

Designing an Online Collaboratory for the Global Social Benefit Incubator

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Abstract. The Global Social Benefit Incubator (GSBI) is an international education program designed to serve social benefit entrepreneurs working in the fields of education, health, economic development, the environment, and equality around the world, mainly in developing countries. Hosted by Santa Clara University, two-week intensive workshops were held in 2003, 2004, and 2005. A limited number of participants (no more than 16) are sponsored to attend each year. The program has identified two major goals for its development: (1) Establishing an innovative blended learning environment (in-person and online) capable of addressing the learning needs of a wide range of learners, and (2) extending the program's reach via the online environment to social entrepreneurs not able to participate in person. Key goals for this developmental research project include the design of (or adaptation/enhancement of open source) online tools that support distributed knowledge construction, skill development, communication, and collaboration for learners with different backgrounds, language skills, interests, and priorities. Project outcomes would be meaningful at two complementary levels: pedagogical innovations addressing heterogeneous learner populations, and innovations in the design of online learning environments.

Background

An interdisciplinary team of Santa Clara University (SCU) faculty are working to develop and study, under a developmental research framework (Reeves, Herrington, & Oliver, 2004), a web-based collaboratory serving the international community of social entrepreneurs. Kramer (2005) defined a social entrepreneur as "One who has created and leads an organization, whether for-profit or not, that is aimed at creating large scale, lasting, and systemic change through the introduction of new ideas, methodologies, and changes in attitude" (p. 6).

The Global Social Benefit Incubator (GSBI) was launched at SCU in 2003, bringing together social entrepreneurs selected from among the finalists in the Tech Museum of Innovation's "Technology Benefiting Humanity" Awards (see Barnholt, 2004; Koch, 2003; Koch, 2001). The Tech Awards program started in 2001, and SCU's Center for Science, Technology, and Society has been in charge of the judging process since that first year. The awards are grouped into five categories: Education, Health, Environment, Economic Development, and Equity. The number of applicants, and the variety of countries represented, has consistently increased each year. The winner in each category receives a \$50,000 prize, and the five finalists in each category are invited to a gala event at the Tech Museum for the presentation of awards. They also participate in two days of public events designed to maximize exposure for their work.

It became evident to the research team, and to the network of venture capitalists, advisors, and friends of the Tech Awards involved in the GSBI, that quite a few of the social entrepreneurs recognized by the Tech Awards—even the category winners—were in need of "business development" help if their work was to continue being successful over the long term. Through conversations and other exchanges starting in 2001 (the first year of the Tech Awards) through 2002, a plan was created to invite a select group of Tech Awards "Laureates" (as the five finalists in each category are called) to a two-week, intensive "boot camp" on social entrepreneurship business development during the summer of 2003. In 2003, one of the team members (Guerra) worked exclusively with finalists from the Global Junior Challenge in an "alpha" version of what then became the "beta" version of GSBI in 2004. While Tech Awards Laureates represented the largest number of participants in 2004 and 2005, the GSBI also attracts winners from the World Bank's Development Marketplace, as well as Ashoka, Schwab Fellows, and Global Junior Challenge winners. A total of 7 participated in that first session. Thanks to additional funding secured from private foundations and university in-kind contributions, a second GSBI summer session with an additional 15 participants took place in 2004, and the third session took place in summer 2005, with a new group of 16 participants from 11 different countries.

After three successful in-campus experiences, our own reflections, and feedback from participants have convinced us of the need to expand the current format to include an online component that would be available not only to the in-campus participants but, eventually, to the social entrepreneurship community at large. The online environment that is the subject of this research program would allow GSBI to:

- Offer pre-visit and post-visit support to participants in the campus experience
- Create innovative, learner-centered pedagogical approaches to serve the needs of this international, multilingual, and heterogeneous learning community, emanating from both SCU faculty and amongst the participants themselves.

- Develop a global, collaborative web-based platform that can serve as a model for other learning communities including those in traditional K-12 and higher education settings, professional training, corporate and government training, the not-for-profit sector, and others.

To provide additional context for this proposal within the larger vision for GSBI, it is helpful to envision a circle diagram with four quadrants. One quadrant represents the Selection process that identifies potential participants in the program, through the Tech Awards program and through partnerships and alliances with a variety of individuals and organizations (including the World Bank’s Development Marketplace, the Schwab Foundation, Skoll Foundation, and others).

The second quadrant is the two-week Residence program at SCU in which distinguished faculty and entrepreneurial mentors from Silicon Valley interact with the selected social entrepreneurs—who, of course, are interacting amongst themselves as well. The third quadrant is Incubation, which includes ongoing mentoring for social entrepreneurs, integration with course curricula in one or more courses at the Leavey School of Business, and the web-based collaboratory which is the main component of this proposal, along with the fourth quadrant, Research. This last quadrant (described in more detail below) involves standard social scientific research practices to address specific questions of practice, create and sustain a community of practice, and generate publications in academic journals, professional conferences, and other venues as appropriate.

Background: Social Entrepreneurship

Since the 1990s, social entrepreneurship has been recognized as a crucial element for the well-being of communities—even entire regions or countries—around the world. A variety of international organizations (e.g., UNESCO, the World Bank), foundations (e.g., Ashoka, Schwab Foundation, Skoll Foundation), corporations (e.g., Accenture), academic institutions (e.g., SCU, Stanford, Macquaire Institute on Entrepreneurship in Australia), and other entities and individuals have dedicated a considerable amount of financial and other resources to support the work of social entrepreneurs, and have attempted to build networks to link practitioners as a way to help them leverage each other’s knowledge and expertise.

One of the key challenges for many social entrepreneurs and the organizations they create is that of “scaling up” in a sustainable way—they may have had enough talent and resources to get the organization or project to its current state, but they may be unable to grow it beyond a certain point to increase its reach and effectiveness or, in quite a few cases, to remain financially viable.

In early 2004, a United Nations Commission focused on the role of private enterprise in economic development published its research findings. The Commission was chaired by the Honorable Paul Martin, Prime Minister of Canada and included global industry and academic leaders. (Please refer to <http://www.undp.org/cpsd/>). The three pillars supporting private sector growth in this model are: (1) Level playing field, (2) Access to financing, and (3) Access to skills and knowledge. The Global Social Benefit Incubator focuses on the third pillar, Access to Skills and Knowledge. Drawn from a pool of Silicon Valley mentors and faculty from the Leavey School of Business School (at SCU), the lessons learned are adapted and applied to the unique needs of individual social entrepreneurs from around the world in an intensive two week program focused on early enterprise formation, market creation, and venture-scaling skills.

The GSBI program has secured some funding from private foundations to expand its services to past, current, and future Tech Awards Laureates. During the on-campus internship, participants are engaged in an intensive business development experience, focused on helping each organization prepare to move to the “next level,” whether that be at the organizational, fundraising, or operational level. Given that Laureates come from many different countries, and with different backgrounds and skills, one of the challenges for GSBI is how to design a curriculum that will be equally meaningful to all participants, and how to maintain and further develop the learning community created through this experience. As might be expected, the camaraderie that develops among Laureates participating in the summer internship leads to a great deal of experience sharing among people, which greatly enriches and enhances the value of the formal coursework in social entrepreneurship, development, and planning they are exposed to. One of the goals of the current project is the research of online pedagogies, and of communication and collaboration strategies and services in particular, that would be most useful and productive for all involved: Laureates, faculty, community volunteers, as well as the intended beneficiaries of the work of these social entrepreneurs. A “learning community” is defined as one composed of individuals who share the purpose of acquiring knowledge, skills, and information on a shared subject or issue. The GSBI participants, and by extension all Laureates, constitute such a community.

The GSBI In-Residence Program teaches theory but integrates it tightly with practical exercises, case study analyses, and execution. By the end of the two-week period the social entrepreneurs are expected to produce a credible business plan for their venture. The instruction offered is guided by the following two questions:

- What are the needs of social entrepreneurs?
- What do we expect the social entrepreneurs to be able to do with this instruction?

Research Context

The following needs have been identified:

- (1) There is a need for a comprehensive online environment that is specifically tailored to the GSBI-related community (social benefit entrepreneurs, faculty, mentors, and SCU students). This self-identified learning community, then, is comprised of the GSBI attendees/entrepreneurs, mentors, and SCU faculty and students. It has the primary goal of supporting the annually selected projects in achieving their “scaling up” and sustainability objectives. Accordingly, the content, services, resources, and online learning venues (e.g., collaboration forums) should be driven by the users.
- (2) There is also a larger group—all of the Tech Awards Laureates (100) to date, and 25 additional each year—for which an on-line community might be of value. Based on a survey of the 2005 participants, the range of potential common interests and needs amongst this group includes: information about and access to funding sources, marketing information, organizational capacity building, training materials and resources, information on software tools, opportunities for ongoing communication and collaboration with peers and program mentors, and strategies for sustainability.
- (3) There is an even wider group of social entrepreneurs and organizations that are interested in gaining access to the GSBI content and regional expertise related to technological innovation (including the development of markets). For example, Glocal Forum (www.glocalforum.org) is extremely interested in GSBI making its content accessible to the cities of Kigali and Addis Ababa as part of the We Are the Future Centers being developed in Rwanda and Ethiopia. In each instance, local institutions—the Kigali Institute of Science and Technology and the Graduate School of Telecom and Information Technology—could be viable local partners to augment relevant distance learning content with local mentoring and support.

The research and design challenges this project is designed to address can be summarized in the following questions:

- How should the GSBI program evolve to sustain and develop a community of learners and practitioners composed of individuals from multiple countries, different cultures and languages, and addressing different social benefit goals?
- What services should be put in place to support this community? (Learning, communication, collaboration, mentoring, funding contacts, other networking, technical advice, etc.)
- How can the curriculum be learner-centered to better reflect their individual needs and interests, while maintaining consistency across the program?
- What are the technical issues to overcome, and the design challenges to identify and address, so that people with different levels of connectivity (from public access in a cybercafé, to modems, to DSL and cable modems) have good experiences interacting with the online system (for learning, communication, collaboration, etc)?
- What are the strategic partnerships that GSBI should establish to ensure short-term success and long-term viability and replicability?

Research Goals.

The multidisciplinary research team participating in this project (Business, Education, Computer Engineering, Science and Technology Studies)—augmented by representatives from corporations, government agencies, venture capitalists, foundations, non-governmental organizations, and service providers—is interested in a variety of questions focused on online and multicultural pedagogy, collaborative learning, business development, marketing, and communication. General problem areas include:

Conception:

- What services will be most appreciated by participants from different parts of the world, working on different kinds of projects? Are certain services preferred by individuals according to specific needs (e.g., information resources, financing) or emphasis area (e.g., education, health, environment, economic development)?

Design:

- What are the ideal features and services of an online education and learning system supporting faculty and students from different countries, who speak multiple languages, and who have different learning styles?

Evaluation:

- How can one measure the value of face-to-face interactions for teaching and learning purposes? To what degree do new communication and collaboration technologies like real-time desktop videoconferencing help students and faculty overcome the limitations of mediated environments?

Service Goals

The Tech Awards Laureates have been recognized for the quality of their work serving their intended audiences and communities, as well as for the creativity and commitment to their vision of how appropriate technologies can be used to improve people's lives. A further recognition is given to those selected to participate in the internship program. This proposal aims to extend the benefits of participation in the summer internship to all Laureates, by creating an online learning community where past and future Laureates can share information, resources, and experiences with each other, and benefit from ongoing communication and collaboration opportunities with GSBI faculty, mentors, community volunteers, and others (including SCU students and other faculty).

The services to be investigated for their usefulness and viability (both from a technical and an organizational perspective) include:

- Online courses, including all course materials, learning modules, readings, presentations, etc.
- Secure messaging (private electronic mail)
- Discussion forums (asynchronous online discussions)
- Web Logs (and RSS feeds)
- Online Chats (real-time), including text, audio, and video
- Online whiteboards (real-time shared collaboration spaces)
- Webcasts (and archives) of lectures, presentations, meetings, and other special events
- Assessment (quizzes, exams, essays, business plans, presentations)
- Online polls and surveys
- Web hosting services for Laureates
- Online fundraising
- Support for multiple languages besides English

Fourteen participants in the 2005 summer session completed a 2-page survey that included questions on characteristics of their organizations, connectivity, experience with online courses, interest in teaching online, preferred forms of communication and collaboration, and other issues. Electronic mail was rated as the communication and collaboration tool that "would be most helpful to you and your organization." Seven of the 14 respondents listed email as number one, and six other respondents checked it as important but did not rank their selections. (Only one respondent had "personal meetings" as their only selection.) "Online discussion forums" was the medium most frequently listed in second place, followed by phone conferences. While there are reasons to believe that some of the participants were not clear on what these technologies really can do for them and their organizations (or are aware of bandwidth limitations), it's worth remarking on the fact that the two participants who had perhaps the most difficulty speaking English did check "video conferences" as a preferred option, and that the youngest participant (25-years-old) was the only one to check "instant messaging" and write in "Voice over IP" (which was not one of the options listed). Half of the respondents (7 of 14) said every one in their main office had individual access to a computer with Internet access, 4 reported shared access, and 3 said their employees or volunteers had no access at the office. The type of connection also varied greatly. Three respondents said their organizations connect to the Internet via telephone modem (in Africa, Mexico, and Brazil), 4 reported using DSL (in the U.S., Argentina, Uruguay, and Guatemala), 3 connected via Local Area Network (in India, Paraguay, and Bangladesh), and only one respondent each (both in the U.S.) reported using a wireless connection or a cable modem. One respondent said its organization relied on a cybercafé (Nigeria), and another did not properly have an office in the public libraries where their work was carried out (South Africa).

Technology Development

Our initial work in the area of distance learning involved the deployment of skill building exercises delivered via the ANGEL course management system (<http://www.angellearning.com/>), hosted by Santa Clara University, and with web links to the Skoll Foundation's Social Edge website (<http://www.socialedge.org>). The

objective of the web links was to offer a “Community of Practice” (Wenger, 1998; Wenger & Snyder, 2000) collaboration capability designed to share successes, trials, and lessons learned.

The distance and community learning tools would aim to fulfill the promise of “virtual incubation.” While a great deal of work is required to understand in detail the needs of the target beneficiaries and how best to deliver the on-going support, these tools are to be utilized to:

- Provide curriculum, exercises, and mentors at different stages of the venture’s life cycle;
- Address the different knowledge and skill needs over the venture’s life cycle;
- Promote collaboration among the project leaders and their program mentors;
- Provide a laboratory for research on the initiatives and thereby stimulate the research on sustainability for social benefit ventures;
- Help ensure project sustainability via direct assistance on overcoming obstacles;
- Provide analytical tools for decision support.

Sample Scenarios and Desired Features

The GSBI Web Collaboratory Platform conceptually borrows heavily from the eBay experience of building community while vetting members and the quality of their service. All members would be able to build and post content and processes on the envisioned web-based platform. Vetted credentials would also be required. Educational content, skill-based exercises, mentors, corporate programs, agency assistance, and service providers would all be subject to review and feedback mechanisms available to all participants. While the vast majority of exchanges are likely to be free of charge, fee-based services delivered over the web platform would provide the GSBI Web Collaboratory with a source of revenue aimed at achieving self-sustainability.

The survey of participants in the 2005 summer session also asked them to identify the “kinds of Web-based information, services, and resources” that their organizations need the most. Respondents listed the following needs:

- Information on effective marketing channels
- Information on possible sources of funding, investment, and loans
- Accountability
- Tracking former students graduated by the organization
- Class material
- Training material
- Opportunities to continue dialogue with mentors, colleagues, and coordinators of program
- Lessons learned from other organizations
- Software tools for creating content
- Capacity building (staff training)
- Links to and networking with partners
- Partnership building
- Travel, financial, farming, weather information

Four respondents expressed a willingness to teach online and/or develop content for online delivery, another six said “maybe,” and only four said “no.” For those who are willing to teach or develop content, the main motivation to teach online was the “opportunity to share with others what I know,” followed by “learning opportunities for people in my organization.” Almost all (15 of 16) respondents identified at least one topic or skill they feel capable of teaching to others, ranging from the technical (HTML, Web development, web searching) to business topics (marketing, business writing, leadership), to academic (ICT for development, Sociology of Education), to practical (beekeeping).

From a design and development perspective, several challenges and opportunities arise from the fact that the “learners” in the GSBI experience have themselves much to contribute. The recognition that the GSBI faculty and collaborators don’t have to be responsible for developing and “delivering” all the content eventually made available in the program, leads to the challenge of designing an online environment where it is possible for remote contributors to create content and organize it in clear and consistent ways. The opportunity is to have a range of content—and perspectives within content categories—created by many of the learners themselves, in what Collis and Margaryan (2004) called “contribution-based pedagogy.” Under such a framework, “An important source of learning resources is the learners themselves, 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 & Margaryan, 2004, p. 43).

Conclusions

To become and remain successful as social entrepreneurs, people need not only a one-time exposure to abstract knowledge of business planning communicated in traditional academic formats. They 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 & Duguid, 2000, p. 109). The online collaboratory envisioned for the Global Social Benefit Incubator aims to place the learners at the center, recognizing their background knowledge and skills as resources for their own learning and that of their peers. 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 admirable efforts are intended to serve.

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