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Designing a Stakeholder-Driven Entrepreneurship Programme for a Developing Country

Dwitya K. Amry*

Dr. Ali J. Ahmad

Dwitya K. Amry is a PhD candidate in Warwick Manufacturing Group, University of Warwick, UK. She holds a position as a lecturer in Faculty of Economics at Universitas Nasional, Indonesia.

Dr Ali J. Ahmad is a Senior Teaching Fellow in Warwick Manufacturing Group based in the International Digital Laboratory, University of Warwick, UK.

* Corresponding Author

Address:

Warwick Manufacturing Group
International Digital Laboratory
University of Warwick
Coventry CV4 7AL

Email:

Dwitya K. Amry (d.amry@warwick.ac.uk)
Dr Ali J. Ahmad (ali.ahmad@warwick.ac.uk)

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Abstract—The debate surrounding what entrepreneurship means within developing countries (DCs) context continues, exacerbating uncertainty and complexity in implementation. EEs novelty within a DC Higher Education Institutions (HEI) context means that quality delivery remains a chronic problem. Following on from these emergent issues, this paper aims to uncover issues surrounding the implementation of a programme of EE delivery at a DC HEI. Using the case study research methodology, empirical research is undertaken at a prominent HEI in Indonesia, considered an EE pioneer. Data is collected through both in-depth interviews and a survey with stakeholders of the case HEI's entrepreneurship development program to uncover a 360 degree stakeholder-driven perspective of expectations, challenges and values. Outcomes suggest that entrepreneurship development at the case site has not been able to achieve the expectations of its stakeholders and has been generally unable to capture its intended objectives. Thus, recommendations for further entrepreneurship development were put forth and validated by key decision makers.

Keywords— developing countries, enterprise skills, entrepreneurship development, entrepreneurship education, higher education institutions

Word count: 6,652 (excluding tables, references and appendices)

1 Introduction

Developing countries struggle with job scarcity and human capital quality, which lead to youth un- or under-employment. Also contributing to the youth unemployment problem is the lack of transferable skills that are sought by the local industry; educational mechanisms have been generally ineffective in providing the necessary means for their absorption in the industry. Thus, following the steps taken by their developed country counterparts, entrepreneurship teaching and learning in developing countries (DCs) have been embedded into education with a view to aid in the creation of enterprising individuals that are more robust and are able to navigate the new venture creation process in often volatile, uncertain, complex and ambiguous 'doing business' milieus prevalent in DCs (Streeter, Kher & Jaquette Jr., 2011; Mirzanti, Simatupang & Larso, 2015). However, as entrepreneurship is a concept derived from developed countries (Gibb, 2002; Fayolle, 2007; Fayolle & Gailly, 2008), adopting it to the conditions of developing countries is challenging, considering their differing socio-economic conditions (Adekiya & Ibrahim, 2016), historical trajectory (Farquharson, Örténblad & Hsu, 2014) and infrastructure readiness (Richardson, 2011).

As an emerging middle-income country and the world's fourth most populous nation, Indonesia has joined the efforts of equipping its youth with entrepreneurship education, under government directives. It is estimated that as many as 20.57% of Indonesians live in poverty, and because of the overall high proportion of youth within the national population, their unemployment remains a pressing issue (World Bank, 2017). Thus, entrepreneurship education has been introduced as a high-priority national agenda item to equip youth with the necessary skills to not only seek employment, but also to harness their potentiality to engage in new job creation.

However, implementing entrepreneurship education (EE) programmes in the context of Indonesian higher education institutions (HEI) remains challenging. Scholars agree that there is no one best way to deliver entrepreneurship education (Fayolle & Gailly, 2008; Streeter et al., 2011; Othman & Nasrudin, 2016; Miller & Acs, 2017) – many models and approaches, often contradictory, exist. Implementing EE can be highly contextual depending on the audience, intended objectives, infrastructure and internal capabilities (Huq & Gilbert, 2017). In addition, EE differs greatly from other academic subjects such as management, marketing and accounting; it is a multidisciplinary subject that focuses on transferable skills rather than technical knowledge (Larso & Saphiranti, 2016). Therefore, the unique nature of the subject also needs an enterprising and innovative approach for implementation, both in the development of programmes and methods of delivery (Kirby & Ibrahim, 2011; Ortiz-Medina et al, 2016).

The aim in this exploratory research is to undertake an in-depth, multi-stakeholder and exploratory investigation to explain the EE implementation process at a DC HEI. Using stakeholder analysis and the design thinking approach, it evaluates the capacity of an HEI in Indonesia to deliver a programme of EE to achieve its principle objectives. As EE is principally derived from scholarship embedded in developed country narratives, an important question will be brought to fore and scrutinized: are the deployed contents and pedagogical methods suitably embedded in the contextual conditions of a DC HEI? A review of the drivers and trends within EE will be outlined to inform the research's theoretical framework and methodology. A description and analysis of the current EE landscape in Indonesia will also be provided to highlight the most significant aspects of context. Then, findings from the empirical exercise will be presented, followed by outlines of the EE programme under implementation. An outcome is an alternative programme of EE delivery, validated by the research's target stakeholders. The research outcomes are relevant to entrepreneurship educators within a

developing country institution as a guide for designing an effective entrepreneurship development program.

2 Background Literature

2.1 *Entrepreneurship and Enterprise Education*

‘Enterprise’ and ‘entrepreneurship’ education are often used interchangeably, however, the UK QAA (2012) suggests that these two areas are distinct with differing definitions. Enterprise education is defined as the process of equipping students (or graduates) with an enhanced capacity to generate ideas and the skills to make them happen. Whereas, entrepreneurship education is defined as equipping students with the additional knowledge, attributes and capabilities required to apply abilities in the context of setting up a new venture or business. Even though it may have different definitions, but in the practice of EE, it is always delivered as one composite of enterprise+entrepreneurship (Gibb, 2002; Kirby & Ibrahim, 2011). According to Jones, Matlay, Penaluna and Penaluna (2014) enterprise education is placed as the basis for entrepreneurship education. This is because entrepreneurship education implies additional knowledge and abilities to apply enterprise education. Hence, ‘entrepreneurship education’ may also refer to ‘enterprise education’ as the two notions are not conceived as a stand-alone, but adjacent and reliant on one another.

Despite debates in the area, it is believed that entrepreneurship as a discipline can be conceptualised and its various aspects refined in a manner such that it can be taught as an independent subject area (Fayolle, 2007; Fayolle & Gailly, 2008; Masakure, 2015). Entrepreneurship education is unique as it requires not only transferable knowledge but also transferable skills (Larso & Saphiranti, 2016). Most importantly, based on research, educated individuals are more likely to pursue entrepreneurship, in particular through university-level education (Masakure, 2015). This is because EE allows mind-set transformation which then enables the progression to build up knowledge and skills to engage in entrepreneurial activities.

2.2 *Drivers of Entrepreneurship Education*

In the past, EE was taught as part of a business school’s suite of programmes to prepare students to create a venture through studying business planning (Gibb, 2002). Business school approaches view entrepreneurship merely as part of its overall function (Gibb, 2002). The teaching approach relies on causal logic where decision making is taught to be based heavily on the need for accurate prediction (Read, Sarasvathy, Dew & Wiltbank, 2017). However, recent developments in entrepreneurship research reveal that entrepreneurship in practice deals with uncertainty and unpredictably due to its novel nature, where agents are faced with limited or no resources (Sarasvathy, 2001; Dew, Read, Sarasvathy & Wiltbank, 2011; Read *et al.*, 2017). Therefore, entrepreneurship cannot be placed as a function of doing business, instead, its role is significant prior – in the stage before doing business, i.e. pre-starting and starting a business.

The shift in the above understanding drives changes in how and why entrepreneurship education is implemented (Lackeus, 2015). Now, educators are not merely teaching theory, unless of course, they are teaching *about* entrepreneurship and not teaching *for* entrepreneurship – two entirely different schemes (EEUK, 2018). If so, educators must use a different pedagogical approach to traditional business study, as entrepreneurship is more about personal development (Robinson & Shumar, 2014) and not just about theory-knowledge familiarity. Following the shift in the conceptualisation of entrepreneurship, there has also been a shift in approaches of EE teaching methods, materials and implications. Therefore, this understanding of the driving forces behind these shifts highlights whether EE has been implemented the way it should be to allow entrepreneurship activity to flourish.

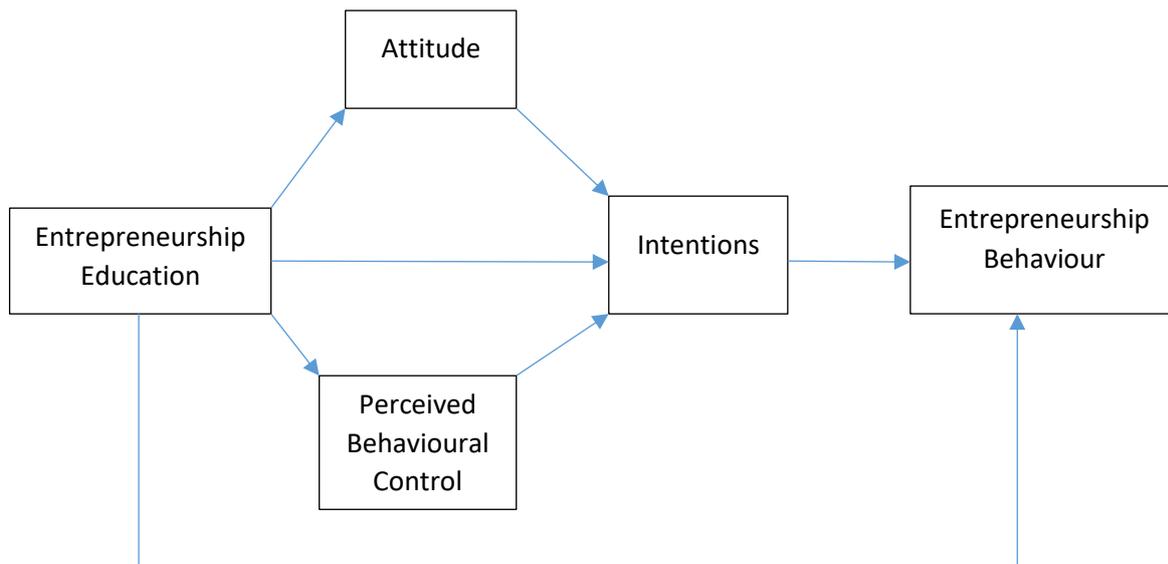


Figure A: *Entrepreneurship Education to Intended Behaviour* adapted from Raunch and Hulsink (2015)

2.3 *The Objectives of Entrepreneurship Education*

Many scholars try to identify the effectiveness of EE by evaluating whether or not it has achieved its intended objective(s) (Streeter, et al., 2011; Ramayah, Ahmad & Fei, 2012; Ghina, Simatupang & Gustomo, 2017). Some argue that there are two main objectives in the delivery of EE; first, to create a positive attitude towards entrepreneurship and secondly to teach existing entrepreneurs to become better entrepreneurs (Kuckertz, 2013). To achieve these objectives, EE is delivered by embedding entrepreneurial behaviours within students through three progressive phases, (1) the formulation of self-identity, (2) identifying resources available, and (3) making sense of problems and exploring opportunities from these (Robinson & Shumar, 2014). Another objective in EE is to reinforce the entrepreneurship intention to not only 'create ventures' but to also influence students' attitude leading to an entrepreneurial behaviour which is seen as useful in other aspects in life. As depicted in Figure A, the process of EE to influence entrepreneurial intentions is by affecting students' attitudes towards entrepreneurship itself, and also how they perceive their self-ability to engage in entrepreneurial activities (Rauch & Hulsink, 2015).

We find that different goals and objectives in EE arise due to the subjective context of where it is implemented and who the audience is. These different goals and audiences also require different approaches in teaching (Othman & Nasrudin, 2016). For example, teaching entrepreneurship to students in developing countries with institutional barriers (such as financial access), will differ to the developed country counterparts that have more access to start-up support (i.e. angel investors and venture capitals) (Lilischkis, Halbfas & Liszt, 2017). These might mean that EE in developing country condition focuses more on accessing microfinances, or enhancing social capital by building networks to support business start-up (Sarasvathy, 2001); whereas students in developed country might focus more on learning to pitch to VCs and investors. Identifying these contextual differences will enable setting the right EE objectives.

2.4 *Entrepreneurship Education Going Forward*

Through building an Entrepreneurial Ecosystem (EEC), EE can ease and encourage entrepreneurial activities that lead to long-term socio-economic benefits (McKeon, 2013; Isenberg, 2016; Maritz, Koch & Schmidt, 2016). These ecosystems can flourish only if all stakeholders and the institutional environment are supportive. However, building functional entrepreneurial ecosystems is proving to be challenging (McKeon, 2013; Groth, Esposito &

Tse, 2015). In certain places, cultural beliefs, resource deficiencies and unaccommodating policies make it difficult for an EEC to emerge. Therefore, to tackle such barriers, new and creative ways of EE implementation are being experimented with - utilizing innovative pedagogical approaches such as using game simulations to increase interest, and experiential learning approaches to increase engagement and even technology to reach a wider audience (Bellotti *et al.*, 2012; Al-Atabi & Deboer, 2014; Antonaci *et al.*, 2015; Pittaway, Gazzard, Shore, Williamson, 2015).

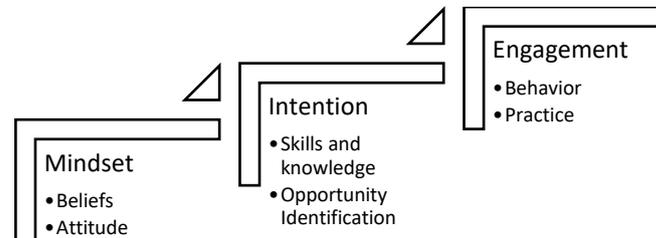


Figure B: Goal Stages of Entrepreneurship Education (adopted from various sources (Roxas, 2014; Maritz, Koch and Schmidt, 2016; Nabi, Liñán, Fayolle, Krueger & Walmsley, 2017)

It can be inferred from Figure B, that the three stages in EE would require different pedagogical approaches. In Europe or other ‘developed’ parts of the world where policies to promote entrepreneurship exist and where the doing business environment is specifically fine-tuned to deliver growth and productivity, the practice of EE can lead towards encouraging student intention and engagement (Zamfir, Lungu & Mocanu, 2013; Robinson & Shumar, 2014; Abreu, Demirel, Grinevich & Karatas-Ozkan, 2016; Egerova, Eger & Micik, 2017). In contrast, in developing countries such as Nigeria and Indonesia, the role and goal of EE should primarily be in shifting mind-sets to alter cultural beliefs (Sherman, Sebora & Digman, 2008) and norms that might lean more on stability and against uncertainty associated with entrepreneurialism (Streeter, et al., 2011; Ghina, et al., 2014; Othman & Nasrudin, 2015; Adekiya & Ibrahim, 2016; Edokpolor & Somorin, 2017).

To punctuate the above assertions, past research identifies entrepreneurship as a novel concept in the academic subject spectrum (Fayolle, 2007). Subsequently, it was also found that entrepreneurship as a concept is interpreted differently according to each's perception (Oosterbeek, van Praag & Ijsselstein, 2010; Lepistö & Ronkko, 2013). It is often forgotten and missed in the literature the importance of aligning a coherent entrepreneurship concept paradigm of the various actors in entrepreneurship development efforts (Lackeus, 2015). Entrepreneurship perception influences how it is translated into education. Very few works of literature highlight this important aspect; if they do, it is usually done broadly through highlighting geographical culture differences (Adekiya & Ibrahim, 2016; Lilischkis, Halbfas & Liszt, 2017) at the cost of institution level differences.

The novelty of the EE has resulted in problems of delivering it academically within a developing country context. In addition to that, as mentioned in OECD (2012) and Robinson and Shumar (2014), EE is a multidisciplinary subject that must be delivered via a non-traditional teaching method. Such a unique subject leads to the requirement of adopting new methods in its deliverance (Abik & Ajhoun, 2012).

2.5 Entrepreneurship Education in Indonesia

In 2016, the legislative, governmental body, the *Dewan Perwakilan Rakyat* (DPR), drafted the National Entrepreneurship Bill (DPR, 2016a; DPR, 2016b, Prihatini, 2017). This Bill marks

the government increasing awareness of the importance of entrepreneurship development as a means of accelerating economic growth.

Ever since entrepreneurship development initiatives were put forward, various ministries and government bodies have developed programmes to accelerate linked government agenda (Mirzanti et al., 2015) (see Figure C). To promote SME development, the Ministry of Cooperation and Small Medium Enterprises rolled out several funding schemes and supported programmes for SMEs (Kemenkop, 2017). Concerning increasing technopreneurs or technology-based entrepreneurs, the Ministry of Communication and Informatics have implemented a program called 1 million technopreneurs, a target to be achieved by 2020 (Kiki, 2017). Funding for business incubators and university incubators is provided based on the number of tenants with technological aspects as criteria (Budiyanto, Suprpto & Poerwoningsing, 2017).

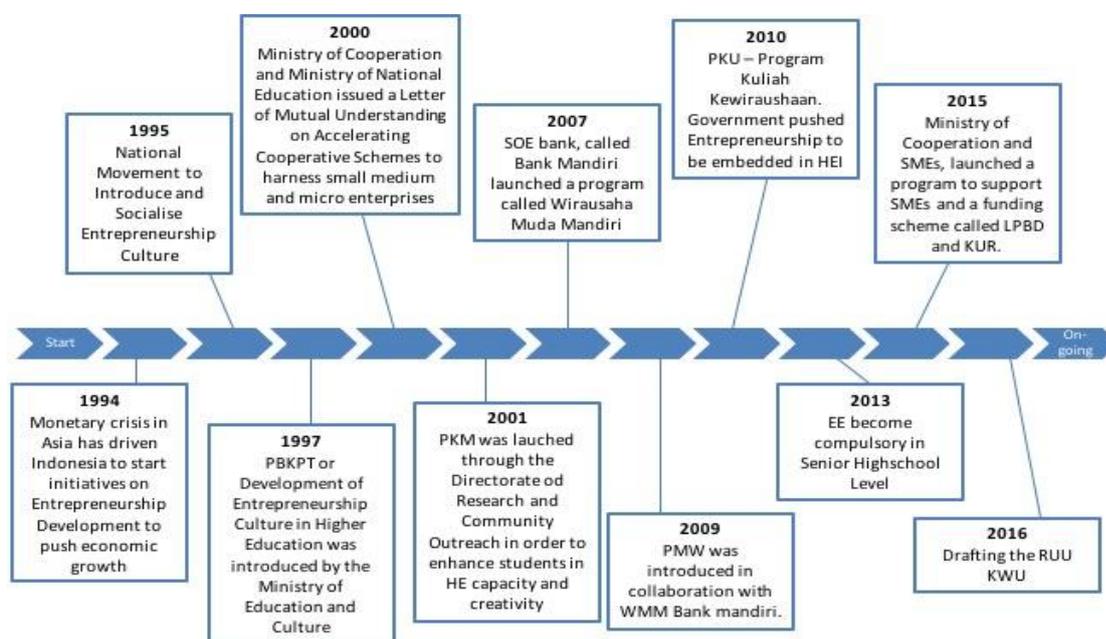


Figure C: Indonesia EE Program Initiatives Timeline (Various Sources)

In higher education, monitored by the Ministry of Research Technology and Higher Education, several programs have been rolled out such as *Penggerak Wirausaha Muda* (PWM or Young Entrepreneurs Program), *Program Kreativitas Mahasiswa* (PKM or Student Creativity Program), Start-up internships and the national entrepreneurship expo that is under a scheme called the *Kewirausahaan Mahasiswa Indonesia* (or Indonesian Student Entrepreneurship) (Kemristekdikti, 2017). Although these initiatives have been rolled out, they only serve as guides for HEIs to prioritize the promotion of entrepreneurship within their student bodies. Therefore, HEIs retain the option to decide independently whether these schemes are relevant and applicable within their unique contextual environments.

2.6 The Direction for Indonesian Entrepreneurship Development

Based on the Global Entrepreneurship Monitor (GEM) in 2014, Indonesians have a positive attitude towards entrepreneurship (Nawangpalupi et al., 2015). However, data suggests that 31% of Indonesians between 18-65 years have the intention to engage in entrepreneurship activity but only 4% are pursuing their entrepreneurial intentions as nascent entrepreneurs (Nawangpalupi et al., 2015). This indicates that even though such agents have intentions, they have not as yet felt confident enough to pursue an action to engage in entrepreneurship (Wiratno, 2012; Nawangpalupi et al., 2016). The necessary conclusion made is that this lack

of change from intent-to-action is due to a lack of necessary skills and knowledge to enable early and late-stage entrepreneurship activity. This is where educational institutions can play a role for creating the pipeline from intention to nascent or new entrepreneurs (Wiratno, 2012).

Another aspect to be considered is the importance of understanding the significance of context and the manner it impacts entrepreneurship development programmes from institution to institution (Welter, Baker, Audretsch, Gartner, 2017). Although the GEM report has provided a general outlook on the direction of entrepreneurship development, educational institutions are expected to translate its findings by contextualising delivery according to their unique and individual situations (Hayton & Cacciotti, 2013; Farquharson, Örtenblad & Hsu, 2014).

As an illustration, entrepreneurship education at an HEI within the Papua region would not be the same as it would at an HEI in Jakarta – Indonesia's the capital city. Papua is one of the underdeveloped provinces in Indonesia, earmarked by high levels of social inequality. A tribal culture subsists, and modernisation is only limited to those who are nearer to the capital city of Papua – Jayapura. One university, in particular, Universitas Cendrawasih addressed this by collaborating with USAID to develop a relevant entrepreneurship development program that fits the context of Papua's culture and social context (Goldstein, Ick, Ratang, Hutajulu & Blesia, 2016). Thus, EE practices would be very much different between Papua and Jakarta due to its different nature as a capital city earmarked by higher standards of living and greater integration with the regional and global economy. Education institutions must then understand the importance of regional differences in the socio-cultural-economic context as an important consideration in creating suitable entrepreneurship development programmes (Goldstein *et al.*, 2016; Welter *et al.*, 2017).

2.7 Summary

This brief review of literature has uncovered the many different reasons why EE is implemented. Studies indicate that the delivery of EE aims to introduce mind-set changes. Following mind-set change, EE triggers an intention to engage in entrepreneurial activity. However, what needs to be explored further is the manner in which the delivery setting's contextual environment impacts on constructing the EE delivery *raison d'être*. It was attempted to be shown that due to vast differences in the socio-politico-cultural differences between developed or industrialized nations, where the EE narrative was forged, and developing countries, where at present it is being adopted, it was important that the goals and delivery mechanisms of EE ought to differ with sufficient contextualization.

The review highlights that the focus of Indonesia's education policy is now on developing an innovative and creative human capital base. EE is expected to enable the harvesting of enterprising skills in order to tackle socio-economic problems in Indonesia. However, it is yet to be seen how government legislation to promote entrepreneurship will influence HEIs to act in promoting entrepreneurship development. Such a policy also puts considerable pressure on HEIs to create an impactful EE delivery mechanism to foster efforts in driving forward government agenda and political expectations.

3 Methodology

This research is epistemologically subjective and views the world pragmatically. The aim in this paper was to “to undertake an in-depth, multi-stakeholder and exploratory investigation to explain the EE implementation process at a DC HEI”. This aim was facilitated by the following research objectives: (1) evaluating the current EE programme in an archetypical HEI in a DC and (2) explaining the impact of the programmes deployed on intended outcomes and (3) using stakeholder insights, propose and validate an alternative structure for a programme of EE delivery.

The research takes an interpretivist stance as it seeks to understand a phenomenon by construing it in a situational context (Dobson, 1999). Findings are interpreted on the basis of theory which explains the reasons why EE is implemented differently in the context of a developing country. It is believed that even though EE has universal theoretical approaches, how it is conceptualised depends on the subjective interpretations of the implementing actors, which might be wholly miss-aligned with EE's universally accepted objectives and limitations.

A multi-methods case study approach was desirable as this provided a real-life and in-depth unpacking of the phenomenon (Yin, 2014). It allowed a deeper understanding of underlying nuances that impacted implementation of the case site's EE agenda; while, also allowing the capture of differing expectations of the various internal stakeholders involved. Thus, according to Yin (2014) in cases like this, a single unit of analysis is appropriate for providing the requisite depth with rich emerging insights.

3.1 Case Selection Criteria

Universitas Nasional (UNAS) in Jakarta, Indonesia was chosen as a single unit of analysis for this research. As one from 3,128 private universities in Indonesia (PDDIKTI, 2018), it has typical characteristics of most universities such as having a range total of 7,000 – 15,000 enrolled students and 6 – 11 faculties/departments (Kopertis, 2016; PDDIKTI, 2018). It targets students from middle income families.

Additionally, UNAS also fulfills the case study criteria due to two types of rationale, the case study design rationale, and also operational rationale. The case study design rationales were: (1) having an EE programme in place which was universally delivering the subject to all undergraduate students, and, (2) the case organization has not been able to measure its EE programme's impact and outcome. The operational rationales were: (1) having wide ranging access, and (2) having prerequisite insights on the current practices of EE at the case organization. The first author was a former employee based in the case organization's EE delivery unit.

3.2 Data Collection and Analysis

A rigorous data collection approach was employed encompassing in-depth interviews, observations, a survey and document analysis. Richness of data from multiple sources provided allowed a more nuanced understanding to emerge. The multiple sources of evidence also provided grounds for triangulation and to further explain why and how the phenomena occurred (Tharenou, Donohue & Cooper, 2007). The data collection exercise was designed as a means for shedding light on the research's stated aim and accompanying objectives. It allowed the gaining of holistic stakeholder insights on EE practice at the case organization. A stakeholder is defined as "a person, group or organization that is somehow connected to or has an interest in a project, organization or product" (Sticdorn, Lawrence, Hormess & Schneider, 2018, p.32). As a case study research design, entrepreneurship as a general subject was delivered to all students by faculties from different backgrounds, therefore, as "different representations have different implications for individuals and society" (Braun & Clarke, 2014, p. 25), it was important to undertake an in-depth exploration of why and how EE was implemented by the different stakeholder actors.

3.3 Design of Interviews

Interviews were designed to last about 45 minutes and were duly recorded and transcribed. All participants are asked the same questions but following the flow of the conversation, some questions were added throughout if there was a need for clarification or a more in-depth understanding of the participant's responses.

A number of guiding questions were developed to create a 360-degree view of EE practice. The questions adapted from Huq and Gilbert (2017) with themes surrounding EE current and expected objectives, performance indicators, pedagogy, content and audiences.

The interviewees were chosen using a purposive and judgemental approach, for ensuring that the participants represented different study programmes and departments, were on different levels in the organisation structure and had a direct or indirect influence in the practice of EE at the case organization.

A total of 17 interviewees participated and their recorded interviews were transcribed into 16 verbatim transcripts - one of the sessions included two interviewees. Participants consisted of 3 top administrative role (including the Rector who initiated EE), 3 mid-administrative role (including whom also was a lecturer), 8 head of departments (with 2 of them being Vice Head) and 3 Entrepreneurship subject lecturer. Leadership and administrative role was important to include, as they set and implement the university's strategy and policy which was important in creating a holistic entrepreneurial ecosystem at UNAS.

3.4 Design of Survey

A survey was designed to draw out insights from EE students with the aim of eliciting their view on EE. It was designed with 6 Likert scale-based questions with 43 statements. The instrument was distributed online using Google Forms. The aim was to confirm and triangulate the findings of the interviews from the students' perspective.

The survey instrument was derived from the summary of interview analysis, to align EE expectations and current condition with student's stance and point of view. Convenience sampling was used with the snowball method. The survey was promoted via WhatsApp chat groups through the assistance of lecturers. The researcher ensured that the messaging reached students from different semesters to gain meaningful insights. As a result, 180 responses were collected. With a confidence level of 95% and interval of, 7.51, it was deemed acceptable for this study.

3.5 Observation and Document Analysis

Observation served a specific purpose and related to a research proposition (Lefebvre & Redien-Collot, 2013). For this research, non-participant observation was undertaken to add rigor to the evidence. The purpose of the observation was to study the learning spaces of the university – as this is seen as an important factor in the implementation and delivery of EE (Sherman, Seborá & Digman, 2008; Robinson & Shumar, 2014).

In addition, official documentation was also used to study the current and past EE study plan and its alignment with practices and expectations to excavate any issues. Document analysis is appropriate to use in this research as it seeks to “uncover historical process and developments” (Tharenou, et al., 2007, p 125). The documents that were reviewed include entrepreneurship subject study plan and the resources they have used to deliver it.

3.6 Data Analysis

Interview responses were transcribed verbatim and uploaded to NVivo to assist in thematic organization. These key insights allowed "summarizing main findings into a concise and actionable format" (Sticdorn *et al.*, 2018, p. 131) in order to assist in sense-making from the data. Then, content analysis was used based on the key insights creating nodes which were: action, motivation/justification and tension/barrier/issue.

Questionnaires were analyzed using cross-tabulations by calculating mean scores and comparing these to different group categories to seek differences and significance. As the

appointed Likert scale ranged between 1 – 6, 1 meaning strongly disagree, and 6 strongly agree, the mean of above 4.5 was considered within the ‘agree’ spectrum, the differences of 0.5 between each compared mean was considered acceptable to justify its significance (Abduh, Maritz & Rushworth, 2012). Data was cross-tabulated based on semesters and on whether students have or have not taken the entrepreneurship subject.

3.7 Reliability and Validity

To ensure validity, the research utilized multiple sources of evidence and theory to support explanation building and to construct logic models (Yin, 2014). An additional validity exercise was also done by gaining feedback from parties that took part in this research to suggest iterations for instrumentalist findings and to check for their potential for application at the case organization (Davies and Wilson, 2013; Sticdorn *et al.*, 2018).

Reliability was achieved by following the case study research protocols methodically which entailed creating a case study database throughout the data collection process (Yin, 2014). A pilot interview was exercised to elucidate line of questioning which provided insights into framing certain questions for clarification purposes. A pilot questionnaire was also done to seek for biases.

4 Findings

4.1 EE Implementation at Universitas Nasional (UNAS): A Background

UNAS has been implementing EE since 2009, from before the time the subject was deemed compulsory through a government directive. The Rector of the university at the time raised the importance of entrepreneurship as a means to equip students with other career options upon graduation. EE became a compulsory and general subject that was to be taken by all students regardless of faculty and enrolled programme of regular study. It was intended to introduce students to basic concepts of entrepreneurship allowing a mind-set change from ‘job seeker’ to ‘job creator’.

[TM11]

“I want UNAS students of any department, even though science or social should be able to understand and know how to create a business. Therefore after I become rector in 2009, one of my first initiatives was to make entrepreneurship subject a compulsory to all students.”
“...a year later in 2010 the government directed that entrepreneurship should be taught in universities across Indonesia.”

Thus, as it was a general subject, it was not placed within any faculty or department but was placed in a strategic implementation unit structured under the Rector. Entrepreneurship was viewed as an institution level initiative instead of a specific subject housed within a specific department or faculty. At that time, UNAS leadership believed they were forward thinking in a sense that not many universities within Indonesia implemented EE in the manner they had.

[FS33]

“I hold two positions, as the entrepreneurship subject coordinator and as the head of the Entrepreneurship Unit. My main job now is the head of the Entrepreneurship Unit, reporting directly to the rector. In a nutshell, I have to create as many students engaging in entrepreneurship. And as the coordinator of entrepreneurship education, I should create right module of for students, through the entrepreneurship subject.”

Even though, the vision was clear, however, in practice the implementation faced serious problems. As interview data suggests, some of the early stakeholders involved in the process

of implementing the new EE agenda faced problems such as not having suitable lecturers to deliver EE. None of the employed lecturers were educated about EE pedagogy and curriculum design.

[FS07]
<i>"I was Head of the Academic Administration when Entrepreneurship was made a compulsory subject. It was then placed as a general subject just like religious studies and civic education and so on. At that time, not many universities did it that way..."</i>
<i>"Indeed it was difficult for us to find professors who have a background in entrepreneurship to deliver the subject (as a general subject)."</i>

The university, to solve this problem, took initiative and enrolled a number of lecturers for a national-level training for trainers in EE implementation. This training was hosted by a state-owned bank, and was delivered nationally. These lecturers were then expected to develop a curriculum for EE at UNAS. However, the outcome was still below expectations, as there was no on-going support for entrepreneurship educators and no mechanism in place to measure the impact of the implementation.

[TM11]	<i>"We have been dealing with re-directing the curriculum and module content. It's as if we are still guessing through trial and error. Also, in general Indonesia is still figuring out the concept of entrepreneurship education to fit into its context."</i>
[TM33]	<i>"The objectives and outcome (of the entrepreneurship subject), in my opinion, has not been achieved ... far from our intended expectation."</i>
[TM07]	<i>"Irrespective that this has been running long enough, but I do not see it has reached the see right target according to objectives made by Universitas Nasional. Also, we have not evaluated it yet and no means to measure its impact."</i>

4.2 Subject Structure

The EE study plan at UNAS was divided into 16 sessions worth 2 credits and delivered over a semester (from the total 144 credits required to pass an undergraduate course). The 8th session was a mid-semester exam and the 16th was a final semester exam. Each session was 90 minutes. Most of the teaching was carried out didactically in a traditional lecture setting.

The midterm exams were loosely defined and the setting of exams was undertaken independently by each teaching lecturer. The final exams were in the form of a 'student bazaar', where students were required to set up a booth displaying their products to sell at the bazaar. The products sold in the bazaar was given marks based on criteria set out by their respective lecturers.

4.3 Subject content

Based on the study plan and insights from interviews, the subject content has gone through major changes since its implementation in 2009. The most current iteration took place within the 2017 Plan. Structure-wise, the programme has not changed, however, a pre-made curriculum provided by a third-party entrepreneurship education foundation was adopted. This curriculum was in a form of a cloud based learning management system using a blended-learning approach. Pre-2017, content in the study plan consisted primarily of theories about entrepreneurship and focused on giving guidelines for starting a business. Post 2017, the content was more biased towards enhancing enterprise skills, self-discovery and opportunity recognition. Starting a business as the main outcome became nearly invisible.

[FS33]
<i>"Yes, the website is great. Moreover, the material and content is also great. There are interactive games and quizzes, making it very interesting.</i>
<i>"It also emphasizes on thinking tools such as design thinking which is excellent!"</i>

[FS12]
<i>"The final goal of the new curriculum is not just for starting a business that are seasonal and trendy (like what we did before), but it's about changing the way people think and about self-discovery. That way they can create change for a better future"</i>
<i>"For example, (the new curriculum) teach students that to succeed in business or in general is not being an expert in theory, but we need teamwork, networking, leadership..."</i>

[TM07]
<i>"So now (unlike before), we focus on the way of thinking, changing mindsets and building the right attitude"</i>
<i>"...essentially one needs to be independent, innovative so they can compete, collaborate and so on..."</i>

This off-the-shelf curriculum required 120 minutes for each of its 18 sessions, however in practice UNAS only allocated 16 sessions of 90 minutes only. The condensation of the sessions caused considerable misalignment between learning outcomes, course requirements and implementation.

4.4 Extant Issues in EE Implementation

Based on the analysis of the current practices, several key issues were found contributing to the effectiveness of EE implementation at UNAS. These included novelty of EE, staff expertise and the absence of an entrepreneurship eco-system. It was believed at UNAS that EE, because it originated from developed countries such as US and UK, was not contextualized to the practices and conditions of developing countries.

[FS12]
<i>"Maybe we should revise the curriculum, in practice, as the materials are in English, it's sometimes difficult to understand. As the content comes from abroad such as Europe, we might have to revise it to Indonesian context. For example, using Indonesian business as case studies, looking at prominent Indonesian figures as role models. It needs a lot of revision"</i>

[TM01]
<i>"I think it's the case of whether the materials, methods and procedures used (in entrepreneurship education) are suitable for us (Indonesia). Because entrepreneurship education effectiveness is very closely related to culture, and every nation has different cultures. So, if we just adopt entrepreneurship education from other countries, it may not be relevant as they have different cultural background for example."</i>

Ever since it was first implemented at UNAS, EE has remained very rudimentary in both planning and practice. Therefore, in its second iteration with the pre-made curriculum, EE was seen as a solution to fill the expertise gap. However, the absence of an entrepreneurship eco-system contributed to the misalignment between how entrepreneurship ought to be practiced in an Indonesian-developing country context and how it was taught to students. Thus, EE in

UNAS continued to go through phases of trial and error. No evaluation records were found to measure the impact and outcomes of these series of iterations.

4.5 Stakeholder Insights

The interviews provided in-depth opinions and expectations from key decision makers and implementers of EE at UNAS. While the student survey provided evaluative and expected aspects from the students' perspective. This allowed a multi-layered exploration of EE's impact on and directed by the internal stakeholders of the university. The line of enquiry was also used to propose an EE development project that aligned with the stated needs and expectations of the internal stakeholders.

4.5.1 Senior Leadership

Based on the interviews, senior leadership tended to view entrepreneurship as a broad concept encompassing both enterprise and entrepreneurialism, where individual self-development and discovery would enhance the entrepreneurship journey and associated activities.

[TM01]	<i>"...so I think the entrepreneurship is the soul or spirit to be able to create new things, not merely in the field of trading and selling. Very broad in my opinion..."</i>
[TM07]	<i>"The final objective for entrepreneurship education must be for all aspects in life. It's like the concept of research – about re-thinking, re-seeking and re-winding to make things better from time to time."</i>
	<i>"So the concept of entrepreneurship is broad, encompassing innovation" "It's not about just being a businessman later on, but he is able to create and innovate within his profession. Whatever he chooses to do in life, he can change it to become better from time to time"</i>
[TM11]	<i>"We have to educate and to give an understanding (about entrepreneurship in a broader sense), that it's about determination and motivation. Entrepreneurial success is not luck like gambling, but it can be learnt and through practice and hard work."</i>

EE in the university should, therefore, be translated to fit this broad definition, to change student mind-sets and to foster a positive attitude towards entrepreneurship. The expected outcome was the increased intention for students to engage in entrepreneurship activities. The success of entrepreneurship development in the university is to be measured in the long term, through tracing alumni future careers or through measuring entrepreneurship activity within the university.

[TM07]
<i>"So we have to measure their attitude about entrepreneurship, are they enthusiastic? Then we evaluate the process they go through, can they become winners in their field, for example such as any competitions achievements, or what kind of position they hold in their job etc. This has to be measured in the long term, through alumni tracer studies and see whether this was impacted due to them going through entrepreneurship education while in university"</i>

4.5.2 Middle Management

Middle Management had hands-on experience based on continuous contact with students in the university.

They recognised that many students engaged in early-stage entrepreneurship such as setting up and running online shops to earn an extra income during their studies. These students needed to be facilitated in order to scale up their business. Thus, based on the insights gained, according to Middle Management, EE at UNAS should be educating students to run and scale-up their own businesses.

[FS04]	<i>“Well for example I found a student’s Facebook page. She is good at making cakes. So, then she made her own brand and it’s called Dapur Kue[†]. On Ramadhan, she often makes a post on Facebook, and I can see that she gets a lot of orders for her cakes. And the prices are quite premium as well!”</i>
	<i>“There are quite a few students like her...these students need to be incubated and facilitated, so they can grow their business”</i>
[AM11]	<i>“Some students sell things on campus for additional money supporting their studies. These students need to be facilitated, given extra support to grow their business. In reality, they do business out of necessity, and we need to motivate them to look for opportunities to scale and become real entrepreneurs because they already have that basic entrepreneurship mind-set.”</i>

Thus, entrepreneurship is about new venture creation and executing business activities for profitable outcomes. The Middle Management view was that EE needed to equip students with the technical knowledge of starting their own business and that entrepreneurship should be an alternative career option for these students.

In contrast to Senior Management, they believed that the success of any EE programme at the university should be measured by counting how many entrepreneurship-based activities were active on campus, and how many students graduated to become entrepreneurs.

[AM11]	<i>“We have to see how many events relate to entrepreneurship, and how active the (entrepreneurship) student club is”</i>
[FS04]	<i>“We have to measure how many students actually become entrepreneurs whether during studies or after graduation”</i>

4.5.3 Lecturers/Faculty Members

There were three distinct insights gained from 3 categories of lecturers and faculty members. Based on their departmental affiliation – ‘applied and pure sciences-based’ such as engineering, biology or agricultural sciences, OR ‘social science and humanities-based’ such as political science, communications, language and literature OR ‘economics-based’ such as management, accounting etc. These different groups provided different perspectives on what, why and how EE ought to be configured for delivery.

The first and second groups highlighted that EE should provide a means for the scientist to engage in commercialisation, research opportunity recognition and to enhance innovative and creative thinking which most pure science students, in their opinion, lacked. This can be translated into the ideal that entrepreneurship should be taught in a much broader sense to enhance enterprising skills instead of limiting its scope to mere new venture creation.

They did not expect the direct outcome of creating student entrepreneurs or students engaging in venture creation straight after graduation, but expected a more broader sense of how students

[†] A pseudonym

can utilise specific knowledge gained in their respective study programs to be used innovatively and creatively to solve problems or to help their careers regardless of what they chose to do.

[FS01]	<i>“The students need soft skills that educate them to be open minded and to think out of the box. I like the term mind-set, attitude and creative thinking (for our entrepreneurship education)”</i>
[TM07]	<i>“The outcome should be about gaining a recognition like winning competitions, or even being able to publish innovative journal articles by applying his academic knowledge and his entrepreneurship skill. For example he can get patents etc.”</i>
[FS02]	<i>“Why not try excavate the student’s knowledge and skills? Help them develop the basic science from university to create something, solve problems or see it as an opportunity to grow. It’s just a waste to see the knowledge student’s gained from universities go to waste if we only want to make them as businessmen”</i>

However, the economics perspective tended to view EE as a means to equip students with the skills to set up their own businesses. This was to be measured by means of counting how many students chose entrepreneurship as a career either while they were still at university or upon graduation.

[FS33]	<i>“They just can’t depend on looking for jobs again in the future. It’s too competitive. They must be creative to look for other sources of income (through job creation).”</i>
	<i>“So I tend to view entrepreneurship education must be related to SMEs (Small Medium Enterprises). I met the assistant deputy of entrepreneurship from the Co-operatives Ministry department. He stated that entrepreneurship education should be directed to creation of SMEs. It’s supported (by the government). If existing students submit a proposal to the ministry they can get funding up to 25 million rupiahs.”</i>
	<i>“We need to encourage students to submit proposals, the more proposals granted, this means our entrepreneurship education is successful”</i>
[FS07]	<i>“He/she must understand the science of management. How to market and how to manage finance. This is important for them to be able to create (entrepreneurial) ventures.”</i>

4.5.4 Students

Table 1: Student’s Attitude and Perception of Entrepreneurship Education

Semesters	1 to 3		4 to 6		Above 7	
	EE Students	Non-EE Students	EE Students	Non-EE Students	EE Students	Non-EE Students
Positive attitude towards taking part in EE	5.4	4.73	4.97	5	5.03	5
Perceiving Entrepreneurship as a familiar concept	4.2	4.2	4.36	4.34	4.66	4.25

Students generally depicted a positive attitude towards entrepreneurship education, however, they did not believe that they had the right knowledge and skill-set to pursue entrepreneurship due to process-based uncertainties and lack of self-efficacy.

Based on the survey, overall, students were satisfied with the entrepreneurship class. However, they were generally unsatisfied with how it was delivered, viewing it as too theoretical lacking practical dimensions.

Table 2: Entrepreneurship Education student's efficacy, content and satisfaction

Values	Semesters		
	1 to 3	4 to 6	Above 7
Average of confidence in pursuing entrepreneurship (efficacy)	4.100	4.149	4.273
ES needs more skills Building	4.33	4.77	4.66
ES needs focus on Attitude Formation	4.54	4.81	4.59
Satisfaction towards overall ES class	5.20	4.65	4.35
The perception that ES is practical	3.00	3.24	3.42
Perception that Lectures have high teaching capability	4.47	4.41	4.24

The survey also showed that intra-curriculum activity should begin to be introduced between semesters 1-3, preferably earlier in semester 1. Whereas, extracurricular activities should be introduced between semesters 4-6 to prepare students with the right technical skills to engage in entrepreneurship. This was in contrast to how UNAS now is giving students the freedom to choose in whatever semester they wish to take on the compulsory EE subject.

Based on the findings above, a program was designed incorporating stakeholder expectations and aligning it to the current capabilities based on stakeholder insights. The program proposal is discussed in the next section (section 5).

5 Proposed Programme Proposal

Considering the resources and barriers mentioned through the empirical research, the learning objectives of the entrepreneurship subject should surround topics related to self-discovery and pre-start-up stages of entrepreneurship. Such an approach is likely to drive learning outcomes towards internalising and reflecting on what they have learned (Fayolle & Gailly, 2008; Rokhman & Ahamed, 2015; Lindh, 2017) for fostering entrepreneurial attitudes and characteristics (Potishuk & Kratzer, 2017). Using these, students will be able to identify opportunities around them (Oosterbeek, et al., 2010). The overall aim would not be based around theory-knowledge acquisition, but inculcating a high-level conceptual understanding of *doing* entrepreneurship principles (Sarasvathy, 2001; do Paço, Ferreira, Raposo, Rodrigues & Dinis, 2013; Jones *et al.*, 2014).

In doing so, a progressive pedagogical design was needed to enhance engagement of students to actively participate in the learning process (Robinson, Neergaard, Tanggaard & Krueger, 2016), such as role modelling (Rahman & Day, 2014) and experiential learning (Kolb, 2015). Assessments would be based on displaying ideas as a form of self-achievement (Rokhman & Ahamed, 2015) and internalisation of what has been learnt through self-reflection (Lindh, 2017).

As a result of the empirical research, we design two schemes to enhance EE in UNAS, including intra-curricular and extracurricular programmes. The following intra-curricular scheme was proposed to UNAS for validation (Table 3).

The intra-curricular activity focused on the entrepreneurship subject taught in class. Following the intra-curricular activity, an extra-curricular scheme was also proposed (See table 4 below). Extra-curricular were the activities that were offered outside of the classroom. This scheme

suggests the deployment of a pre-business incubator or a business idea boot camp in line with the recommendations of Oosterbeek et al. (2010). This programme would be run in one semester, and would not be compulsory.

Table 3: UNAS Intra-Curriculum Program Proposal

Learning Objectives	Learning Outcomes	Design and Content	Assessments
<ol style="list-style-type: none"> 1. Students perceive entrepreneurship as a superior career choice as it can bring more value to themselves and society (Frederiksen and Brem, 2017) 2. Students develop an entrepreneurial attitude such as independence, creativity, perseverance and ability to calculate risks associated with decision making (Potishuk and Kratzer, 2017) 3. Students develop enterprising skills such as innovating through science-based knowledge, exploring problems in society as a means for opportunity recognition through creating valuable solutions (Oosterbeek et al, 2010; Hunter, 2012; Barucic and Umihanic, 2016) 4. Students develop the confidence in articulating their ideas and understand the value of collaboration in realising those ideas (Roxas, 2014) 	<ol style="list-style-type: none"> 1. Students can create a self-reflective paper about how entrepreneurship can help their future careers 2. Students can internalise enterprising attitude and skills indicated by in-class and out-of-class assignments 3. Students create a well-displayed presentation articulating their ideas. 	<ol style="list-style-type: none"> 1. Role Modelling (Rahman and Day, 2014)– Invite inspiring entrepreneurs as a public lecture for all entrepreneurship subject students at least once 2. Experiential Learning (Sherman, Seborá and Digman, 2008), by doing these activities: <ol style="list-style-type: none"> a. creating simple videos as a group of entrepreneurs that they felt has brought value to their community b. Create a self-reflective paper on their thought about the assignment and what they have learnt about entrepreneurship (Mavin and Roth, 2014; Lindh, 2017) c. Learning through simulations and serious games to internalise an observable attitude (Bellotti <i>et al.</i>, 2012; Bruni-Bossio and Willness, 2016) 3. Use of Technology, by: <ol style="list-style-type: none"> a. Introducing concepts through videos (Vibert and MacKinnon, 2015) b. Using technology to display learning outcomes – videos and presentations (Birch, 2009) 	<ol style="list-style-type: none"> 1. Self-reflective essays on ‘what and how entrepreneurship value to them.’ 2. A video presentation on inspiring community entrepreneurs – the quality of the video is not highlighted, but the insights they gained are more important 3. Poster presentation of their ideas – either as a business or a movement. The importance lies in the value it can bring to their chosen community segment.

Learning objectives of this structured extra-curricular activity were aimed at preparing students to develop a realistic and viable business idea or to transform an existing business they had in order to scale and sustain it. Tools and frameworks such as design thinking (Davies & Wilson, 2013; Sticdorn *et al.*, 2018), business model canvas (Osterwalder & Pigneur, 2010), lean start-up (Ries, 2011) combined with effectuation (Sarasvathy, 2008; Read et al., 2017) were proposed in the ‘conditioning’ phase of this program (Bonazzi & Perruchoud, 2014). Objectives surrounded the articulation of an actual business through visualisation and validation. However, as insights from UNAS stakeholders specified that businesses stemming from UNAS were expected to be able to bring value to society; thus the assessments proposed

were to be designed to evaluate how submitted business ideas could create social value (Osterwalder, Pignaur, Bernarda, Smith & Papadakos, 2014; Frederiksen & Brem, 2017). Also, the role of the educator is not only as a facilitator but also as a coach guiding students throughout the process by building close relationships (Lepistö & Ronkko, 2013; Ahmad, 2014)

Table 4: UNAS Extra-Curricular Program Proposal

Learning Objectives	Learning Outcomes	Design and Content	Assessments
<ol style="list-style-type: none"> 1. Students are able to go through the process of developing an existing idea into a viable prototype, including the gathering of resources, recruiting, promoting and calculating activities. (Sarasvathy, 2008; Read <i>et al.</i>, 2017) 2. Students acquire the knowledge and skills needed to develop a value-driven business (Nielsen and Stovang, 2015; Larso and Saphiranti, 2016) 3. Students understand the value of enterprising skills in contributing to their success (Gaffney <i>et al.</i>, 2014) 	<ol style="list-style-type: none"> 1. Students can articulate their business idea in a workable proposal and visualisation (Osterwalder and Pigneur, 2010) 2. End of the year student exhibition and bazaar after going through a series of iterations (Ries, 2011) 3. An actual small business venture – this can be a validation that there is indeed a need for a university-based business incubator. 	<ol style="list-style-type: none"> 1. Experiential learning: Students learn through simulations (T. Scott, Schumann and Anderson, 1998; T. W. Scott, Schumann and Anderson, 1998) and gamification (Domínguez <i>et al.</i>, 2013; Antonaci <i>et al.</i>, 2015) in order to replicate the real world situations of entrepreneurship process. 4. Coaching (Lepistö and Ronkko, 2013): Students are talked through a problem and given means of solving it through a conceptual understanding of the problem. 	<ol style="list-style-type: none"> 1. Students must be able to articulate what value this business brings to society and must not only be for self-generating profits. 2. Additional points are given for businesses that create the most significant impact and viable to execute

The proposal was sent back to the stakeholders for validation. Based on the comments from the validation exercise, it is found that the proposal was able to capture the holistic expectation of the stakeholder in UNAS derived from the empirical research. They also acknowledged that an extra credit point for the semester of the entrepreneurship subject was needed to enable the implementation of the proposal.

6 Discussion

In designing a new program for UNAS, this research has uncovered insights highlighting contextual practices and issues unique to a developing country case.

The type of programme content in each curriculum, its structure, along with its delivery mechanisms are the tools for achieving its intended objectives (Lackeus, 2015; Nabi *et al.*, 2017). Thus, the coherence of these elements is imperative. Without coherence, a misalignment of practice will occur, and its impact cannot be evaluated (Fayolle & Gailly, 2008; Robinson & Shumar, 2014).

The research findings unveiled an interesting phenomenon in EE practices. Although study plans are made to an ideal state suggested by the stakeholders, the execution lies in the capability and commitment of the executors – in this case, the lecturers. This was consistent with previous research (Beynon, Jones, Packham & Pickernell, 2014; Ortiz-Medina *et al.*,

2016; Huq & Gilbert, 2017) suggesting that due to the novelty of the entrepreneurship concept and teaching method, it was required for lecturers to also have ‘skin in the game’ (Sarasvathy, 2008; Read *et al.*, 2017) and a level of expertise (Robinson & Shumar, 2014) for it to be delivered effectively. However, based on the findings, it was portrayed, that even though there was a ‘new way of doing things’, which was considered an ideal programme, the current lecturers still wanted to ‘do things the way they were used to’, showing a form of resistance and adherence to the status quo. Thus, contributing to the misalignment between structure, curriculum and delivery.

Various internal stakeholders held the view that the current practices of EE were not in-line with their expectations. The current practice of entrepreneurship did not seem to focus on changing mindsets, rather the emphasis on business planning and trading in the form of student bazaars was seen as inadequate. As supported through past research (Gibb, 2002; Jones *et al.*, 2014; Rauch & Hulsink, 2015) instilling learning based on technical tools such as business planning, marketing and financial skills do not translate into the creation of an entrepreneurial mindset. Educators must differentiate between what constitutes as learning *about* entrepreneurship (Goldstein *et al.*, 2016) and learning *for* entrepreneurship (Lefebvre & Redien-Collot, 2013; Berbegal-Mirabent, Ribeiro-Soriano & Sánchez García, 2015). Drawing a line between these two conceptual understandings will drive consistency between the objectives and associated practices.

7 Conclusion

Through case study research using multiple methods of data collection, this exploratory research has presented a multi-stakeholder view of EE implementation and execution at a DC HEI. It identified key insights to drive the creation of new assumptions in the proposing of a stakeholder-driven entrepreneurship development program at the case organization through the implementing of a combination of intra-curricular and extra-curricular initiatives. The new programme proposal was sent out to relevant, vital stakeholders as an attempt to validate and iterate. Stakeholder feedback highlighted the need for only minor iterations which highlights the overall appeal for the new proposed scheme to deliver EE.

As EE is highly contextual, gathering institution-level insights of how and why EE should be delivered was important to create an impactful programme. In the case of UNAS, as EE was a general subject, including the stakeholders in the development process was important to create legitimacy and to obtain pre-commitments. It also showed that generally EE structures derived from the context of developed countries cannot be directly adopted to the conditions and needs of developing countries.

Due to the nature of this research and imposed time limitations, findings and the proposed new scheme were only validated through a single iteration. Also, as the stakeholders were only internal, more research is needed to include the inputs from case organization’s third mission role: alumni, industries and the government.

Thus, future research could adopt a quasi-experimental design, testing the impact of the new programme proposal as an intervention. Further research could extend the participants within the stakeholder analysis to include external entities beyond the ones identified above.

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