

DEVELOPING ENTREPRENEURIAL AND INTRAPRENEURIAL EDUCATION IN CAMBODIA

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ABSTRACT

As a Senior Fulbright Specialist in Phnom Penh, Cambodia, my goal was to assist the Institute of Technology of Cambodia (ITC) in developing an entrepreneurial program that would invigorate their existing STEM curriculum and programs while building an entrepreneurial ecosystem to support interest in entrepreneurial growth. The relevance of intrapreneurship is also highlighted to demonstrate how students interested in entrepreneurship can utilize entrepreneurial principles and practices within innovative businesses that will employ them.

Keywords: Cambodia • entrepreneurship education • intrapreneurship • economic development



HISTORY AND THE GROWING SUPPORT FOR ENTREPRENEURSHIP

Cambodia has had a difficult recent history particularly from 1975 to 1979 when Pol Pot and the Khmer Rouge sought to impose a utopian form of rural Communism to create a classless social system. His brutal regime forcefully evacuated everybody from the cities and pursued a policy of genocide whereby more than two million Cambodians were killed.

Despite this tragedy and related trauma, there is evidence that the human spirit is a mighty force and Cambodia is very much on the rise. Currently, Cambodia is experiencing tremendous growth. One of reasons for this is entrepreneurship.

Cambodia, a country growing from the remnants of the Khmer empire that controlled much of Southeast Asia from the beginning of the eight century CE has developed quickly in the past 40 years. Much of this economic development has occurred in Phnom Penh, the economic, industrial, and cultural center of the country. Notwithstanding recent developments, Cambodia is largely rural (approximately 75%) and conservative in nature (about 95% of the population practice Buddhism). Even though Cambodia is often perceived to be a poor nation, the Gross Domestic Product (GDP) in 2022 was \$29.96 billion, which is about 0.01 percent of the world economy, and the GDP is expected to continue to rise. The Entrepreneurship Development Fund (EDF), The World Bank and the Deutsche Gesellschaft für Internationale

Zusammenarbeit (GIZ), among others, have played a significant role in spurring growth by helping Small to Medium Sized Enterprises (SMS) and start-ups that have and will continue to positively affect the future economic landscape of Cambodia.

When we think of entrepreneurship in the US, we often think of emboldened and resilient people who possess an active entrepreneurial mindset, and who are willing to take risks. Capital is available for entrepreneurs to try out their ideas, and if they fail to create a sustainable business, they have the opportunity to try again. Many US entrepreneurs believe that “Fail” stands for First Attempt in Learning. And what is learned from a business that did not work can transfer to another attempt or another opportunity. From the US television series Shark Tank to friends, family and online Crowdfunding sites, there appears to be an endless array of opportunities to obtain some amount of money to determine if one’s idea has potential. While this is not the case in Cambodia, where funding is not easily accessible, there is more in the equation to attaining financial support. Regardless of where people reside, potential entrepreneurs with the mindset focused on finding opportunity and creating value, can start new businesses. In Ethiopia, for example, tires are recycled that wash up on its shores into sandals and in Africa, mountains of urban waste are converted into Africa’s first waste to-energy-plant. Regardless of where people reside, potential entrepreneurs can greatly benefit from various forms of learning and assistance.

The entrepreneurial ecosystem includes identifying people with particular skills including making sure that existing markets are vibrant and functioning, surveying needs, understanding customers and culture, and connecting with supportive organizations and networks that provide personal encouragement to those who wish to pursue a new business idea. The challenge in helping a country, or city within a country, to entrepreneurially grow and flourish entails understanding the culture, history, and where they are in the present moment with respect to what it is they are looking to improve or change. It is unreasonable to impose one’s views onto another country or institution. Indeed, what works in one country may fail in another. Listening to understand, not just to respond is essential despite language barriers. And having a capacity to be patient is also critical. I vividly remember one instance where it took a few minutes to understand that a question I was asked was about ‘courses’ not ‘costs.’ We were mutually frustrated, but when we finally figured out what the right word was we had a ‘break through’ and a good laugh!

THE ASSIGNMENT AND LEARNING LANDSCAPE

After determining a compatible Cambodian school match, I was fortunate to initially work with a few individuals at the Institute of Technology of Cambodia (ITC) in Phnom Penh. Those faculty and administrators were instrumental in helping me gain clarity with regard to the needs of the school in terms of entrepreneurship classes. Thanks to Zoom, we had many meetings

prior to leaving for Cambodia. Those Zoom sessions helped me develop an understanding of what ITC's needs were and what I could offer. Since I teach in an 18-credit intra-university minor in Entrepreneurship and Innovation (ENTI) that I helped establish in the College of Engineering at Penn State, there were indications early on that I could help.

In Cambodia, the system of higher education consists of separate institutions. For example, in the US, several colleges can be part of one university situated oftentimes in one location. In Cambodia, colleges are geographically separate entities. ITC is the institution where a student goes to study engineering sciences and technology in a five-year undergraduate program. ITC also offers master and doctoral programs. In Cambodia if you choose to study something besides engineering and technology, you have to travel to another educational institution that specializes in that discipline.

As a Fulbrighter at ITC in May and June, 2023, I was able to join faculty, students, and the administration in evaluating their entrepreneurial program. The aim was to make entrepreneurship and intrapreneurship an integral part of their STEM education comprising 15 rigorous engineering degree programs and 7 technical degree programs. The hope too was to engage students in the development of an entrepreneurial ecosystem.

NEEDS ASSESSMENT AND PREPARATION

To understand and evaluate the current entrepreneurial situation within ITC and its surrounding community, we conducted a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats or barriers that need to be overcome) to check the pulse of entrepreneurial education at the school and general interest in entrepreneurship. The results indicated that there was work to do. In fact, the only entrepreneurship course offered was in students' final year, a time when they are anxiously looking for employment. However, there was one faculty member who sponsored a start-up contest where students could make business pitches and have feedback from judges. The overall assessment indicated a general interest in entrepreneurship, but one question remained: how can an entrepreneurship program fit into an already crowded curriculum?

Developing and institutionalizing new programs cannot happen without the full commitment and buy-in of senior administrators, department heads, and faculty. It is important to 'sell' the benefits of a vibrant entrepreneurship program that includes fostering innovation and discovery among students, bolstering the local economy and, in the case of intrapreneurship, helping existing companies understand how innovation happens within firms to keep them ahead of the competition.

ENTREPRENEURIAL THINKING

It became evident early in my visit that linear thinking was the dominant way faculty thought and taught and was the method by which students progressed in their studies. This is fairly typical and understandable. In order for STEM students to succeed in their studies, a clear progression of thought must be followed. One must learn addition and subtraction before moving on to more complex equations. Linear thinking follows a systematic, step-by-step progression that leads to conclusions. A bridge will fail if the calculations are wrong.

However, entrepreneurial thinking has non-linear characteristics, which means making connections between unrelated concepts and ideas. Both ways of thinking are needed in order to advance an idea, especially a technical one. While these differences were underscored when I interviewed many faculty and department heads, attempting to modify the way one thinks is complicated and time-consuming. However, I was excited to see that some faculty were already experimenting with both linear and non-linear thinking by way of student projects to broaden the student's perspectives and increase possibilities. Why can't a structurally sound and functional bridge be also beautiful?

INTEGRATION OF ENTREPRENEURSHIP AND INTRAPRENEURSHIP

My work at ITC included teaching a short course on entrepreneurship to students and faculty, as well as working with administrators and a few faculty members who were already fully vested in establishing an entrepreneurial ecosystem. Additionally, I had the opportunity to meet with several company representatives who were part of ITC's University Industry Linkage Office (UIL) who shared their views about ITC graduates they have hired and ideas on establishing a more formal entrepreneurship program that could contribute to advancing their company's mission and goals.

During my Fulbright experience, we gained wide-spread support for a visible and integrated program in entrepreneurship and intrapreneurship. Several inroads were made that included bringing senior administrators on board to understand the value of a program in entrepreneurship. Additionally, the benefits of corporate outreach were explored. Several companies that we worked with during my Fulbright indicated a strong interest in supporting entrepreneurship and were willing, through the existing UIL organization, to understand how ITC students can innovate within their companies. While many companies in Cambodia remain quite pyramidal or hierarchical, there were enough UIL companies on board to explore how the concept of intrapreneurship can help them innovate. These interested companies plan to join a small faculty group to discuss the mechanics of how entrepreneurship can be incorporated not only into the curriculum, but carry over into the day-to-day life of their companies.

One thing I emphasized during my assignment is the importance of establishing a support system for students interested in exploring their entrepreneurial ideas beyond campus. This support system could include joining the Global Entrepreneurship Network (GEN) that currently connects 180 countries, bringing in outside speakers as part of an Entrepreneur in Residence program, as well as creating an entrepreneurship club initiated and run by students. Engaging with local startups, entrepreneurs, and business leaders to foster connections between the university and the wider entrepreneurial community is essential. This engagement can deliver real-world insights and opportunities for students such as internships and help define how the entrepreneurial mindset works. It can also humanize entrepreneurship and allow students to understand that although entrepreneurship can be satisfying, it can also be equally frustrating. Lastly, a system for monitoring the progress and impact of the entrepreneurial program was also discussed.

IMPACT AND REWARDS

Entrepreneurship is not an easy subject to teach or motivate students to embrace. Many people today feel that entrepreneurship cannot be taught and that a person is either born an entrepreneur or at some point in their life has an epiphany that fires up their emotions and carries them onto developing a new product, service, or system. Besides, considering that entrepreneurs in the US, on average, range from 41 and 43, it is not typical for young people to pursue entrepreneurship, especially with student debt that must be paid off.

One of the greatest rewards was to learn how I could bring entrepreneurship education to ITC and help them see that learning about entrepreneurship can indeed help save a great deal of time and maximize the chances of converting an idea into an opportunity.

From a personal perspective, one of the greatest rewards of my Fulbright was to learn how I could bring entrepreneurship education to ITC and help the faculty, students, and administrators see that learning about entrepreneurship can indeed help save time and maximize the chances of converting an idea into an opportunity. Learning about the people and culture before and during my ITC experience helped me a great deal. I was often modifying my thoughts and lectures as I acquired more knowledge about the realities of how entrepreneurship is viewed in Cambodia.

Despite having extensive experience in entrepreneurship teaching and years developing my own business, it was still a challenge to present my thoughts in an unfamiliar environment. Southeast Asia is like no other place I have visited. However, I greatly appreciated the level of acceptance I received from people—an acceptance that made me feel as though I had been in Cambodia for a long time. As time went on, our exchanges became more fluid and easier.

While ITC is making great strides in developing an engaging program in entrepreneurship, it will take persistence and time to build a program that starts on campus and supports entrepreneurs throughout their careers. Devising a solid program in entrepreneurship and its off-shoot, intrapreneurship, is an entrepreneurial project unto itself. Fortunately, before I departed, the administration designated a director for entrepreneurship to oversee much of what was identified during my assignment; I intend to continue to offer assistance when needed in the future.

NOTES

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ITC students learning about entrepreneurship and intrapreneurship

BIOGRAPHY

Frank Theodore Koe is professor of engineering entrepreneurship at The Pennsylvania State University where he teaches graduate and undergraduate courses on corporate innovation and entrepreneurship, entrepreneurial leadership, and intrapreneurship. His patented products have occupied shelves in Walmart, Dicks Sporting Goods and appeared on Amazon. His award winning text, *Fabric for the Designed Interior* published by Bloomsbury, is forthcoming as a third edition. Frank can be contacted at ftk2@psu.edu
