GOING GLOBAL:
HOW TO DEVELOP YOUR CONTINUING ENGINEERING EDUCATION STRATEGY FOR A WORLD WITHOUT BORDERS

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Abstract

As companies attract and develop talent across the globe, continuing engineering education providers will follow suit – creating and delivering programs that both address the implications of a global strategy and are delivered worldwide. Stanford University's School of Engineering has, through its extended education unit, the Stanford Center for Professional Development (SCPD), created and launched a number of global programs over the last decade. In the process, the SCPD has learned valuable lessons on how to develop, nurture, and sustain graduate, professional, and executive programs with a worldwide reach.

Introduction

The Stanford Center for Professional Development (SCPD) has created and launched more than 20 international programs for engineers, managers, and executives. As these programs evolved in countries such as China, India, Korea, Singapore, and Japan, the SCPD learned valuable lessons along a number of critical dimensions. The hallmark of an effective continuing engineering education (CEE) organization is to carefully review successes and failures to glean insights and to evolve and refine strategy.

As the Stanford School of Engineering's education outreach organization, the Stanford Center for Professional Development delivers 56 part-time master of science degrees, 450 graduate and professional courses, and 35 graduate and professional certificates to technical professionals, managers and executives from more than 500 companies worldwide. Courses are delivered online, at Stanford and at work. The SCPD portfolio comprises 15,000 hours of online video-based education and includes a range of Stanford seminars, symposia and conference proceedings distributed online at no cost. Nearly 7000 industry students from 40 countries enroll annually in graduate and professional education courses delivered by the SCPD.

As the companies and organizations served by SCPD have become more global, Stanford faculty and alumni have expressed an increased interest in international education outreach. The SCPD

is meeting this challenge by developing executive-level professional programs and leveraging Stanford's close ties and geographical proximity to Asia. The result has been a significant increase in global enrollments over the last decade. The strategy has been straightforward: If executives can be successfully engaged in short, flexible, relevant programs, they will become advocates encouraging their employees to participate in other Stanford offerings, including SCPD's extensive portfolio of online graduate and professional education courses. This trickle-down effect has been observed in Korea and China and is beginning to emerge from SCPD's programs offered in India.

The SCPD's professional and executive education programs began in Japan and Singapore in 1997, continued to Korea and China in 2002 and moved to India in the last few years. While each program has its unique attributes, we have identified five factors which contributed to successful outcomes:

- Follow the faculty leaders
- Engage alumni
- Insure institutional commitment
- Partner locally
- Develop an incremental strategy

Details on these key success factors and lessons learned are described in the following sections.

Follow the Faculty Leaders

With any education program developed for industry participants, the critical determinant between success and failure is the selection of the right faculty. The SCPD's portfolio focuses on education programs which have relevance to industry, direct applicability, and return-on-investment for the participants and the companies they represent. First, when considering a new program, we seek to engage key tenured faculty supportive of these attributes especially those faculty with a personal commitment to the country. Senior faculty members have mature research programs and reasonable flexibility with their time. With the right incentives – revenue, release time, and additional staff support – faculty are willing to develop and deliver professional and executive education programs. Second, we select faculty who have prior international experience, either through their research or teaching or both. This sensitivity is critical to engaging international participants. Third, content partners are engaged by faculty to co-develop and co-teach courses because of Stanford's relatively small number of faculty. By using distinguished in-country experts, we address both the local context and perspective and the potential language and cultural barriers some executives might face. We have used this strategy extensively in China. Fourth, senior faculty can be internal champions and help identify key stakeholders and potential presenters and convince them of the merits of participating in a program. Finally, tenured faculty members have an institutional perspective; they are more apt to appreciate the broader purpose of international education outreach beyond the actual delivery of the individual course. Those purposes include:

- Promotion of Stanford's academic departments, centers, institutes and faculty
- Building and strengthening Stanford's industry, government, higher education, alumni and prospective student connections and relationships
- Supporting education outreach requirements of grants and contracts
- Experimenting with new pedagogical approaches, distance education applications and e-learning tools
- Generating revenue for participating departments, centers, institutes and faculty

Engage Alumni

Stanford is fortunate to have a strong, diverse, geographically dispersed, and well-connected alumni population. As international program development is considered, guidance is always sought from well-placed alumni in the target market. As an example, recent programs in India would not have occurred without the encouragement, advice, and support of key alumni in the region. India has long been the source of talented graduate students, but Stanford has recently accelerated its efforts to develop a number of in-country professional and executive education offerings. Based on alumni requests and with the encouragement of the deans of the engineering and business schools, SCPD and Executive Education in Stanford's Graduate School of Business co-created a series of education events and programs designed to attract industry participation in India. Alumni advice and guidance was particularly productive during the initial phases of development for programs in India on innovation and manufacturing design. Alumni offered insights in a wide range of areas, from hiring the agency to market the programs to selecting the venue to identifying and recruiting participants.

Whether it is India, China, or Korea, alumni have a keen sense of the marketplace and a commitment for Stanford to succeed. They provide excellent advice and key contacts with their peers to provide the initial research required to develop a program. In our international programs, the SCPD typically convenes a group of alumni advisors to help guide SCPD to identify the right local partner insuring they have similar perspectives and values. As the program evolves into tactical planning, the alumni group can help suggest and frame logistics and appropriate program schedules in the local context. Finally, as these events conclude, alumni provide advice and guidance on areas of improvement and next steps. Alumni are vested in protecting and enhancing the reputation of their alma mater. They are your most ardent supporters…and your most vocal critics.

Insure Institutional Commitment

Once faculty and alumni support have been established, it will be essential to create institutional awareness and commitment to the project. In any organization there are blind spots and, as complex as universities are, there is a need for extra care in creating the internal support necessary to launch an international portfolio. This is important because the institution's reputation must be protected and, in SCPD's case, the dean's office and on occasion the provost's office needs to be aware of the programs considered for development in order to insure a proper fit with the institution's broader goals and strategies.

The SCPD has taken a number of steps to manage these internal communications. First, we identify trusted advisors, typically senior administrators within the university who can provide useful guidance on faculty, alumni and companies with whom we might engage. Next, we leverage the faculty within a specific department by having them present the program concept to the department chair and in some cases, to the entire faculty of the department in question. Third, once the idea is developed, it is presented to the dean for review. Finally, these programs are often defined as pilots or framed internally as 'experiments' which provides the SCPD with sufficient flexibility to offer the program and learn from the experience.

Partner Locally

Nowhere is there more risk than engaging with a local higher education, government or corporate partner and yet, this is one of the important ways to develop CEE programs globally. The in-country partners work as essential sales and marketing channels, and provide beneficial local insights to successfully develop and sustain programs. It seems to be a simple matter of cultivating a partner, developing a product and seamlessly, in a matter of months offering a successful program. In our experience, this is rarely the case. Indeed, not unlike any long term relationship, one must create local partnerships with care, and develop them with a focus on aligning a variety of key dimensions: values and culture, business objectives, contractual issues

and investments, success criteria (including revenue), assessment and quality assurance plans and of course, the protection of the brand. We have developed a set of criteria against which we screen potential partners. Even with these time-tested criteria, we have developed partnerships which have not met expectations and have exited the relationship.

Based on our experience, we work with partners who have the same core values and beliefs regarding education and branding. If a prospective partner has a track record of developing educational solutions for customers – and a sustainable business model with customers who can validate their claims – we know we are on the right track. Most of our partnership work has focused on non-credit professional and executive education programs where we have more flexibility to experiment with the content and the business model. Assuming the proposed partner passes the initial screening we will move to the second phase: developing a program.

In the development phase, the SCPD spends considerable time analyzing how the program might be structured, the nature of the audience, the applicability of the content to the local audience, the willingness of the faculty and partner to develop and deliver the initial program, the sustainability and scaling of the program, and the motivations of each party in the short and long term. There is considerable value in meeting potential colleagues in their country to understand their approach to marketing, sales, program development, business affairs, and to assess their reputation. Typically, we not only meet with the partner, but also have them include potential customers so we can evaluate the target market for ourselves and determine the partner's ability to attract an audience.

Once the program has been shaped and the partner organization vetted by faculty and alumni – and validated by a market survey – contracts are carefully crafted and a pilot program created. Paramount among the contract terms are assurances that Stanford and the SCPD, working with faculty oversight, have final say on all program aspects, from content and program structure to marketing and sales collateral. Partners need to be flexible and willing to make adjustments to meet institutional needs. The contract should reflect both the obligations and value of the program for each party. We also make sure the contract has enough specificity to deliver the pilot version of the program, while reserving the right to terminate in the event the partnership does not meet expectations. Contract terms are detailed and explicit and typically include these items:

- Term and termination – ability to exit at will and with cause
- Marketing/brand – supervision and final approval of all print and electronic materials associated with program
- Governance and oversight – active university participation on the program advisory council
- No sublicense or third party without consent – avoid brand dilution beyond your control
- Defined roles and responsibilities for each party – assurances that each party is fully engaged and understands when to act
- Clear success criteria and measurable goals – contractual obligation for each party such as enrollment and revenue targets
- Program investment plan – initial investment, program renewal and scaling

Develop an Incremental Strategy

In the last decade, the SCPD has carefully developed and offered a variety of international education outreach programs. All aspects of each program are assessed in an effort to determine where adjustments can be made to improve the overall outcome. In some cases, the adjustments are minor but occasionally, a program must be terminated. Useful questions to consider before launching a program include:

- Is the project or pilot in alignment with the values, strengths and areas of academic distinction of the faculty, academic departments and institution?

- Does the program achieve a strategic objective for the school, university, and academic department?
- Are there multiple 'wins' for faculty, academic departments, partners, and the CEE unit?
- Are the financial, faculty and staff resources sufficient to launch and sustain the project?
- Are success criteria clearly defined and articulated to stakeholders? How does this impact alumni in the region?
- Is the partner in alignment with the university's goals and values? What are their motivations? What is the business model? Has scenario-based planning been completed?
- Has an evaluation and assessment plan been completed to improve – or cancel – future offerings of the program?

Based on the answers to these questions and the sentiments of the various stakeholders, (faculty, alumni, institution, and partners) we create and over time, tailor the program strategy and direction.

Summary

The SCPD has developed a robust international CEE portfolio over the last decade. Along the way, we have learned a number of key success factors needed to deliver graduate, professional, and executive education programs around the world. The five dimensions – faculty willingness, alumni engagement, institutional support, strong local partners and an incremental strategy – must work in concert to achieve success. Even after ensuring the five success factors are aligned, CEE groups must ensure their existing offerings are on solid foundation at home before embarking globally. The level of effort required to address the key success factors coupled with the vagaries of local market conditions indicate that universities must enter global markets very carefully since these ventures will place a spotlight on the university. By working toward aligning the five factors, CEE groups are much more likely to mitigate the risk inherent in venturing away from campus and realize the opportunity to enhance the university brand and reputation around the globe.