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Designing the Online Collaboratory for the Global Social Benefit Incubator

by Pedro Hernández-Ramos, James L. Koch, Albert Bruno, and Eric Carlson

Social benefit organizations face staggering challenges in their efforts to improve the lives of poor people, particularly in the developing world. Programs that offer management training and financial know-how to local leaders working in fields such as health, education, environmental protection, and economic development fill a widely recognized need for these organizations and their supporters. One such program that was developed and hosted by a team at Santa Clara University (SCU) has been delivering a collaborative learning experience to leaders of social benefit organizations for several years. The Global Social Benefit Incubator (GSBI), launched in 2003, selects social benefit entrepreneurs from around the world to participate in an intensive two-week residential workshop where they acquire training in business development techniques, collaborate with experts from a variety of academic perspectives and professional fields, and learn from each other with two main goals in mind: sustainability and scalability.

We have revised our approach in these workshops year by year, and the next step in the program's development is the use of online tools supported by pedagogical theory. By using teaching and learning methods that emphasize collaborative pedagogy, we expect to enrich the experience for participants, enlarge the scope of their participation, and mitigate some of the shortcomings inherent in a program with ambitious reach and logistical constraints. The result will be an online collaboratory that will invite GSBI participants and graduates—and eventually other social benefit entrepreneurs—to contribute to subsequent workshops and curriculum revision.

In what follows, we first provide an account of the development, goals, and structure of the GSBI program. We then outline a pedagogical model—communal constructivism—that provides a theoretical foundation for the future growth and development of the program based on the diverse needs and skills that characterize our participants. Finally, we discuss the technological platform initially adopted by the GSBI program, describe and assess the current platform in use by the program, and outline the design and functionality of the online collaboratory currently under development. While the new GSBI online collaboratory has yet to be fully established and implemented, the issues addressed in our account of this work in progress may nevertheless indicate how online technology may be used to strengthen social benefit organizations, thereby helping them make a substantial difference in the world outside cyberspace.

The GSBI Program: Development, Goals, and Structure

Faculty of the Leavey School of Business at Santa Clara University (one of whom, James Koch, is also the Founding Director of the Center for Science, Technology, and Society, which houses the program) developed the GSBI in 2003, centering the program around a two-week intensive workshop held annually in the summer. The program invites a small group of outstanding international social benefit entrepreneurs selected from among the finalists of the Tech Museum of Innovation's Technology Benefiting Humanity Awards and other sources (cf. Barnholt 2004; Koch 2001, 2003) (Exhibit 1). The GSBI grew out of a recognition among stakeholders in the awards process that the finalists generally lacked the technical and organizational skills that allow enterprises to function over the long term and to manage growth—or, to put it in business terms, to achieve *sustainability* and control *scalability*, respectively. The academics and professionals involved in the awards, including SCU faculty, venture capitalists, and a network of advisors, began discussing a plan to create a rigorous two-week program that would offer social benefit entrepreneurs an immersion course in business development. Since its inception in 2003, the program has offered yearly sessions with selected participants from a range of organizations (Exhibit 2).

The program intends to attract the leaders of social benefit organizations; these individuals represent a very wide range of learner characteristics (Exhibit 3). These include their ages (early twenties to late sixties), educational backgrounds (high school to post-graduate), English language skills (English may be their second or third language), and specific business-related knowledge (from none to MBAs or equivalent). All participants lead organizations that solve problems using technology in some way and that do not depend exclusively on charity or grants. They are a diverse group of learners with rich experiences; they are also actors in a larger debate about economic development (Exhibit 4).

In its structure and overall approach, the GSBI in-residence program teaches theory but integrates it tightly with practical exercises, case study analyses, and actual execution. There are three distinct phases in the program:

Pre-Arrival. About eight weeks before the residential program starts, participants are sent a package of materials, instructions for joining the current online environment (to be described in more detail below), and the names of the two or three mentors assigned to them. With the assistance of their mentors (all of whom are extremely accomplished current or former executives of Silicon Valley companies) and the tools available in the online environment, participants must prepare an "elevator pitch," perform several other business plan-related exercises, and post the data needed for the elaboration of their business plans.

In-Residence. During the two-week residential program, the emphasis shifts toward interpersonal contacts in more traditional classroom settings. Participants attend classroom-based presentations during 10 of the 13 days on campus (Exhibit 5), with time reserved each evening to prepare their business plans in consultation with their mentors. As participants prepare their business plans for submission to a panel of experts, their faculty mentors ask them to focus on three essential questions:

- What business concepts should a social benefit entrepreneur understand?
- How can these concepts support the scaling of the venture?
- How can entrepreneurs communicate these concepts to members of their organizations so that theory leads to sustainable results?

Post-Residence. Once participants leave campus with new business plans and their tactical plans for the next twelve months, the program enters a different phase. In the fall quarter that follows the summer workshop, a specially designed MBA course matches teams of MBA students with GSBI participants to work remotely on the execution and reporting of tactical plan activities. Thanks to a partnership with Accenture, two or three carefully selected participants are designated to receive additional in-country business development and organizational consulting. Most participants usually continue in regular communication with their mentors, some of whom go on to serve on advisory boards or in other governance functions. Experience tells us that all participants live through what can be described as "reentry shock" on their return home. One of the largest challenges returning participants face is the task of communicating to their teams some of the new knowledge they have gained and winning the support of all stakeholders in the drive to implement the new business and tactical plans that they have brought back with them. It is to address these and other challenges that the envisioned collaboratory is being designed.

Communal Constructivism and Collaborative Pedagogy

Based on feedback from participants and faculty reflection, the program revises the curriculum each year with the aim of improving what it delivers during the residential experience. The faculty involved in the GSBI recognize that their expertise cannot meet every learning need participants bring with them from their varied backgrounds, much less squeeze it all into a two-week residential program. Given these limits, the challenge is to create a framework in which participants themselves are given the opportunity to create and contribute

content that is likely to be useful to future participants like themselves, further broadening the range of circumstances and situations covered by the curriculum and its associated resources.

The concept of communal constructivism provides a theoretical framework to support the program's intended practice. According to Tangney et al. (2001), communal constructivism is "an approach to learning in which students not only construct their own knowledge (constructivism) as a result of interacting with their environment (social constructivism), but are also actively engaged in the process of constructing knowledge for their learning community" (3114). Just as constructivist theory argues for student activity and work products that are authentic and connected to the real world students live in, communal constructivism expands this core notion to explicitly design learning environments "where students leave their imprint on the course, and the field, as an integral part of their learning" (Tangney et al. 2001, 3116).

A core tenet of constructivist theory is that students are not blank slates who bring no background knowledge or relevant experience to their studies, and this tenet is particularly applicable to the participants of the GSBI program. Each participant brings richly informed perspectives to the campus. Each has run an organization for years, and many have advanced degrees in disciplines other than business. The students attending the GSBI have much to contribute to it, creating challenges and opportunities in terms of the design and development of the curriculum.

In accordance with this pedagogical approach, online technology plays a crucial role in helping the program meet its broader goals. First, the fact that GSBI faculty and collaborators will not deliver all the content eventually made available in the program creates the challenge of designing a comprehensive online environment where it is possible for remote contributors to create content and organize it in clear and consistent ways. The goal is to have a range of content—and perspectives within content categories—that learners themselves create in what Collis and Margaryan (2004) call "contribution-based pedagogy." As a result, the students themselves become assets for teaching "through the process of submitting the results of their various tasks into a shared electronic environment where they can be used and reused by others as learning resources" (Collis and Margaryan 2004, 43).

In turn, not only can such an online environment energize the residency portion of the program, but it also can be a renewable resource if participation continues afterward. Surveys of the 16 participants in 2005 and the 17 participants in 2006 explored their interest in continued involvement and found that most felt that sustained contact with the program would be helpful. Nearly half of the respondents expressed an interest in teaching future online courses themselves. Those willing to teach or develop content identified their main motivation as the "opportunity to share with others what I know" followed by "learning opportunities for people in my organization." Almost all respondents identified at least one topic or skill they felt capable of teaching, including technical skills (Web development, Web searching, HTML), business topics (marketing, business writing, cash flow analysis, leadership), academic subjects (ICT for development, sociology of education), and practical skills (grant writing, managing volunteers).

Technological Infrastructure: Initial Development and Current Platform

We first used online tools in the program to deliver skill-building exercises via the ANGEL course management system hosted by Santa Clara University with links to the Skoll Foundation's Social Edge Web site. The Web links aimed to offer a "community of practice" (Wenger 1998; Wenger and Snyder 2000) designed to share successes, trials, and lessons learned. The ANGEL system, however, did not support our goals as well as we expected. Participants had trouble with the user interface and with the course metaphor on which the system is based (which requires, for example, that all content, regardless of nature, be placed in the "Lessons" area). The system is also rigidly hierarchical, setting different rights and permissions to instructors and students, thus potentially limiting student-to-instructor and student-to-student interactions. Finally, while the system has many features that are useful in traditional formal education settings, it is a closed system that does not allow users to customize its functions to better serve their needs; this limits its utility in nontraditional settings, such as the GSBI.

As a result of these limitations, we gave up on the ANGEL system and developed a new online environment that now relies on the commercially available JotSpot wiki platform (acquired by Google in October 2006). The design and function of this environment borrows conceptually from the Wikipedia model, building content and community while vetting members and the quality of their contributions. For example, as in all wikis, participants are able to create, post, and modify content in our current online environment. The platform provides access to skill-based exercises, educational content, discussion forums, and blogs (Exhibit 6); it also offers users private collaboration spaces (important for mentors and participants in the early stages) as well as community-building tools such as a directory and a photo album. All of these areas are open to review via feedback mechanisms, and comments are allowed on almost every page. At this stage, only invited participants may become members of the community.

In its current implementation, the wiki-based online environment with its support for multiple authors represents a good conceptual fit with the theoretical foundations for the program. However, the wiki platform has its own limitations, including some interface issues related to navigation in the wiki space and difficulties some users have with the collaborative authorship metaphor. System performance when connecting via dial-up (a reality in most of the developing world) is unsatisfactory, and the transition of JotSpot into Google has led to decreases in customer support that have impeded our ability to implement certain desired features or functions into the system. Despite its advantages as a transitional step, the wiki platform cannot fulfill all our needs in the long term.

Toward a New Online Environment: The GSBI Online Collaboratory

After four successful on-campus experiences (Exhibit 7), our own reflections and feedback from participants have convinced us of the need to expand the current residential format to include an online component that would be available, eventually, to the entire social benefit entrepreneurship community. In terms of participant feedback, the surveys of participants in the 2005 and 2006 GSBI sessions included a request that respondents identify the "kinds of Web-based information, services, and resources" that their organizations need the most. In response, participants identified four broad categories of needs, which have become the basis for identifying new features and services required in our next technological platform (Exhibit 8).

Based on this feedback and working within a developmental research framework (Barab and Squire 2004; Reeves, Herrington, and Oliver 2004), we are creating a Web-based collaboratory. Through an iterative process, the new platform for the collaboratory (Ning) will bring together content management and social networking features to allow GSBI to

- offer pre-visit and post-visit support to participants in the campus experience (Exhibit 9);
- involve other members of the participant's team through online contributions before, during, and after the in-residence program (Exhibit 10);
- create innovative, learner-centered pedagogical approaches based on project-based and problem-based learning modalities, including structures to create case studies (Exhibit 11) from each organization's experience and to support information and knowledge sharing as a communal strategy (Exhibit 12); and
- improve the Web-based platform so that the program can take advantage of the diverse experience of its participants and thus, in the longer term, serve as a model for other learning communities—including traditional K-12 and higher education, professional training, corporate and government training, the not-for-profit sector, and others.

With each iteration, the online collaboratory will provide an integrated, vital tool for realizing the full potential of the program. It will be useful for providing information and resources to participants and their organizations; it also will be useful for exchanging information between the entrepreneurs and their mentors since mentors cannot be physically available at all times. Meanwhile, the leadership team for GSBI will rely on the collaboratory for updates to program content and daily evaluations of the program's residential activities (

Exhibit 13). Finally, the collaboratory will address the biggest challenge the program has faced so far, which is the tendency of participants to reduce their involvement with the program after they leave residence. We hope this design can reduce the number of graduates who stop communicating with each other, their mentors, and faculty once they return home. The goal is to keep all graduates engaged with the follow-up process, reporting on their work and contributing their experience to subsequent cohorts of learners. Then, our goal of a global and self-sustaining learning community of social benefit entrepeneurs will be that much closer to being fulfilled.

Conclusion

Since its inception, the GSBI has undergone substantial modification in program content, and the number of applicants to the program has risen dramatically. However, it is clear that the in-residence program still faces several significant constraints:

- *Content*—No additional content can be added because participants already operate at their intellectual and physical limits for the full two-week residence period.
- *Length of in-residence program*—It is unlikely that the program can be extended beyond the two weeks currently offered because participants have indicated that it is difficult for them to be away from their enterprises for a longer time.
- *Number of participants in the in-residence program*—Pedagogical concerns limit the enrollment of the GSBI in-residence program to a number that can be individually tutored and served, which is fewer than 20.
- *Budget*—Providing food and lodging to participants in a residential setting consumes a significant amount of capital each year. (Participants are required to pay for their own transportation to and from Santa Clara.)

These constraints argue for developing an even more robust online component for our program, moving it increasingly toward a fully blended (residential/online) model. For most people, learning how to be a successful social benefit entrepreneur requires more than a one-time exposure to the abstract concepts of business planning practices as typically communicated in traditional academic formats. Learners also need to "construct their understanding out of a wide range of materials that include ambient social and physical circumstances and the histories and social relations of the people involved" (Brown and Duguid 2000, 109). The online collaboratory being developed for the Global Social Benefit Incubator places the learners at the center, recognizing their background knowledge and skills as resources for their own learning and that of their peers (Jakobsdóttir 2002). Our attempt to draw from the participants' on-the-ground experience while engaging them in an extended learning experience that involves both traditional and online elements presents us with unique opportunities. The pedagogical and system design challenges are not trivial, but the potential rewards from successful development and implementation of this online collaboratory will be enjoyed not only by these learners but also by the much larger populations their efforts are intended to serve.

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