

SEDS LESSONS LEARNED DISCUSSION PAPER

The Influence of Applied Entrepreneurship Curriculum on Student Businesses: Lessons from Indonesia

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June 2017

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CONTENTS

EXECUTIVE SUMMARY	ii
INTRODUCTION	1
1. THE RESEARCH LITERATURE: HIGHER EDUCATION, ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT	2
2. METHODOLOGY	4
3. FINDINGS AND LESSONS LEARNED	4
4. RECOMMENDATIONS	17
BIBLIOGRAPHY	19

EXECUTIVE SUMMARY

The Sulawesi Economic Development Strategy is a five-year project (2012-2017) focused on building entrepreneurship capacity in the Indonesian provinces of North and South Sulawesi. The goal of the project is to achieve improved management and growth of small and medium enterprises that generates greater employment, higher levels of income and reduced poverty. The project engages seven Indonesian universities and one Canadian college to achieve this goal. A train-the-trainers approach was used to develop the capacity of the Indonesian university partners to deliver applied entrepreneurship programming. This included both the design of applied curriculum to be delivered as university courses and the development of business support services to be delivered outside the classroom environment. Through both of these strategies, university students will graduate with the knowledge and skills necessary to start and manage successful small businesses. This, in turn, will contribute to greater employment, higher incomes and reduced poverty.

As the SEDS project comes to an end, a research study was undertaken in 2017 involving SEDS students and lecturers. The study explored how the project's applied entrepreneurship programming influenced the start-up and management of student businesses in North and South Sulawesi. Fifty-six students and 74 SEDS lecturers or coaches took part in the research. The lessons that emerged from the study have potential implications for both development practice and theory. The scholarly literature on entrepreneurship education argues that entrepreneurship programming that is applied in focus and draws on mixed methods can effectively provide students with the real world skills needed to start and manage successful businesses. At the same time, this literature is largely drawn from the experience of developed economies and is often based on western notions of entrepreneurship. There is a gap in the research on how effective this applied model of entrepreneurship education is in developing economies and societies with collectivist values. The SEDS experience can therefore provide valuable insights from a different cultural context in the Global South. The lessons learned can help bridge theory and practice by informing future practice that is culturally appropriate and addressing the current gap in the research.

This document outlines the findings from the SEDS study. It discusses 14 major findings and their corresponding lessons learned. A set of recommendations emerging from the lessons learned are also identified. The lessons learned and recommendations are intended to provide direction to the SEDS partners as the project comes to an end. They also offer insight to other Indonesian universities interested in delivering applied entrepreneurship programming in the future.

Major Findings and Lessons Learned

Major Finding #1: The applied nature of the SEDS course curriculum was overwhelmingly successful in providing students with practical entrepreneurial knowledge and skills needed to start a business.

Lessons Learned:

- Applied curriculum and teaching methods are an effective pedagogical strategy in Indonesia. Both students and lecturers value the active nature of learning that departs from traditional methods used in Indonesian higher education.
- Diverse teaching methods are critical for promoting applied entrepreneurship learning but these teaching methods themselves must be adapted to different learning styles within the classroom and across different study programs or disciplines.

Major Finding #2: SEDS business support services and extra-curricular activities provide an effective bridge between course learning and real world entrepreneurship.

Lesson Learned:

- A formalized link must be made between in-class curriculum and support services/extra-curricular activities in order to realize the full potential of applied entrepreneurship programming. This will provide integrated support for both business start-up and on-going management in the student entrepreneurship experience.

Major Finding #3: The applied nature of the SEDS courses, support services and extra-curricular activities builds self-efficacy within students that results in motivation to start businesses.

Lessons Learned:

- Entrepreneurship programming that directly engages students in the learning process can effectively address the documented challenge of a lack of entrepreneurial self-efficacy among Indonesian university students.
- Entrepreneurship programming needs to pay special attention to building self-efficacy and motivation among students who do not have personality traits associated with entrepreneurship. This is best done through using mixed teaching methods that connect to different learning styles and personality traits.

Major Finding #4: SEDS lecturers take on a broad range of roles beyond just teaching to help student entrepreneurs become successful.

Lessons Learned:

- The capacity development approach used by the SEDS project was effective in building skills and motivation within lecturers to deliver applied entrepreneurship programming. The format of capacity building activities, however, needs to be designed more closely around lecturers' schedules and workloads.

- Extending the learning of SEDS lecturers to other faculty through socialization activities is critical to institutionalize capacity and broaden the use of applied techniques within each university.
- Long-term sustainability of the many roles lecturers play beyond their regular workload requires some form of incentive or compensation that fits within the specific regulations and status of each university partner.

Major Finding #5: Student entrepreneurship contributes to social good.

Lesson Learned:

- Applied entrepreneurship programming in Indonesia should incorporate the social aspects of entrepreneurship as a key component of curriculum. This should be an integrated theme that cuts across all curricular content rather than just a focus on corporate social responsibility as one topic related to entrepreneurship.

Major Finding #6: The applied focus of SEDS is a victim of its own success. Unintended consequences that emerge from the applied approach have led students to reject the value of theory in the learning process.

Lesson Learned:

- Applied entrepreneurship curriculum must be designed so the role of theory in informing practice is at the foundation of students' applied learning. This can be done through both curriculum content design and the choice of teaching methods.

Major Finding #7: Female student entrepreneurs generally achieve less success than male student entrepreneurs in terms of revenue and amount of employees.

Lesson Learned:

- Research is required to better understand why female Indonesian entrepreneurs who develop motivation and skills through entrepreneurship education are not as successful in business as their male counterparts.

Major Finding #8: Effective marketing, including marketing using social media, is a challenge for new businesses in the transition from education to practice.

Lesson Learned:

- Marketing curriculum in the Indonesian context should focus explicitly on social media and online marketing strategies including guerrilla marketing techniques and online platforms like Tokopedia.

Major Finding #9: Time management is overwhelmingly the biggest challenge student entrepreneurs face.

Lesson Learned:

- Education or training in time management skills needs to be a core part of applied entrepreneurship programming. This can be done by adding it into the curriculum, incorporating it into existing curriculum content, or providing it through extra-curricular support such as coaching or training.

Major Finding #10: Lack of funding is a barrier to business growth but students do not seek formal loans.

Lesson Learned:

- Supporting the funding needs of student entrepreneurs needs to move beyond providing loan information in the classroom to engaging the larger university in networking with banks, government and entrepreneurship organizations to identify or develop funding opportunities that are accessible to students with little collateral.

Major Finding #11: Group dynamics among student business partners often inhibit successful business management

Lesson Learned:

- Promoting effective group dynamics among student business partners would be enhanced by the use of an Agreement Contract provided by the university and signed by partners that outlines roles, capital contributions, profit sharing and other issues.

Major Finding #12: Student businesses tend to lack innovation.

Lesson Learned:

- Entrepreneurship curriculum should teach students to assess when innovation is useful while coaching should support student innovation where appropriate.

Major Finding #13: Challenges related to marketing, time management, funding, partner dynamics and innovation all limit business growth which, in some cases, threatens long-term business sustainability.

Lessons Learned:

- Addressing the multiple student challenges of time management, marketing, funding, partner dynamics and innovation should be done as a holistic strategy that recognizes they work together to limit business growth and sustainability.

- Applied entrepreneurship programming should be designed to recognize the twin burdens of student life and entrepreneurship life and how these might be best balanced to promote sustainable businesses upon graduation.

Major Finding #14: The overall SEDS experience demonstrates that an applied and participatory education model is effective in the Indonesian cultural context.

Lessons Learned:

- The applied education model is most successful when it aligns with the larger institution's vision and mission and where regular communication occurs with executive level university administrators.
- The applied model of SEDS programming is adaptable to other university programs unrelated to entrepreneurship and should be expanded to these programs where appropriate.

Recommendations

The SEDS partnership

Recommendation #1: The SEDS partnership should link its project experience to a collaborative research agenda on applied entrepreneurship education. Research results can be used to improve future education programming and contribute to entrepreneurship theory-building from a perspective of the Global South. Two areas of potential research collaboration emerge from the lessons learned, including gender differences in entrepreneurship outcomes and the social role of entrepreneurship in Indonesia. The latter would provide an original contribution to entrepreneurship theory-building and support culturally appropriate programming.

Recommendation #2: The SEDS partnership should build on its collective capacity and reputation to collaboratively offer business support services and curriculum consulting to institutions and individuals outside of the partnership. Money generated through these services can help support business support centres at each partner institution.

Recommendation #3: The SEDS institutions should work together, either as a single partnership or two partnerships in North and South Sulawesi, to network with government, banks and other stakeholders to secure or develop funding opportunities for student entrepreneurs.

Recommendation #4: The SEDS partners should develop and deliver joint extra-curricular activities for all of their students within individual provinces. This will expose students to more customers and spur greater innovation through broader interaction with other student entrepreneurs.

Individual SEDS institutions

Recommendation #5: Each SEDS institution should undertake a process of curriculum review to respond to the issues that emerged in the research findings. These issues include gender differences, social media marketing, time management, partner dynamics, innovation, and the link between theory and practice. A curriculum review will enable decisions to be made on whether to incorporate these issues directly into curriculum or address them in other ways.

Recommendation #6: Each SEDS institution should institutionalize the link between entrepreneurship curriculum and support services/extra-curricular activities. Strategies to do this include incorporating extra-curricular activities into course learning outcomes, formalizing a coaching system that assigns coaches to student entrepreneurs during and after the entrepreneurship course, and creating a database of student entrepreneurs in order to track them and supply on-going support services prior to and after graduation.

Recommendation #7: Each SEDS institution should assess the sequencing of when students start their businesses as part of the institution's program. Both the benefits and challenges of SEDS programming were often related to students starting their businesses while still in university rather than as graduates. Assessing the benefits and challenges of this approach, and making revisions where needed, will strengthen future programming.

Indonesian institutions interested in entrepreneurship or applied education

Recommendation #8: Applied entrepreneurship programs in Indonesia should be designed around the concept of entrepreneurship as a social good as a key curriculum foundation. This will result in applied entrepreneurship education that is better connected to the collectivist values of Indonesian culture.

Recommendation #9: Applied entrepreneurship programming should be designed to fit directly within its larger institution's mission and effectively within its administrative regulations. This includes designing applied programming that provides appropriate incentives or compensation for lecturers given their expanded roles.

Recommendation #10: Applied pedagogy and programming unrelated to entrepreneurship should be expanded to other higher education study programs/disciplines, ensuring that these programs incorporate a balance between theory and practice that is relevant to the larger role of universities in Indonesia.

INTRODUCTION

The Sulawesi Economic Development Strategy (SEDS) is a five-year project focused on building entrepreneurship capacity in the Indonesian provinces of North and South Sulawesi. The project seeks to achieve improved management and growth of small and medium enterprises that generates greater employment, higher levels of income and reduced poverty among women and men. Academic institutions, including seven Indonesian universities and one Canadian college, are the vehicle to achieve this goal. A train-the-trainers approach was used to develop the capacity of the seven Indonesian university partners to design and deliver applied entrepreneurship programming. This included both the design of applied curriculum to be delivered as university courses and the development of business support services like coaching to be delivered outside the classroom environment. Through both of these strategies, university students will graduate with the knowledge and skills necessary to start and manage successful small businesses. These businesses, in turn, will contribute to greater employment, higher incomes and reduced poverty. The SEDS partners involved in the project include Universitas Negeri Manado (UNIMA), Universitas Sam Ratulangi (UNSRAT), Universitas Klabat (UNKLAB) and Universitas De La Salle (UNIKA) in North Sulawesi and Universitas Hasanuddin (UNHAS), Universitas Negeri Makassar (UNM) and Universitas Muhammadiyah Makassar (UNISMUH) in South Sulawesi. Humber College of Toronto is the Canadian partner. The project's timeframe is 2012-2017.

As the project comes to an end, this study examines the results that emerged from the SEDS experience. The document explores how applied entrepreneurship curriculum and support services delivered by the SEDS partners influenced the start-up and management of student businesses. Based on this experience, a set of lessons learned and recommendations are provided. The lessons and recommendations are intended to inform on-going applied entrepreneurship programming within the SEDS partners as the project comes to a formal end. They also are intended to provide insights for future programming undertaken by other higher education stakeholders in Indonesia interesting in replicating the SEDS model.¹

The document is divided into four sections. The first section provides a brief summary of the scholarly research on entrepreneurship as it relates to the specific assumptions that underlie the SEDS strategy. It identifies a research gap that the lessons learned from the SEDS project might help fill, both in theory and practice. Section two describes the research methodology used in the study. Section three explores the study's findings related to how SEDS applied entrepreneurship programming influenced the start-up and management of student businesses. The section includes a set of major research findings and their corresponding lessons learned. Section four outlines a set of recommendations that emerge from the lessons learned.

¹ For a more in-depth analysis of the study's results please see the document entitled SEDS Lessons Learned Discussion Paper: Extended Analysis.

1. THE RESEARCH LITERATURE: HIGHER EDUCATION, ENTREPRENEURSHIP AND ECONOMIC DEVELOPMENT

The SEDS strategy uses higher education institutions as a means to generate successful young entrepreneurs whose businesses will raise incomes, increase employment and reduce poverty. Several assumptions underpin the logic of this strategy. At the broadest level, the project assumes there is a link between entrepreneurship and economic development. It further assumes that higher education institutions can play an effective role in promoting economic development and can do so through the provision of applied entrepreneurship programming in particular. Central to this assumption is the importance of an applied educational approach. This approach blends theory and applied skills-building to provide students with hands-on, practical entrepreneurship skills. The final SEDS assumption is that this model can work in the Indonesian context where higher education is characterized by largely theory-driven curriculum and traditional teaching methods. Based on these assumptions, each SEDS university partner designed and delivered applied entrepreneurship curriculum. Each partner also developed skills in business support services like coaching to be provided outside of the classroom environment. A Business Support Centre was set up at each SEDS university as a physical location to provide these services. Overall, this strategy enabled each SEDS university partner to develop and deliver a complete package of applied entrepreneurship programming to Indonesian students.

What does the scholarly research literature say about this SEDS strategy and its assumptions?² The first assumption of SEDS relates to the link between entrepreneurship and economic growth. Empirical evidence suggests there is indeed a link as greater entrepreneurial activity leads to economic growth both regionally and nationally (Acs and Armington 2004; Audretsch and Keilbach 2008; Berkowitz and DeJon 2005; Foelster 2000; World Bank 2016). Most of the empirical evidence, however, is restricted to developed economies and ignores the potential influence of culture and context (Bruton, Ahlstrom and Obloj 2008). The second SEDS assumption is that universities can play a role in economic development, particularly through the provision of applied entrepreneurship education. A relatively small literature argues that higher education institutions can play a unique role in development initiatives in the Global South (Bloom et al. 2014; Gyimah-Brempong et al. 2006; Hatton 1995; Jordaan and Blignaut 2005; Lin 2004; Mathews and Hu 2007). A much larger literature focused largely on universities in the global north argues that entrepreneurship education specifically can play a role in economic development. To be effective, such higher education programming requires the use of applied curriculum and mixed pedagogical methods that equip students with practical skills, motivation and self-efficacy, or the confidence to become an entrepreneur (Draycott and Rae 2011; Gibb 2010; Lourenço and Jayawarna, 2011; Lourenço, Taylor and Taylor 2013; Nabi

² For a more detailed review of this literature, please see the full SEDS Lessons Learned Discussion Paper: Extended Analysis.

et al. 2016: 12). The use of this kind of applied approach needs to incorporate the cultural and social environments within which it exists (Jones and Iredale 2014). Nonetheless, many entrepreneurship programs are primarily located in Business Schools and take a one-size-fits all approach rooted in the experience of the developed world (Lourenço, Taylor and Taylor 2013: 506). This not only creates a problem across different disciplines but across different cultures as well.

Two gaps related to culture and entrepreneurship therefore emerge from the literature. First, the general agreement on the link between entrepreneurship and economic growth is largely limited empirically to developed economies with a lack of understanding of how culture influences this link. Second, the consensus on the need for entrepreneurship programming to be applied is similarly limited to western experiences with little knowledge of cross-cultural applicability. These two gaps are critical in light of the third assumption underlying the SEDS strategy: applied entrepreneurship programming can promote economic development in Indonesia in particular. The vast majority of Indonesian businesses are micro- and small enterprises that provide half of the country's employment (Vial 2011; Tambunan 2007). Yet low productivity, lack of innovation and aversion to risk means these businesses have a relatively low contribution to Indonesia's gross domestic product (Tambunan 2007). The success of Indonesian entrepreneurs in creating employment is not matched by their contributions to economic growth. Some claim there is a deeper, more fundamental issue that explains this discrepancy. Cole (2007) argues that entrepreneurship is largely defined in terms of western values of individualism and competition. The collectivist nature of Indonesian culture does not fit within this conceptualization of entrepreneurship. To western eyes, Indonesian culture itself becomes a perceived barrier to entrepreneurship when defined purely in terms of the competitive pursuit of individual wealth. Cultural context therefore emerges a third time as a key issue that represents a gap in our knowledge, this time in terms of how entrepreneurship itself should be understood and evaluated in different cultural contexts.

This review of the literature offers two broad insights as a foundation for examining the results of the SEDS strategy in practice. First, the SEDS project should be on solid ground in its assumptions that higher education institutions can play a meaningful role in promoting entrepreneurship through applied programming and that, in the longer term, this will contribute to economic development. Second, while this ground is solid in a general sense, there are gaps in our knowledge about whether these assumptions will hold in different cultural contexts like Indonesia. The lessons learned that emerge from the SEDS experience can therefore help bridge theory and practice by both informing better future practice in the Global South and addressing the gap in the research literature. The remainder of this document uses these insights and gaps as a foundation to explore a set of key findings and lessons learned for applied entrepreneurship education in Indonesia.

2. METHODOLOGY

The research question

In order to identify the key lessons learned in the SEDS project and analyze their implications for entrepreneurship programming in Indonesia, this study asked the following research question:

How has applied entrepreneurship curriculum delivered by the SEDS project influenced the start-up and management of student businesses in North and South Sulawesi?

Research methods

Answering the research question made use of a mixed approach using primarily qualitative and participatory methods. Semi-structured interviews were undertaken in early 2017 with students or graduates who have taken a SEDS entrepreneurship course and subsequently started a small business. Eight respondents from each SEDS institution, four female and four male, were randomly selected for a total of 56 interviews. Data from the interviews were coded and analyzed to identify individual themes that were then aggregated into a set of major findings. A one day workshop was then held at each SEDS partner institution. Through a variety of participatory methods, SEDS lecturers analyzed the major findings and developed a set of institution-specific lessons learned. Overall, 74 SEDS lecturers and coaches participated in this process. The lessons learned from each institution were then aggregated and analyzed to develop a single set of lessons learned for the SEDS project as a whole. An analysis of quantitative data collected as part of the larger SEDS evaluation process was undertaken at this point to identify where the quantitative data informs or expands the qualitative findings.³ The next section turns to a discussion of the major findings and the lessons learned that emerged from the SEDS experience.

3. FINDINGS AND LESSONS LEARNED

The SEDS project began tracking the results of its applied entrepreneurship programming after the partners had designed their curriculum and business support services and delivered them for approximately two years. This allowed time for students to apply their learning to the start-up and management of businesses. As of November 2016, the quantitative data show that 18% of students had started a business based on a representative sample of students who had taken a SEDS course. These businesses are generating an average monthly revenue of just under 3 million Indonesian rupiah (IDR) or the equivalent of approximately CAN\$300. While these businesses are relatively new, they are also creating employment. Forty-seven percent of the businesses have created at least one job.

³ The quantitative data collected for the SEDS evaluation draws upon two rounds of data collection. This report uses data collected in the first round as the second round occurred after the report's completion.

These numbers indicate considerable success is emerging after only two years of delivering applied entrepreneurship programming. What are the factors that have driven this success and what challenges remain, particularly in light of the cultural gap that emerges in the research literature? The qualitative data collected from students and SEDS lecturers enable a deeper exploration of the factors behind these numbers and the lessons learned from the SEDS experience. Fourteen major findings, each with accompanying lessons learned collectively developed by SEDS lecturers, can be identified.

Major Finding #1: The applied nature of the SEDS course curriculum was overwhelmingly successful in providing students with practical entrepreneurial knowledge and skills needed to start a business.

One of the main objectives of SEDS was to equip university students and graduates with a set of applied skills and knowledge that will enable them to start and manage businesses. The experience of the 56 respondents indicates that the project was very successful in fulfilling this objective, particularly in terms of business start-up. Moreover, SEDS was successful in doing so with students from a wide range of study programs such as economics, chemistry, engineering and animal sciences. The ability of SEDS to equip students with applied entrepreneurship skills can first be seen in the skills respondents reported as being applied in setting-up and running their businesses. By far the most frequently reported skill was marketing and market segmentation. The Business Model Canvas (BMC) and financial management were also key learnings that many respondents applied in practice. Other skills identified less often were distributed consistently and broadly and included things like human resource management, consumer behaviour, business planning and customer relations. What is notable is that the skills respondents applied in practice were most effective in helping students with starting-up their businesses. They were less influential in providing them with skills for the on-going management of the business after start-up. This is not to say the skills were not applicable to on-going management but their influence was more pronounced on start-up.

In addition to the reported knowledge and skills respondents applied to their businesses, the success of the SEDS courses can also be seen in how respondents feel about the applied curriculum they experienced. Respondents often spoke of how the SEDS courses differed from other university courses in both content and delivery methods. Without exception they overwhelmingly preferred the applied focus of the SEDS courses. The applied approach created enthusiasm for learning given its real-world implications. Respondents identified the use of class visits by entrepreneurs, simulations and shadowing of entrepreneurs as key learning experiences. Most often they pointed to those SEDS

“We went from knowing nothing to producing something.”

Student respondent

courses that involve the actual development of a product or business as the most effective learning experience.⁴ Developing a product or business in class was a source of excitement for students as it linked their learning to the real world and propelled them to action. Significantly, many SEDS lecturers also reported that their own attitude to teaching has changed with the SEDS experience. They maintained that their use of applied curriculum and participatory pedagogy within SEDS has re-shaped the way they teach more generally. The SEDS experience has opened them up to a student-centred learning approach that moves beyond traditional lecturing techniques that are common in Indonesian higher education. Overall, the applied nature of SEDS curriculum provided respondents with applicable real world skills and re-shaped the preferences of students and lecturers towards the nature of in-class learning.

Lessons Learned:

- Applied curriculum and teaching methods are an effective pedagogical strategy in Indonesia. Both students and lecturers value the active nature of learning that departs from traditional methods used in Indonesian higher education.
- Diverse teaching methods are critical for promoting applied entrepreneurship learning but these teaching methods themselves must be adapted to different learning styles within the classroom and across different study programs or disciplines.

Major Finding #2: SEDS business support services and extra-curricular activities provide an effective bridge between course learning and real world entrepreneurship.

Each SEDS partner designed and delivered business support services such as coaching to assist students in the start-up and management of their businesses. Extra-curricular activities such as marketplace or expo events also enabled students to market and sell their products in a real world business setting. These services and activities acted as a critical link for respondents to move from learning about entrepreneurship to actually starting and managing businesses. Respondents were particularly enthusiastic about the marketplace and expo events.

“The Expo was inspirational and exciting.”

Student respondent

These events enabled respondents to gain confidence in their products, develop marketing materials, deal directly with customers and, in some cases, secure regular customers. While student respondents were most enthusiastic about the marketplace and expo activities, coaching services were the activity that was most

⁴ Not every SEDS partner requires the development of a product or business within their curriculum.

influential. Coaches assisted respondents with specific technical and day-to-day business issues not covered in the courses. Indeed, the coaching was most important at the business management stage rather than the start-up stage. The SEDS courses and support services/extra-curricular activities therefore offer complementary support: the courses are most effective in supporting students to start-up their businesses while the support services and extra-curricular activities are most effective in supporting the day-to-day issues of on-going business management. The two work together to provide a full package of support across both start-up and management.

Lesson Learned:

- A formalized link must be made between in-class curriculum and support services/extra-curricular activities in order to realize the full potential of applied entrepreneurship programming. This will provide integrated support for both business start-up and on-going management in the student entrepreneurship experience.

Major Finding #3: The applied nature of the SEDS courses, support services and extra-curricular activities builds self-efficacy within students that results in motivation to start businesses.

In order for someone to be motivated to actually start a business, practical entrepreneurship skills need to be partnered with self-efficacy, or the confidence one has the ability to become an entrepreneur (Indarti, Rostiani and Nastiti 2010). This is particularly important for Indonesian university students as they are less likely to have self-efficacy when compared to other Indonesians with less education (Nawangpalupi et al. 2016: 31). One of the clear successes of SEDS was its ability to fill this gap by building self-efficacy and motivation among respondents. The applied nature of the curriculum and extra-curricular activities was the driving force behind fostering self-efficacy. Many respondents again pointed to the requirement within some SEDS courses to actually develop a product or business as a major motivational force. Learning by doing allowed students to build confidence in their ability to be successful entrepreneurs. In fact, many respondents claimed the self-efficacy and motivation provided by SEDS courses and extra-curricular activities was more important than the skills they learned. It ultimately was what drove many respondents to start their businesses.

“My original purpose in coming to university was to graduate and get a regular job. The entrepreneurship course motivated me to expand my horizons. There’s a lot more passion and fun in business.”

Student respondent

Many respondents also described their own personality as a driving force for starting their businesses. They outlined how their personality traits like assertiveness, independence and comfort with risk were further stimulated by the applied entrepreneurship course content. Starting a business, in their opinion, was a natural thing to do once they developed the needed skills. What is notable is that the respondents who stated their own personality was a motivational force in starting their business were very likely to also state that SEDS programming was also a source of motivation. This suggests the ability of the courses to foster self-efficacy and motivation to start a business is often linked to students whose personalities are already pre-disposed to it.

Lessons Learned:

- Entrepreneurship programming that directly engages students in the learning process can effectively address the documented challenge of a lack of entrepreneurial self-efficacy among Indonesian university students.
- Entrepreneurship programming needs to pay special attention to building self-efficacy and motivation among students who do not have personality traits associated with entrepreneurship. This is best done through using mixed teaching methods that connect to different learning styles and personality traits.

Major Finding #4: SEDS lecturers take on a broad range of roles beyond just teaching to help student entrepreneurs become successful.

Much of SEDS success is directly due to the commitment of SEDS lecturers. In addition to in-class lecturing, they are providing one-on-one technical advice, connecting students to technical experts, helping students network with potential suppliers, connecting them with customers, providing encouragement and motivation, securing physical space for students' businesses, and occasionally even acting as business partners or providing loans to students. The significant impact lecturers have on students is nonetheless based on an underlying challenge. The extra roles taken on by SEDS lecturers are in addition to their regular full-time work-load. They receive no compensation, financial or otherwise, for the extra work. SEDS lecturers at multiple partner were overwhelmingly clear that they are willing to take on these roles given their enthusiasm for SEDS and the learning they received through the project. Yet many questioned whether this is sustainable in the long terms. As other lecturers get involved in the future in teaching SEDS courses or providing support services, will they be as willing to do so without compensation? The issue of lack of compensation is a significant one for the sustainability of SEDS programming once the project ends. Addressing it is important to maintain the critical role of lecturers in student success.

Lessons Learned:

- The capacity development approach used by the SEDS project was effective in building skills and motivation within lecturers to deliver applied entrepreneurship programming. The format of capacity building activities, however, needs to be designed more closely around lecturers' schedules and workloads.
- Extending the learning of SEDS lecturers to other faculty through socialization activities is critical to institutionalize capacity and broaden the use of applied techniques within each university.
- Long-term sustainability of the many roles lecturers play beyond their regular workload requires some form of incentive or compensation that fits within the specific regulations and status of each university partner.

Major Finding #5: Student entrepreneurship contributes to social good.

Many of the businesses run by respondents are financially successful. This is a positive development for a project focused on using entrepreneurship as a vehicle to increase incomes. Yet most respondents themselves view entrepreneurship in much broader terms. They identify improving social conditions, not just creating personal wealth, as an important reason for starting their businesses. Creating employment was a frequent issue raised. Some respondents specifically provide jobs for people who are marginalized. Respondents' businesses employ poor students, orphans, people from broken homes and a number of people with disabilities. In many cases, respondents felt this was more important than using their business to get personally wealthy.

Respondents pointed to other ways their businesses contribute to a larger social good. Providing healthy food options to their community was a motivating force many respondents with culinary businesses. Others spoke of using their business to support their family, particularly through providing tuition money to siblings. What is remarkable about respondents' focus on entrepreneurship as a social good was that it was raised unprompted in the interviews.

No interview questions were specifically directed to the issue. This indicates a conscious and real commitment to a social component in respondents' business life. Entrepreneurship is as much about contributing to a social good as it is an engine for economic growth. Respondents' understanding of the social role of their businesses is a departure from western notions of entrepreneurship. It suggests a cultural-specific conceptualization of entrepreneurship may exist among Indonesian students. This represents a fruitful avenue for future research that can contribute to the entrepreneurship literature.

"A civil servant or desk worker can't impact society as well. The entrepreneur can give multiple impacts on society beyond being at a desk."

Student respondent

Lesson Learned:

- Applied entrepreneurship programming in Indonesia should incorporate the social aspects of entrepreneurship as a key component of curriculum. This should be an integrated theme that cuts across all curricular content rather than just a focus on corporate social responsibility (CSR) as one topic related to entrepreneurship.

Major Finding #6: The applied focus of SEDS is a victim of its own success. Unintended consequences that emerge from the applied approach have led students to reject the value of theory in the learning process.

The applied focus of the SEDS project was very successful in re-orienting partner universities to provide entrepreneurship programming that blends theory and practice. It moved beyond the domination of theory and traditional teaching methods that typically characterize Indonesian higher education. Student respondents clearly preferred the applied component of this approach. Yet the applied nature of SEDS is a victim of its own success as a set of unintended consequences has emerged. Respondents want even more applied learning than they received through the SEDS curriculum. They also were vocal in their preference for lecturing to be dropped entirely as a teaching method, both in SEDS courses and across all university programs. Respondents also wanted lecturers to provide very specific technical information related to respondents' businesses. Many demanded that this technical knowledge to be incorporated directly into the curriculum despite it being specific to their own business. Multiple respondents also felt it necessary for lecturers to have both an academic background and practical business experience. Many respondents experienced a valuable applied learning experience through SEDS and, as a result, are demanding an even greater applied focus.

Overall, the demand for a greater focus on applied learning has led some respondents to reject theory entirely in the learning process. Respondents often did not understand the interrelationship between theory and practice or how theory informs practice. This is a significant concern for universities. A key role of universities in society is to generate critical thinkers, not just employable graduates. SEDS effectively addressed the issue of theory-heavy education in Indonesia but the pendulum has swung the other way where some students are demanding learning that is solely applied in focus. This represents a challenge not only for SEDS partners as universities but for applied learning on its own terms. The literature points out that effective applied learning requires a balance of mixed methods (Lourenço and Jones 2006; Lourenço, Taylor and Taylor 2013). Respondents are demanding a learning environment that does not have this balance.

Lesson Learned:

- Applied entrepreneurship curriculum must be designed so the role of theory in informing practice is at the foundation of students' applied learning. This can be done through both curriculum content design and the choice of teaching methods.

Major Finding #7: Female student entrepreneurs generally achieve less success than male student entrepreneurs in terms of revenue and amount of employees.

Gender was a cross-cutting themes in the SEDS project. The intention was to develop university level applied entrepreneurship programming that promotes gender equality. There are multiple cases where female respondents benefitted more from their SEDS education than men. A much greater proportion of women were motivated by SEDS extra-curricular activities than men. Women also reported applying the Business Model Canvas and business planning skills much more often than male respondents. Nonetheless, female respondents were less successful in their businesses than men in terms of revenue and employment. The quantitative data collected as part of the SEDS evaluation confirms this situation. It shows that the average monthly revenue of new businesses started by students or graduates is just under IDR 3,000,000. This figure, however, masks a dramatic gender difference. Female entrepreneurs' average monthly revenue is only IDR 1,469,000 compared to IDR 5,587,000 for male entrepreneurs. Female entrepreneurs are therefore generating revenue that is only about a quarter of what their male counterparts generate. A similar difference is evident with employment numbers. Here, again, female entrepreneurs generate about a quarter of what male entrepreneurs do. The average number of jobs created by a new business started by a male is 1.65 compared to just 0.43 for female entrepreneurs. The finding therefore suggests only partial success in promoting gender equality. Many female respondents are benefitting more than males in terms of being motivated by SEDS and learning new entrepreneurship skills but this does not yet translate into female-headed businesses being consistently as successful as male-headed ones.

Lesson Learned:

- Research is required to better understand why female Indonesian entrepreneurs who develop motivation and skills through entrepreneurship education are not as successful in business as their male counterparts. The research results should be incorporated into entrepreneurship curriculum in order to promote better gender equality.

Major Finding #8: Effective marketing, including marketing using social media, is a challenge for new businesses in the transition from education to practice.

Finding #1 outlined that marketing skills were overwhelmingly reported as the most important skill respondents learned and applied. At the same time, effective marketing is frequently one of the biggest challenges respondents face when engaged in the management of their businesses. A particular challenge is the use of social media as a marketing tool. Almost every respondent uses social media to market their business. Some stated that they learned how to market using social media through a SEDS course. Most claimed to use their own knowledge. The use of social media should hold significant potential for effective marketing. Yet most respondents do not make use of its potential. Facebook, Instagram, WhatsApp, Line, and BBM groups are all used but respondents tend to use them only to connect to family and friends as potential customers. A number of respondents have used these online tools much more effectively to reach a broader market but their number is small. The growth of many respondents' businesses would be enhanced by more creative use of social media.

Lesson Learned:

- Marketing curriculum in the Indonesian context should focus explicitly on social media and online marketing strategies including guerrilla marketing techniques and online platforms like Tokopedia.

Major Finding #9: Time management is overwhelmingly the biggest challenge student entrepreneurs face.

Managing time effectively is the largest challenge respondents faced in both starting-up and managing their businesses. This is not surprising as respondents, most of whom have not yet graduated, are balancing being both a student and an entrepreneur. In many cases this is a reflection of the requirement in some SEDS courses to develop a product or start a business. Respondents found developing a product or business to be one of the most rewarding parts of the courses but it has created a burden where respondents find it difficult to manage their time. In extreme cases, insufficient time to devote to both their businesses and their studies has led students to neglect their studies, lose customers, pass on growth opportunities, or temporarily shut down their businesses during the exam period. In some cases, the time management issues has decreased respondents' enthusiasm for continuing with the business after graduation. Many respondents stated that some form of time

"We had a plan to distribute our product to stores but there wasn't enough time."

Student respondent

management education would be useful. Some SEDS lecturers raised the issue of re-thinking the requirement in some SEDS courses for students to start a business during their studies. The focus, they suggested, should be on equipping students with the necessary applied skills to start a business once they graduate. Other SEDS lecturers disagreed, stating that the requirement helps foster student motivation by putting their learning into practice right away under the supervision of a lecturer. These differences demonstrate the challenge of addressing an issue that is both a key driver of student learning but also a source of time management problems. Addressing the issue is critical for promoting future student success.

Lesson Learned:

- Education or training in time management skills needs to be a core part of applied entrepreneurship programming. This can be done by adding it into the curriculum, incorporating it into existing curriculum content, or providing it through extra-curricular support such as coaching or training.

Major Finding #10: Lack of funding is a barrier to business growth but students do not seek formal loans.

Many respondents wrestle with finding enough money to keep their businesses running. Loans from family members are often used to start-up businesses but on-going capital for business management and growth is an issue. Formal bank loans, however, are not sought even though respondents know how to access them. Some stated that the need for collateral is a barrier. Two respondents claimed that the granting of loans is plagued by nepotism. Still others pointed to not having a business license or other required paperwork as the reason they do not pursue a bank loan. Respondents generally claimed they did not apply for a license given the bureaucratic culture of Indonesia. Getting a license, according to these respondents, was too time consuming, required paying a bribe or meant they would then have to pay taxes as part of the formal economy. Remaining in the informal economy was viewed as a smart business move to avoid these issues. The broad challenge this raises is that growth in the economy is often linked to businesses in the formal sector as they are more productive (La Porta and Shleifer 2008; Vial 2011: 235). The more immediate challenge is how student entrepreneurs can better access needed funding and enter the formal economy to grow their businesses.

“The lecturer provided information on bank loans but I’m not following up on it.”

Student respondent

Lesson Learned:

- Supporting the funding needs of student entrepreneurs needs to move beyond providing loan information in the classroom to engaging the larger university in networking with banks, government and entrepreneurship organizations to identify or develop funding opportunities that are accessible to students with little collateral.

Major Finding #11: Group dynamics among student business partners often inhibit successful business management

Many of the businesses created by respondents involve partnerships among friends or fellow students. Thirty-four out of the 56 respondents had one or more business partners. In many cases this is a reflection of the requirement in some SEDS courses to work as a group to develop a product or business. In addition, respondents pursued a partnership approach as a means to share risk, reduce individual time commitments and pool personal funds. Given the challenges with time management and funding, this is a useful strategy to pursue. At the same time, respondents regularly reported problems with group dynamics among business partners. The partners often disagree on key business issues, have ego conflicts, cannot find time to meet one another or contribute inequitably in terms of money or time. The latter issue is particularly challenging as business partners also tend to be friends. When discussing how problems with group dynamics are resolved, respondents usually mentioned that they were solved in a way that preserves the friendship rather than what is in the best interest of the business. This is, of course, a noble way to address the problem but is not necessarily the best business decision. Many respondents requested support that would assist them in dealing with challenging group dynamics.

Lesson Learned:

- Promoting effective group dynamics among student business partners would be enhanced by the use of an Agreement Contract provided by the university and signed by partners that outlines roles, capital contributions, profit sharing and other issues.

Major Finding #12: Student businesses tend to lack innovation.

A small number of respondents are infusing innovation into their businesses in meaningful ways. The majority, however, are not. This can be seen in how respondents often developed their business ideas. A significant number searched Youtube and copied ideas found there. Others

started the same kind of business as a relative. In many cases, the lack of student innovation is driven by the need to create a product or business within a SEDS class. The limited timeline of a 16 week class limits students' abilities to think innovatively. The lack of innovation is not necessarily a bad thing. A business can do well even if it is not innovative. The larger challenge, however, is that entrepreneurship in the Global South needs to engage in innovation if it is to compete in a global market (World Bank 2013). While these student entrepreneurs are running small-scale and very local businesses, greater innovation would contribute to greater growth potential, increasing both incomes and employment. Many respondents outlined how they would like to be innovative to grow but they lack knowledge on how to engage in innovative ways. They recommended the SEDS curriculum focus on innovation in a more intentional way.

Lesson Learned:

- Entrepreneurship curriculum should teach students to assess when innovation is useful while coaching should support student innovation where appropriate.

Major Finding #13: Challenges related to marketing, time management, funding, partner dynamics and innovation all limit business growth which, in some cases, threatens long-term business sustainability.

The challenges previously outlined - ineffective marketing, lack of time and money, often contentious business partner dynamics and insufficient innovation - all combine to limit the growth of many respondents' businesses. Insufficient growth translates for some respondents into a decision to pursue a salaried job upon graduation. In many cases they want to continue the business on the side but as a smaller enterprise. These respondents represented about 20% of the total. While this is not necessarily a problem, especially as many students enter university to learn disciplinary knowledge for a specific career, it suggests that these challenges are a potential drag on the sustainability of student businesses. Addressing the challenges either through revisions to existing entrepreneurship programming or in the design of new programming is critical in order to create the enabling conditions that support the significant potential of applied entrepreneurship programming in Indonesia.

Lessons Learned:

- Addressing the multiple student challenges of time management, marketing, funding, partner dynamics and innovation should be done as a holistic strategy that recognizes they work together to limit business growth and sustainability.
- Applied entrepreneurship programming should be designed to recognize the twin burdens of student life and entrepreneurship life and how these might be best balanced to promote sustainable businesses upon graduation.

Major Finding #14: The overall SEDS experience demonstrates that an applied and participatory education model is effective in the Indonesian cultural context.

The overall experience of SEDS helps begin to address a gap in the research literature that is dominated by western experiences and perspectives. The experience of student respondents and SEDS lecturers who participated in this study demonstrates the effectiveness of an applied approach in Indonesia. The approach was effective in building real world skills while concurrently promoting motivation and enthusiasm among both students and lecturers. In addition to the many successful businesses run by respondents, a number of SEDS lecturers stated that their experience as SEDS lecturers has motivated them to become entrepreneurs themselves. Others have enrolled in PhD studies focused on entrepreneurship education. The challenges outlined in previous findings need to be addressed but the SEDS experience overall illustrates that an applied approach is a successful approach in Indonesia.

Lessons Learned:

- The applied education model is most successful when it aligns with the larger institution's vision and mission and where regular communication occurs with executive level university administrators.
- The applied model of SEDS programming is adaptable to other university programs unrelated to entrepreneurship and should be expanded to these programs where appropriate.

4. RECOMMENDATIONS

The experience of the SEDS project demonstrates the significant success an applied approach to entrepreneurship programming can have in promoting student entrepreneurship in Indonesia. It also illustrates some of the challenges associated with this strategy. Based on the study findings and the lessons learned, the following recommendations are provided for the SEDS partnership, individual SEDS institutions, and other Indonesian higher education institutions that may be interested in developing and delivering applied entrepreneurship programming.

The SEDS partnership

Recommendation #1: The SEDS partnership should link its project experience to a collaborative research agenda on applied entrepreneurship education. Research results can be used to improve future education programming and contribute to entrepreneurship theory-building from a perspective of the Global South. Two areas of potential research collaboration emerge from the lessons learned, including gender differences in entrepreneurship outcomes and the social role of entrepreneurship in Indonesia. The latter would provide an original contribution to entrepreneurship theory-building and support culturally appropriate programming.

Recommendation #2: The SEDS partnership should build on its collective capacity and reputation to collaboratively offer business support services and curriculum consulting to institutions and individuals outside of the partnership. Money generated through these services can help support business support centres at each partner institution.

Recommendation #3: The SEDS institutions should work together, either as a single partnership or two partnerships in North and South Sulawesi, to network with government, banks and other stakeholders to secure or develop funding opportunities for student entrepreneurs.

Recommendation #4: The SEDS partners should develop and deliver joint extra-curricular activities for all of their students within individual provinces. This will expose student entrepreneurs to more customers and spur greater innovation through broader interaction with other student entrepreneurs.

Individual SEDS institutions

Recommendation #5: Each SEDS institution should undertake a process of curriculum review to respond to the issues that emerged in the research findings. These issues include gender differences, social media marketing, time management, partner dynamics, innovation, and the link between theory and practice. A curriculum review will enable decisions to be made on whether to incorporate these issues directly into curriculum or address them in other ways.

Recommendation #6: Each SEDS institution should institutionalize the link between entrepreneurship curriculum and support services/extra-curricular activities. Strategies to do this include incorporating extra-curricular activities into course learning outcomes, formalizing a coaching system that assigns coaches to student entrepreneurs during and after the entrepreneurship course, and creating a database of student entrepreneurs in order to track them and supply on-going support services prior to and after graduation.

Recommendation #7: Each SEDS institution should assess the sequencing of when students start their businesses as part of the institution's program. Both the benefits and challenges of SEDS programming were often related to students starting their businesses while still in university rather than as graduates. Assessing the benefits and challenges of this approach, and making revisions where needed, will strengthen future programming.

Indonesian institutions interested in entrepreneurship or applied education

Recommendation #8: Applied entrepreneurship programs in Indonesia should be designed around the concept of entrepreneurship as a social good as a key curriculum foundation. This will result in applied entrepreneurship education that is better connected to the collectivist values of Indonesian culture.

Recommendation #9: Applied entrepreneurship programming should be designed to fit directly within its larger institution's mission and effectively within its administrative regulations. This includes designing applied programming that provides appropriate incentives or compensation for lecturers given their expanded roles

Recommendation #10: Applied pedagogy and programming unrelated to entrepreneurship should be expanded to other higher education study programs/disciplines, ensuring that these programs incorporate a balance between theory and practice that is relevant to the larger role of universities in Indonesia.

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