Journal of Retail & Distribution Management*, 48(8), 881-899.

Zeng, J., Simpson, C. & Dang, B-L. (2017). A Process Model of Dynamic Capability Development: Evidence from the Chinese Manufacturing Sector. *Management and Organization Review*, 13(3), 643-673

4. Details of the impact

A framework designed to increase entrepreneurial graduate capacity building was developed (Towers et al., 2019, 2020) as part of research led by the University of Gloucestershire, culminating in a three-year Erasmus+ project from 2017 to 2021 (Grant value: €998,732) involving seven Indonesian and four European partners, known as Growing Indonesia: a Triangular Approach (GITA). The three corners of the triangular approach involved: 1) embedding entrepreneurship in all study programme curricula design, 2) the development of university-enterprise collaboration to gain applied knowledge, and 3) developing enterprise incubation capacity.

Impact is seen at three levels, all directed at entrepreneurship development. At the national governmental level coordinated through the Indonesian Ministry of Research and Technology; at the HEI (university) level seen as significant structural organisational changes, engagement with external partners, mapping entrepreneurial learning outcomes and the development of three specific competences (initiative taking, understanding resources, and idea exploitation) at the study programme level; and with start-up enterprise incubation activity supported by external partners.

National level:

The Indonesian Ministry of Research and Technology, responsible for developing national education policy with regard to human capacity building, as well the provision of funding for entrepreneurial activity, has endorsed the significant gains made from the coordinated approach by implementing the GITA triangular methodology. Engaging academics, students, and both commercial and social enterprises had gained a significant impact from “the change in mindset of leadership teams across Indonesian Higher Education Institutions (HEIs) and the students entrepreneurial learning in their studies is excellent” [1].

HEI structural level:

Impact at the institutional level for Indonesian universities is gained by creating career-ready students with entrepreneurship embedded in their studies, enterprise creation as part of their undergraduate learning and new Growth Hub resources created in 2018 for enterprise and start-up incubation, overseen with engagement with external partners [7, 8].

As a direct result of implementing the triangular approach Higher Education Institutes have changed Vice Rector (Deputy Vice Chancellor equivalent) structures to include specific responsibility for coordinating the enhancement of student achievements and the development of entrepreneurship across institutions. Universitas Ahmad Dahlan, based in Yogyakarta with 27,000 students, for example has created a specific Vice Rector position for Students and Alumni Affairs “with responsibility for coordinating the enhancement of students’ achievements, empowering the alumni, and the development of entrepreneurship” [3].

HEI Study programme level:

Mapping Entrepreneurial Learning Outcomes in all Study Programmes has significant impact through changing the way of thinking, teaching and learning for both staff and students. For staff, it gives access to innovative and practice informed teaching approaches, opportunities to link teaching with real-world applied research and engagement with local commercial and social enterprises enhancing relevance and student experience. Indonesian academics are involved in fostering local SMEs benefit from GITA’s expertise and advice available through their Growth Hubs. From late 2019 entrepreneurial learning outcomes (ELOs) have so far been mapped into over a quarter of the 261 undergraduate science and social science study programmes in the 7 Indonesian HEIs in recognition of graduate profiles and their differing employability requirements. This is evidenced by STIE Malangkeucwara, with 25,500 students that “now includes entrepreneurial learning outcomes in all their study programmes” [2].

Start-up enterprise creation:

The entrepreneurship learning gained from the triangular approach has had a direct impact in enterprise creation and development for student entrepreneurs, alumni and local businesses. To date there are 112 new start-up enterprises with a combined annual turnover (2019) Rp115.3bn (£6.5m) working through the seven Indonesian partner HEI Growth Hubs reported in the GITA website [6]. The Growth Hub acts as a dedicated resource to access skills, knowledge and competences for students and academic staff involved in enterprise creation e.g. marketing and industrial internships, and from alumni, external partners, and providers e.g. identifying prospective customers, possible funding opportunities, and business network development

Another impact from each Growth Hub is that start-up businesses have a place and space where they consult with businesses, such as in technical discussions with product development, access to technologies, and commercial business meetings in a professional setting. Further, start-up businesses were able to gain specialist expertise in applying for business growth funding from the Indonesian Government start-up funding opportunities [5].

Growth Hubs organised networking, training and professional development online and physical events for the benefit of start-up businesses. Their impact results from meeting alumni with expertise in growing start-up businesses, training workshops with taxation and legal requirements, skills and competency development, and local network events to showcase tenant's businesses [4].

5. Sources to corroborate the impact

Testimonials

[1] Director General, Professor Ismunander, Indonesian Ministry of Research and Technology (formerly Ministry of Research, Technology and Higher Education)

[2] University Rector, STIE Malangkecewara, Dr Buntamin

[3] University Rector, Universitas Ahmad Dahlan, Dr Muchlas

[4] Sembada Group start-up enterprise

[5] Jogja Mediasi Inovasi start-up enterprise

Reports & Web sources

[6] GITA Website - <http://growingindonesia.eu/> (See 'Project Implementation and Impacts' tab)

[7] GITA Indonesian partner GH 2020 webinar series examples.pdf

[8] GITA Portal - <https://www.gitaproject.org/>