



## Chapter Five

# Criterion Four Acquisition, Discovery, and Application of Knowledge

*The ongoing acquisition of knowledge and its application are central to our mission, which recognizes the simultaneous and interconnected involvement of teaching, application, and basic research roles in higher education.*

The Future Generations master's program is for professionals with life experience, working in the real world, making a difference. It is for students who want to continue on their educational journey and in so doing help lead their communities as they encounter change in the modern world. Students are admitted based on that overarching criterion. Through this academic program, students apply global best practices in their communities by integrating research and action within the framework of an innovative higher education experience. In particular, this master's degree program fits closely within the stated organizational objective of Criterion Four:

*“The organization promotes a life of learning for its faculty, administration, staff, and students by fostering and supporting inquiry, creativity, practice, and social responsibility”*

The defining skill expected from our students in their education is that of managing change, a skill that is taught not only to them as students but also is supported as they become graduates who are lifelong learners. The instruction provided by the Future Generations Graduate School, through the blended learning approach, prepares them especially well; for students and their communities, it expands their horizons and equips them with the tools for continued acquisition, discovery, and application of knowledge. The Future Generations Vision Statement promoting 100 nodes of change anticipates that graduates will join a community of change agents to *“contribute to this learning process and help mobilize community energy into large-scale social transformation in their own countries.”*

As part of a master's level degree program, with scholarship as a distinguishing feature, students learn and practice the research skills that will allow them to contribute to advancing the state of knowledge within their field. While all academic disciplines are evolving, arguably no other is evolving in as dramatic a way as the field of social change. How to address this rapid change and its complexity is what the Future Generations master's degree teaches. To achieve that objective, the optimal mode of “acquisition, discovery, and application of knowledge” must be grounded in both the students' realities (for it to make sense) and in the vast complexity of the world (for it to represent state-of-the-art scholarship).

Our students are practitioners who seek to incorporate scholarship into their community work. As a graduate school offering a professional degree, Future Generations provides students with an advanced multidisciplinary program that stresses knowledge and skills in aligning social change with conservation. The education provided by the two years of study teaches students how to make their home communities bases for scholarship as well as improved locations of practice. As we will demonstrate in addressing the core components of this criterion, the professional development aspects of the program are presented along with academic courses that give students the broad context drawn from global scholarship.

## Addressing the 2007 HLC Evaluation Review Report

We begin with the specific issues raised in the 2007 HLC evaluation before turning to the core components of this criterion. The 2007 Assurance section states:

As a graduate school it is imperative that all students enrolled in the school worldwide be taught how to use and demonstrate the ability to use library resources. They need to have access to current research related to the field through access to library holdings, online library, and cybrary resources. Future Generations must make this a priority.”

The Future Generations Graduate School has made the issue of library resources a priority, addressing it in the following ways:

- 1) At the beginning of each class of students, each new student is encouraged to find an in-country mentor who can help them locate local resources and, as a Future Generations Graduate Student, gain access to a nearby university or city library. This connects each student with the most effective library resource geographically available to them.
- 2) During the Term II U.S. residential, students are enrolled in the Summer Peacebuilding Institute (SPI) through Eastern Mennonite University. This gives them access to EMU online library resources through the rest of Term II and throughout Term III. Even in their home countries, they can log onto the EMU library home page and access all the scholarly and peer reviewed journals available in their databases.
- 3) Class Three students, during their U.S. residential, attended a two-day presentation by the Johns Hopkins University director of electronic acquisitions, Barbie Keiser, on research strategies, tools, and resources. Every student received a copy of the 201-slide PowerPoint as a resource to help them with their research, particularly the literature reviews for their practicum projects (exhibit 5.1).
- 4) Graduate School staff member LeeAnn Shreve e-mails monthly reviews of Keiser’s presentation to students in order to keep the concepts fresh in their minds. Students have appreciated these training reminders (exhibit 5.2).
- 5) The Graduate School identified Academic OneFile, a product of Gale Cengage Learning, as an excellent academic database with thousands of peer-reviewed journals. The school’s subscription to this database started in December 2009, just before the beginning of Class Four.

Faculty and staff of the Graduate School understand that limited Internet connectivity for many of the students makes database searches difficult. So they strive to send students articles pertinent to their research and practica. In addition, instructors post articles on their course sites in Moodle. If students are looking for a specific resource, they know to contact Graduate School staff for help in finding it.

**Core Component 4.a**

The organization demonstrates, through the actions of its Board, administrators, students, faculty, and staff, that it values a life of learning.

**Future Generations work and teaching grows from scholarship, and the organization is advancing global scholarship in fundamental ways.**

From its founding, Future Generations focused on developing cutting-edge research programs grounded in best development practices, with particular attention to sites around the world characterized by the community taking a leading role. This research occurs within the overlapping arenas of social change and conservation (exhibit 5.3), a focus that was first evident in work with two international task forces of the early 1990s (partnering in one case with UNICEF and in the other with Johns Hopkins University). The findings from these studies were released at the 1995 U.N. Social Summit in Copenhagen. The result produced a fresh understanding of the field of social change.<sup>1</sup> In 2002, this central institutional research produced another major publication (exhibit 5.4).

Following the decision by the Board of Trustees in 2000 to offer a master's, the research focus of Future Generations has grown into a formal program of multiple complementary research areas (currently there are seven) (exhibit 5.5). In 2003, with the Graduate School established in parallel with the Civil Society Organization (CSO), Future Generations launched a partnership with the American Public Health Association, the World Bank, and UNICEF to review community-based primary health care worldwide. Carl Taylor, Future Generations' senior health advisor, held the chairman position on the Expert Review Committee for this panel. Henry Perry, a Future

Generations endowed professor, chaired the global review panel. This global review is a major undertaking, examining all the peer-reviewed literature on community-based primary health care. Its final report will be produced in late 2009.<sup>2</sup> Conclusions from this research not only inform the field globally, they directly contribute in the country programs of the CSO and instruction in the master's degree. As will be noted, such parallel input into the work and teaching of the Graduate School also occurs for the organization's research projects in conservation, peace building, family action groups, and all other research endeavors (exhibit 5.6). Future Generations work and teaching grows from scholarship, and the organization is advancing global scholarship in fundamental ways.

The ongoing acquisition of knowledge and its application are central to the organization's mission, which recognizes the simultaneous and interconnected involvement of teaching, application, and basic research roles in higher education:

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<sup>1</sup> Daniel Taylor-Ide and Carl E. Taylor. *Community Based Sustainable Human Development: A Proposal for Going to Scale with Self-Reliant Social Development* (New York: UNICEF, 1995).

Carl E. Taylor, Aditi Desai, Knut Knutsson, Daniel Taylor-Ide. *Partnerships for Social Development: A Casebook* (Baltimore: Future Generations & Johns Hopkins, 1995).

<sup>2</sup> Henry Perry, Paul Freeman, Sundeep Gupta, Bahie Mary Rassekh. *A Review of the Evidence: How Effective is Community-based Primary Health in Improving the Health of Children, Summary Findings Report to the Expert Review Panel* (CBPHC Working Group, International health Section, American Public Health Association, 2009).

*“Future Generations teaches and enables a process for equitable community change that integrates environmental conservation with development. As an international school for communities offering graduate degrees in Applied Community Change and Conservation, we provide training and higher education through on-site and distance learning. Toward this end, **we support field-based research**, promote successes that provide for rapid expansion, and build partnerships with an evolving network of communities that are working together **to improve their lives and the lives of generations yet to come.**”*

The educational model that Future Generations promotes is one with life-long relevance; namely, action and reflection in an ongoing quest for effective practice. This applied approach to societal challenges is especially appropriate to today’s pressing issues of economic crisis and worldwide climate change. Learning and transmitting best practices and state-of-the-art theory is not a one-time activity but must be a beginning for life-long knowledge acquisition. The blended learning framework used by the Future Generations Graduate School is particularly effective for the purpose of sustaining this life-long quest as alumni.

Evidence of the value the institution places on a life of learning is the recently approved Strategic Plan of the Graduate School, which reflects the several functions of the acquisition of knowledge within the institution:

- Documentation of successes to build momentum for large-scale change;
- Development of formally accredited higher education degree programs based on on-site and distance education;
- Building into all field activities a participatory research component, including monitoring and assessment of best practices;
- Development of short-term and continuing education and learning, such as short courses and workshops;
- Scholarly publications, presentations at conferences and professional meetings, dissemination of findings in easily accessible "vehicles," monitoring and evaluation of country program activities, priority recruitment of staff with an academic and scholarly orientation, and priority on sharing lessons learned (both successes and failures) with the rest of the world (exhibit 5.7).

### Acquisition of Knowledge Coupled with Assessment

As an institution of higher learning, the Future Generations Graduate School acts from the conviction that an assessment process is part of the acquisition of knowledge. A feedback loop is needed between knowledge acquisition and application. Future Generations is fortunate to have an assessment method that is central to all institutional operations. The approach is termed Self-Evaluation for Effective Decisionmaking (SEED) and from this an assessment approach XPRS was specifically developed to serve the learning objective assessment requirement.



Application through **XPRS** is as follows:

- X.** The entire class joins in an open-ended eXit interviews at the end of each residential course of study, which leads to a follow-up review and assessment meeting of professors and staff (exhibit 5.8).
- P.** Each Professor evaluates whether his or her course has achieved its stated learning outcomes in consultation with the dean (exhibit 5.9). Moreover, the annual Faculty College provides a forum for all professors, the staff, and the dean to discuss blended learning pedagogy, teaching activities, applied learning experiences, and new technological and pedagogical pathways (exhibit 5.10).
- R.** Review by the dean and administration of online student evaluations of teaching effectiveness, and this is provided to professors as direct feedback on each course (exhibit 5.11).
- S.** Professors assess Student learning through steady feedback on assignments (e.g., essays, projects, presentations, online postings, and exams) and final grades. As each student continues to work on the Practicum across all four terms, he or she learns to dialogue with community, evaluate that relationship, and build upon community-based knowledge and assets. While the Student Learning Plan (SLP) is initially developed in Term I, students revise it each term and use it as a self-evaluative tool. The SLP is submitted to the Practicum professor during Terms I and IV for more formal feedback (exhibit 5.12).

Application of the broad principle of self-evaluation inherent in our overall assessment approach that uses the Seed-Scale methodology is concretely evidenced in the creating the current Strategic Plan. This process spanned 14 months, from March 2008 through May 2009. The first step was to bring forward two sets of documents, the external evaluation that was done in 2007 by the HLC Peer Review Team (looking at both the Assurance and Advancement sections) and also the internal evaluation that drew together both faculty and student critiques of the program (exhibit 5.13). The dean and Graduate School staff followed through during the summer and fall, examining options for implementation based on that initial evaluation (exhibit 5.14). In late September, via Moodle and e-mail, an Internet-based evaluative discussion was held (exhibit 5.15) with the Graduate School's globally scattered faculty. A draft Strategic Plan was presented to the Graduate School Board of Trustees at their meeting in New York City November 21 and 22, 2008 (exhibit 5.16). The trustees returned the draft, noting their concern that proposed income-generating training programs designed to financially strengthen the young graduate school could compromise its academic rigor. The winter and spring of 2009 saw additional discussions among faculty, staff, and trustees, in person and via the Internet. The dean prepared a Blueprint for Growth (exhibit 5.17), synthesizing many of those evaluative comments. The Graduate School Board of Trustees at its May 15–26, 2009 meeting again re-drafted the document and the final Strategic Plan resulted (exhibit 5.18).

This long saga is important in that it reveals the seriousness by which trustees, administration, faculty, and staff all view the self-evaluation process. If a strategic plan had been a simple objective, an institution as small as the Future Generations Graduate School could have produced a plan with much less effort. But the self-evaluation process,

applied in this comprehensive and inclusive manner, resulted in a careful review of the past and built upon evidence from the three classes. Such a thorough process was perceived to be essential for Future Generations—both because of the critical time of the organization’s growth and also because of the innovations of its program.

As an earlier step in this ongoing Self-Evaluation for Effective Decision Making, in January 2007, key members of the Board of Trustees and staff gathered in Baltimore for a two-day meeting. This was an internal group who had backgrounds in the larger role of assessment and who were applying that to systematize institutional evaluative processes. From those meetings a Research Task Force was established, and this group charged two faculty members to lead a global review with a focus on how field programs were being evaluated and how this knowledge base could inform other programs worldwide. Funding for the work was supported through a \$25,000 grant from the Hilton Foundation. Work began at all country sites around the world to implement the evaluative process (exhibit 5.19). Country results from this initiative are now becoming available (exhibit 5.20).

The Graduate School has a strong and growing research focus around the theme of community-based dynamics. Its purpose is both to advance the state of global knowledge and to inform Future Generations programming. Currently there are major ongoing field projects in Social Change, Community-Based Primary Health Care, and Institutional Country Program Self-Evaluation. In addition to these, four other projects are underway:

- Community-Based Conservation (funded by the Gordon and Betty Moore Foundation). A global review examined the question of whether community-based conservation is more effective than the traditional professionally led approach. In addition to a wide-ranging literature review, this study included four original case studies from Nepal, the salmon fisheries in the Pacific Northwest, Botswana, and Guatemala (exhibit 5.21).
- Engaging People in Peace Building (funded by the Carnegie Corporation of New York) examines the process of how to get citizens engaged in what is usually a top-down process of government imposition or outside-in intervention by “peace-keepers.” Specific cases examine the experiences of Burundi, Somalia, Afghanistan, Nepal, and Guyana (exhibit 5.22).
- Himalayan Ecosystem Research (funded by our institutional endowment) is cataloging the 2,500-mile breadth of the Himalaya-HinduKush Mountain natural history. In addition to an overview, a number of case studies are being written. A recent major publication resulted from this work.<sup>3</sup> In addition, this project is also producing a series of case studies on global ecology. Of special relevance are three case studies that examine the ecology around the North Mountain Graduate School campus (exhibit 5.23).

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<sup>3</sup> Robert L. Fleming, Liu Wulin, Dorje Tsering, *Across the Tibetan Plateau* (New York: WW Norton 2007).

- Pregnancy History Research (funded by a private donor) uses field trials in northeast India and northern Afghanistan communities to investigate whether the recounting of women's pregnancy histories in the socially protected context of Women's Only Workshops can allow the gathering of health statistics retrospectively up to twenty years earlier and also present health education where women's life stories become the mode for teaching health concepts exhibit 5.24).

## The faculty and staff are learning-oriented people

Dr. Daniel Taylor, the President of Future Generations, is an educator with multidisciplinary interests that encompass three decades of research and publications in primary health care, conservation, experiential education, formal education, and social change. He has led or co-led half a dozen international research initiatives.

Dr. Thomas Acker, S.J., Dean. Dr. Acker has distinguished experience in higher education. For eighteen years he was President of Wheeling Jesuit University, and concurrent with his deanship at Future Generations Graduate School leads a regional center for higher education in West Virginia as Chairman of The Higher Education Foundation. Earlier in his career he was Dean of Arts and Sciences at St. Joseph's University, and a Fulbright Professor of Biology in Nepal.

Dr. Robert Fleming, Endowed Professor for Equity and Empowerment in Natural History, obtained a doctorate in zoology and is a distinguished scholar-practitioner of ecology and co-author of the widely acclaimed two books *Birds of Nepal* and *Across the Tibetan Plateau*. Dr. Fleming has led over 400 research expeditions throughout the Himalayas and other biologically distinct regions of Asia, Africa, and island groups of the Pacific and Indian Oceans.

Dr. Henry Perry, Professor for Equity and Empowerment in Health, is a scholar-practitioner of community health, with field experience in Bolivia, Bangladesh, and Haiti. He has advanced degrees in medicine, public health, and sociology. Dr. Perry is the author of 40 published articles, 10 books and monographs, and 12 book chapters.

Dr. Dan Wessner has advanced degrees in law, theology and international studies, and has extended in-depth field experience in China and Vietnam. He has been published widely in academic journals and has spoken at numerous national and international academic conferences.

Mr. Jason Calder, director for the Citizens Engaged in Building Peace Research, has 13 years experience managing international programs on development initiatives at The Carter Center. Prior to joining Future Generations, Mr. Calder engaged in extensive dialogue with international development officials, global leaders, and political leaders throughout the world with a particular focus in Mozambique, Mali, Albania, and Guyana.

Dr. Laura Altobelli, country director Future Generations/Peru, a nurse with master's and doctorate of public health degrees from the Johns Hopkins University has over two decades in practical research and program evaluations, mostly in Peru, and over twenty publications and major reports. She has a part-time professorial appointment at Peru's leading private university, Cayetano Heredia.



Ms. Francis Fremont-Smith, country director for China, has lived and worked in China for the last 27 years. Most of her work in China has been in education, including work as an educational consultant with the World Bank, founder of the Milton Academy China Study Program, and multiple positions with the Chinese International School. She is fluent in Chinese, French, and Latin.

Mr. Aziz Hakimi, country director, Future Generations Afghanistan, is an expert on issues of nation building, with a particular focus on this challenge for Afghanistan. Formerly the deputy chairman of the National Election Commission and assistant (policy) to the president of Afghanistan, Mr. Hakimi has published extensively for the last decade in media throughout South Asia on the challenges of nation building.

The adjunct faculty members have a similar level of scholarly interests arising from practical field experience and intellectual curiosity

Dr. Michael Rechlin has an active research program in Nepal looking at leaf litter decomposition and the effects of litter removal on nutrient cycling in community forests. He also is a research associate in a Forest Service project to investigate the ecological effects on the forest floor from various timber harvesting techniques. Dr. Rechlin holds a research appointment at the Yale School of Forestry and is a collaborator in a USAID funded project at Nepal's Institute of Forestry.

Dr. Henry Mosley is a professor emeritus at the Johns Hopkins University School of Public Health, has written or edited five books, authored or co-authored 26 book chapters and 95 peer-reviewed articles.

Dr. Dan Robison and Dr. Sheila McKean are a husband and wife team of food ecologists based out of a research station in the jungles of Bolivia where they experiment with a variety of foods (including wild chocolate). In addition to their research interests they also have worked as technical advisors to a number of food and conservation projects throughout South America.

## Internal support for institutional research

As an institution of higher learning with its own field programs, Future Generations is in a strong position to provide access to field research opportunities for its faculty and staff. This, together with the value the institution places on scholarly field research, provides many research opportunities for faculty and staff.

For instance, Mr. Nawang Gurung is a Future Generations employee who has been director of development programs in Tibet Autonomous Region, China for the past six years. He entered the first class of master's students in 2004 and continues from that experience with writing a series of evidence-based manuals to teach community members current best practice in health, poverty alleviation, and local governance.

In a similar manner, Dr. Tage Kanno (executive director of Future Generations Arunachal), who was also a student in Class Two of this master's program, is building on his training in research and has initiated a review of impact of women's action groups for improving community-based health, a follow-up survey of environmental status in a state wildlife preserve, and is a member of a global team that is reviewing best practices in

community-based change with a special emphasis on the empowerment of women.

Finally and very importantly, Future Generations is able to support the ongoing research of three endowed professors. Dr. Robert Fleming spends 75 percent of his time on research and writing and the other 25 percent on teaching. Dr. Henry Perry spends 20 percent of his time on research and writing, 50 percent on teaching, and the other 30 percent on technical support activities for the field programs of Future Generations. The third endowed professorship is to be taken by Dr. Daniel Taylor who will step down in 2010 as President in order to pursue a research and teaching agenda in applied social change.

Student research is an integral part of the practicum and the master's experience. Altogether, practicum-related credits account for 20 percent of the overall number of credits required for the degree. Research methods are taught in part as preparation for carrying out the practicum research. The full representation of student practica are presented in the Resource Room for this HLC team visit. Refer to exhibit 5.25 for a complete list of student practicum research projects.

Staff who are not members of the faculty also receive opportunities for continuing education. The bookkeeper and director of admissions have participated in special training on financial aid practices. The registrar and director of admissions attended the Higher Learning Commission's workshop on assessing student learning. Opportunities are also provided for staff to travel to program sites to learn about Future Generations field operations. Registrar Christie Hand accompanied students from Class Two in their India and U.S. residentials. She also joined in field evaluation of the Peru program. Admissions director LeeAnn Shreve also joined the students for much of the U.S. residential and participated in most of the Peru residential.

#### Evaluation of core criteria 4.a

This analysis of the history and present day thrust of Future Generations signals how the value of learning connects the entire organization. Future Generations is made up of people who are lifelong learners, and who continue to make contributions to the advancement of knowledge.

#### **Core Component 4.b**

The organization demonstrates that breadth of knowledge and skills and the exercise of intellectual inquiry are integral to its educational programs.

Most of the Graduate School's students are employed as professionals in their home countries. The Future Generations master's program is allowing many of them to move in new directions, professionally. For others, it allows them to broaden their base of knowledge, sharpen their professional skills, and expand the depth of the experiences they bring to their work.

The global network of contacts and professionals affiliated with the Graduate School grounds the master's program in knowledge that is immediately relevant to its goals. The Graduate School drew on experienced academics and community development practitioners in designing a master's degree program with maximum real-world impact.

UNICEF Executive Director Jim Grant's charge, at the organization's founding, that it help produce an understanding of the nexus of economic and social development variables and their sustainability, resulted in reports that were featured at the 1995 U.N. Social Summit in Copenhagen (exhibit 5.26). Conclusions from this still-continuing work are summarized in the Johns Hopkins University Press book, *Just and Lasting Change: When Communities Own Their Futures* (exhibit 5.27). More progress on this research will feature in work to be published in 2010 by Oxford University Press (exhibit 5.28).

The Graduate School was privileged to receive the assistance of two individuals whose broad knowledge and skills grounded the program's educational design. Professor Carl Taylor was involved at the outset. As Chairman of International Health at Johns Hopkins University for 27 years, Professor Taylor led a program that trained more than 2,000 students from 80 countries. Dr. Taylor's insight was that although Johns Hopkins offered more health courses than any other university, it did not prepare students for work under actual field conditions. He guided the new Future Generations Graduate School to a focus on two key features: 1) A curriculum of core competencies, structured so practitioners can apply its principles to specific interests. 2) A practicum that runs the duration of the program. Taylor's experience pointed toward participatory engagement with communities as the focus of fieldwork, wherein students learn both from community experience and through implementing action with communities.

A second colleague more recently engaged to advise the program is Dr. Joan Dassin, Executive Director, Ford Foundation International Fellowships Program. This program has sponsored 3,000 students in education at 500 universities. The first finding from the Ford Fellows program is what the MacArthur Foundation's Master's of Development Practice guidelines term "boot camp." Entrants for higher education must be prepared. This insight has been particularly helpful now as preparations are being made for Class Four. Students will not simply be admitted and then forced to jump into the academic program on the first day of class from their very varied backgrounds.

A second contribution from Dr. Dassin and the Ford International Fellows global base is the idea that candidates should have strong links to communities. (This was a lesson that Future Generations learned from a Class One student, whose link to the community was primarily binoculars she used to study a city slum from her high-rise apartment balcony.) Of course, while the community connection may be centrally important, this does not diminish the parallel admissions requirement of strong academic qualifications.

An important additional knowledge base that Future Generations drew upon in planning the program was from land-grant colleges (with their three-fold emphasis on research, application, and teaching) as well as medical education with its emphasis on "learning" and "learning how." This connection between learning and learning how has been a quest of higher education in America at least since Abraham Flexner similarly redefined medical education in an apt statement found in the introduction to his pivotal report in 1913: "On the pedagogic side, modern medicine, like all scientific teaching, is characterized by activity. The student no longer merely watches, listens, memorizes; he does.... An education in medicine nowadays involves both learning and learning how; the student cannot effectively know, unless he knows how."

**In this instruction the balance between the modes of instruction is just as important as the course content.**

The Future Generations Graduate School has now piloted three classes of its master's degree program. This experience has allowed us to bring together the above premises into our application of blended learning as the action mode of intellectual inquiry. Beyond the points above, a further conclusion is relevant: the value of close peer-to-peer interaction among diverse practitioners who are constantly applying what they are learning. Peers push the envelope of ideas and challenge each other's basic assumptions with reflection and critique from diverse cultural contexts. The month-long field residentials every term create the setting to enliven and enhance the quality of interchange that continues into online components of coursework.

The blended learning approach used in the master's program gives students the skills that will allow them to continue to learn. Many students are from isolated places in diverse countries. With advances in global connectivity, distant places are now not so isolated. After completing this program, graduates are equipped to make use of that connectivity. The interactive online learning component of their courses introduces them to the ways and relationships that will help make them comfortable with communicating and engaging with others and with accessing knowledge after they graduate.

Upon completing their degrees, graduates are invited to stay connected to the Graduate School and the work of the now seven Future Generations CSO organizations worldwide. This brings them into active dialogue with a world of practitioners, just as the interconnected, mission-supporting web of institutions vision is to be part of the 100 nodes of change.

As a professional master's degree, this graduate program provides students with a combination of professional/technical skills, a comprehensive knowledge base in which those professional abilities function, and the tools that direct inquiry into the systematic generation of new knowledge. Table 6.1 is a classification of the courses showing primary instructional content.

Half of the courses in the program contain professional or technical content. Five courses in the program are primarily comprehensive. The other five courses relate to the practicum, and take students through the steps of identifying a research problem, developing a methodology to address that problem, receiving guidance through the research process, and finally synthesizing the findings and integrating them into the more comprehensive issues facing society. In this instruction the balance between the modes of instruction is just as important as the course content. The residentials are intense and life changing, taking students to other worlds of learning. The online dialogues and mentoring, while on the face of it more prosaic, achieve two things: breaking through the professional isolation of remote places and showing students how to connect professionally to the world from those places. The practicum is where the students apply the scholarship they are learning; this home-based component accounts for 20 of the 24 months of the program and takes world-based knowledge and applies it to each student's particular real world challenges.

**Table 5.1** COURSES BY CONTENT

Course Name	Professional or technical orientation in the course	Comprehensive focus in the course	Research Methods included in the course
Practicum: Research Design and Methods			X
Practicum: Prospectus Design			X
Practicum: Applied Research I			X
Practicum: Applied Research II			X
Synthesis and Integration			X
Introduction to Community Change and Conservation	X	X	
Nature Conservation and Management	X	X	
Going to Scale with Community Development	X	X	
Sustainable Development	X	X	
Food and Water Security	X	X	
Human Ecology	X	X	
Health People, Health Communities	X	X	
Inter-Cultural Communicative Competence	X	X	
Leadership and Organizational Dynamics	X	X	
Social Change and Conflict Transformation	X	X	
Applications of Nonprofit Management		X	
Empowerment and Program Evaluation		X	X
Pedagogy of Place: Home and India	X	X	
Pedagogy of Place: United States		X	
Pedagogy of Place: Peru		X	
Pedagogy of Place: Nepal and Tibet	X	X	

The scope of the master's program, the freedom of inquiry allowed, is evident in the diversity of the topics students undertake for their practicum study. Table5.2 is a listing of practicum topics for the three Master's program classes.

**Table 5.2** CLASSES 1, 2, 3 PRACTICUM PROJECTS

CLASS One – Practicum Titles	
Nawang Gurung	How the Pendeba Program Affects Community Change toward Natural Resource Conservation and Health Improvement of the QNNP in Tibet, China
Ikwo John Udoh	Community Readiness for Change: An Entry Point Survey of Egun Community in Makoko
Kelly Brown	For Our Children’s Tomorrow: Heiltsuk Community-based Land Use Management
Traci Hickson	Future Generations: A Global Learning Community of Equitable and Sustainable Change
Bruce Mukwatu	Zambia Academy for Community Change
Pratima Singh	Adolescent Girls of Simayal: Future Mothers
James Paterson	The Partnership of African American Churches
Shannon Bell	Primary Health Care in Cabin Creek: A Proposal for Community-based Change and Empowerment
Class Two – Practicum Titles	
Tage Kanno	Community-based health care in Arunachal Pradesh, India
Abdo Abo Elella	Access to water in Ezbet El Haggana, Egypt
Telile Bayissa	The Ethiopian diasporas in Washington DC
Ellen Lampert	Border policy, the policy community, and the New Mexico/Mexico border
Melene Kabadege	Neonatal mortality rates, causes and strategies for reducing them in Nyamasheke, Rwanda
Asif Obaidee	Community interventions in Ghuri Community: improving road access, Afghanistan
Dang Ngoc Quang	Impact of group-based microfinance on women’s empowerment, Vietnam
Jarka Lamacova	Czech youth learning about global issues, Czech Republic
Yamini Bala	Primary EduCare: toward a new model of education in Detroit
Nguyen Tien Ngo	IC3 learning platform: a new change for English teaching and learning, Vietnam
Mavis Windsor	Qvlagila - making alive, coming alive, or reawakening:” connecting the past, the present and the future is to understand the interdependence of all living things.”
Tshering Yangzom	<i>Ja Thungay</i> : Let’s drink more tea and less alcohol and have more income, Bhutan
Sivan Oun	The Light for Life Child Survival Project and childhood pneumonia, Cambodia
Margaret Kagawa	Mothers and caretakers who have come for child healthcare and postnatal services at the Upper Mulago Young Child Clinic, Uganda
Class Three – Practicum Titles	
Kristen Baskin	Corner store and cooperative commercial kitchen: A study of nutrition, local economics and communal work
Joy Bongyereire	The factors influencing the use of inorganic vs. organic fertilizers in Irish potato production in Kisoro District, Southwestern Uganda



Tsering Digi	A case study on Hope Corner Voluntary Group's impact on social change by building trust, consciousness, identity and knowledge, and ultimately achieving collective action in a group of motivated Tibetan young adults living in Lhasa, Tibet, China
Rezaul Karim	Understanding the impact of BRAC Water, Sanitation and Hygiene Program in rural Bangladesh
Tshering Lham	An assessment of factors that contribute to depletion of ringshoo ( <i>neomicrocalamus andropogonofolius</i> ), an endemic local bamboo species in Kangpara, Trashigang, Bhutan.
Hermenegildo Mulhovo	Violence as an alternative of public expression of informal groups in suburban areas of Mozambique
Tsering Norbu	Establishment of a Pendeba Welfare Center for community change and conservation in Qomolangma Nature National Preserve
Wendy Reese	From community elimination to revitalization: A study on the process by residents of Barrios Unidos in Phoenix, AZ to reclaim their community.
Atul Tayeng	Community Economic Development and Nature Conservation through EcoTourism in the Siang River Watershed of Arunachal Pradesh, India
Alex Vargas	A case study of Peruvian health promoters' performance improvement through empowerment, leadership and social recognition

### Evaluation of core component 4.b

The faculty of the Future Generations Graduate School encompasses field naturalists, experts in public health, community change, peace building, foresters, and agriculturalists. Faculty members are doers and eminent world scholars; their expertise might range from sharpening a chain saw to medical procedures. The practica encompass a wide range of social change and conservation issues.

### Core Component 4.c

The organization assesses the usefulness of its curriculum to students who live and work in a global, diverse, and technological society.

The curriculum was designed for students drawn from all over the world, and from many disciplines. Global reach is one of our distinctive features—and it enormously enriches our program. The Graduate School was fortunate to be unencumbered by place or pedagogy; it was specifically created to pioneer new pedagogies in sustainable development as an appropriate response to the diversities of modern life and planetary existence.

To guide its design, the graduate school began with the pioneering study (by our sister organization Future Generations the CSO) of sustainable development, a study commissioned in 1992 by Jim Grant (then UNICEF's executive director) (exhibit 5.29). That research continues a decade and a half later, finding ways to reach the most marginalized communities with sustainable, holistic development.

Since 2003 the Graduate School has piloted programs seeking the best design of the knowledge, skills, and learning networks needed to implement site-specific solutions toward sustainable development. The exploration began at the macro level. After investigating whether to affiliate with another graduate program (most intensively with

The Graduate School has refined the recruitment process, academic calendar, composition of courses, residential sites, or any factor that could contribute to better achieving the mission of “teaching and enabling a process of equitable community change and conservation.”

Marshall and Johns Hopkins universities) it was concluded that a stand-alone graduate school would be both more innovative and more cost efficient. The model of blended learning was viewed from the outset by the Board of Trustees as an optimal format to achieve this needed diversity and global reach. Since that initial structural planning, the Graduate School has refined the recruitment process, academic calendar, composition of courses, residential sites, or any factor that could contribute to better achieving the mission of “teaching and enabling a process of equitable community change and conservation.”

Using the blended learning pedagogy to achieve greater impact at the community level, this program delivers: 1) a cross-disciplinary curriculum that provides core knowledge and skills needed in sustainable development; 2) a practical experience through field residential in five countries and closely mentored supervision in home communities; and 3) peer-to-peer learning that places practitioners in an active global community of professions, countries, and cultures so that this graduate education becomes an entryway into lifelong learning, which is truly needed for sustainable development education.

Courses span health science, natural science, social science, and management—then from that breadth achieve depth by application into each practitioner’s community. Each of these foundation courses follows the same pattern:

- The course starts with basic knowledge taught in theory and its discipline’s core scholarship.
- Basic knowledge is made real through field experience by having students travel to on-site demonstrations worldwide.
- Each course focuses that learning through supervised applications in the locales of each practitioner.
- Each course works from the general to the specific. Trans-disciplinary connections grow powerful through being synergized. Impact learned in a specific community context scales up across sectors and across regions.

In such a manner, this master’s degree maximizes learning in communities—for it is in community, not distant schooling, that lifelong action unfolds and competency must be built. For 20 months (80 percent of the program), the learning is in each student’s home country, where mentored learning combines with learning from the in-place professional contexts, and where students recognize their strengths and weaknesses while applying lessons.

With such a focus on usefulness, the program is able to enroll promising professionals worldwide. Each practitioner is sponsored by a community, organization, or government. Three classes using this approach have been run to date, and there is growing demand for such reality-based education. In the first three classes, 90 percent of the students have been from the developing world. Twenty-two countries have so far been represented: Zambia, Vietnam, United States, Uganda, Rwanda, Peru, Nepal, Nigeria, Norway, Mozambique, Iran, India, Ethiopia, Egypt, Czech Republic, China, Canada, Cambodia, Bangladesh, Bhutan, Bolivia, and Afghanistan. Sponsoring agencies have included the Afghanistan Ministry of Health, Bhutan Society for the Protection of Nature, BRAC, Community

Avoiding the expense of a physical campus thus reduces costs by about half, and has greater cost returns because a higher proportion of its graduates return than is customary for students from the third world.

Development Foundation of Mozambique, Heiltsuk Tribal Council of Canada, and World Relief in Cambodia and Rwanda.

The program brings global resources to its dispersed students. In doing so, the program strengthens the connection between learning and work—because the student remains in his or her work and the focus on the education is concentrated there. It avoids the potential “brain drain” of quality higher education taking practitioners away from places of greatest need. Rather than the customary higher education practice of bringing students to a campus (or trying to mimic a campus through distance learning), global learning resources are brought to what have been isolated marginalized communities.

While this global learning foundation is central to this master’s degree, one fortunate side effect has been that educating students within local communities lowers costs, cost being, arguably, the most serious barrier to higher education. This master’s degree not only reaches practitioners worldwide with a top-flight academic program, it advances a model of higher education that opens access and also changes the funding basis—that is who pays for higher education. As a community is being served, a community can help pay the costs. Instead of placing the financing expectation only on individuals, this model utilizes the tuition paying potential of sponsoring organizations sending the students. This payment is justified because the practitioners continue to work in their jobs through the two-year program. Thus, those who help pay are not losing a person. Instead of causing a brain drain, they are getting a brain gain. This also increases the pressure on students to excel; their supporting communities, with money invested, now expect results. Communities, once they’ve invested money, also invest their hopes and energies. Students work harder.

In addition to expanding who pays, our model has other higher efficiency cost factors: a best-in-the-world global classroom is created, and this is done without requiring expensive campus infrastructure. Avoiding the expense of a physical campus thus reduces costs by about half, and has greater cost returns because a higher proportion of its graduates return than is customary for students from the third world.

**Table 5.3** TUITION COST COMPARISON

School	Tuition for One Year
Brandeis University <i>Social Policy and Management</i>	\$38,900
Columbia University <i>Program in International Development &amp; Globalization</i>	\$26,831
Future Generations <i>Applied Community Change &amp; Conservation</i>	\$17,500
Johns Hopkins University <i>School of Advanced International Studies</i>	\$34,505
University of Sussex (England) <i>International Development</i>	\$18,921

Also, leading edge information technologies are used to achieve cost reductions and improve instructional reach. Between Class One and Class Two the Graduate School upgraded its Internet educational platform from a first-generation system to Blackboard, allowing for more robust online discussions and a more orderly way to submit and receive feedback on assignments. Between Classes Two and Three, substantive improvement

continued by changing to the Moodle Internet platform. For Class Three, access to Dimdim brought a new tool: “Webinars.” Class Four will use video conferencing.

But simply advancing to the next state-of-the-art Internet platform turns out not to be optimal pedagogy. The challenge is to match the strengths of each information technology tool with student learning needs. For example, simple e-mail remains a powerful tool, so much so that some of our professors use e-mail exclusively for one-to-one communication with students, encouraging the students to use it in turn to engage with their communities. Other professors seek to promote student-to-student interchange, and for this purpose the modern platforms work better. The skills acquired and the knowledge gained in the program are global in nature but local in application. Therefore, as is appropriate in a professional master’s degree, 85 percent of the program’s learning objectives are skills and knowledge necessary for the graduates to be successful in the workplace. Three components of the learning objectives that specifically address the global nature of society are:

- Relate local development to national and global forces of change
- Apply principles of resource allocation economics
- Access Web-based information, discerning what is most appropriate and factual

These learning objectives were developed based on an assessment of what one needs to know to be an agent of change, integrating community development with environmental concerns. As noted previously, the planning for this curriculum included Future Generations faculty and also two advisors whose academic experiences brought decades of perspective (Professor Carl Taylor, from the Department of International Health at Johns Hopkins and Dr. Joan Dassin, the Executive Director of the Ford International Fellows Program). The learning objectives that have been developed include an emphasis on “on the ground” skills and are reflected in the individual course objectives. It is our students that bring meaning to these learning objectives, as they work to determine what concepts like empowerment really mean given their diverse cultural, religious, and political perspectives.

The Future Generations Graduate School master’s curriculum has only been “used” in its entirety by three classes. As with any young curriculum, particularly with one embedded in innovation, the “bugs” are still being worked out. Interestingly, effective answers seem to be coming not by looking for problems but by a forward focus, finding what has worked and then seeking to make that work better. Through this approach we are finding it easier to exploit the significant potential of blended learning. Traditional pedagogy in higher education does not have an equivalent ability to build lessons around first-hand learning—in home communities through mentoring, at global demonstrations of best practice, through engaging such a globally diverse student body. As a result, traditional pedagogy instructs through secondary sources—case studies and data presented in textbooks and journal articles, professor’s accounts of visits to outstanding demonstrations or lectures about them, and reports that students bring back from their fieldwork. These traditional instructional modes are useful, of course, so blended learning uses them as foundations of learning—and adds the mentored on-site experience.

By basing our focus on the constantly unfolding potential of blended learning, new options come forward and older problems seem to melt away. Illustrations of this evolving use of blended learning are presented for Criterion Three in this self-study. Another example is the following instructional change by Professor Daniel Taylor. In Classes One and Two for his course, *Going to Scale*, he moved from using the simpler online discussion platform to Blackboard, expecting students would engage in more vibrant dialogue. But in Class Three, he dropped the interactive online approach entirely, reverting to only e-mail. Through professor-to-student e-mail he found that it was possible to focus students not on interacting with each other but rather on interacting with their communities. Students were assigned to engage with their communities then report on that as a course paper. The paper was critiqued and students were sent back into their communities to re-engage. This iterative mentoring could never have happened so effectively with the older method of sending students out to do their thesis, then communicating with their professors through post and phone. If students had remained online communicating with each other, it would have been difficult to hold them accountable to community realities (exhibit 5.30).

Future Generations self-evaluation process, mentioned earlier in this chapter, includes the evaluation of pedagogy (noted above) and the program's innovative curriculum. Input is from multiple sources, including seasoned teachers and cutting-edge development practitioners. Some of the most useful critics, though, have been our students. They are happy to tell us what works and more than happy to tell us what doesn't (exhibit 5.31), for example, in the end-of-residential reports. As mentioned earlier, a variety of assessment tools have been used (formal residential evaluations, a campus satisfaction survey, group discussions with faculty, staff, and Board members, and individual student course evaluations) to gather input to guide curriculum modifications. One as yet unmet point of criticism has to do with more effective input from the communities with which students engage, an issue of program growth and a challenge that is discussed at greater length under Criterion Five.

Scholarship is an important aspect of the program. Students are expected to exhibit scholarship in writing their term papers, in online class assignments, and especially in their practicum work. Students are given instruction in accessing library resources during their U.S. and Peru residentials. Stated expectations and standards are essential, but it is also important to recognize the global variation that a program such as this one experiences, and the different preparation students bring upon admission. They operate under different national standards, with differing values, professional supervision, and student preparation. Hence, the educational regimen at the Future Generations Graduate School must respond to this input variety while holding to the U.S. standard of academic output. A highly individualized instructional approach makes this possible.

#### Evaluation of core component 4.c

As shown throughout this report, the master's program addresses our global society. As the program matures, Future Generations has systematically advanced, especially through its institution-wide established program of self-evaluation. The Graduate School is increasingly soliciting formal and more rigorous input from all the constituencies involved. Additionally, the recent alumni survey will provide a further check on how

our master's education is used by alumni and accepted in the development community (notwithstanding the small sample size of two graduated classes).

**Core Component 4.d** The organization provides support to ensure that faculty, students, and staff acquire, discover, and apply knowledge responsibly.

The Graduate School is responsive to the needs of the students, faculty, and staff and looks continually for ways to support their acquisition of knowledge and scholarship. Of primary importance is providing students with the library/cybrary resources necessary for the literature review on their practicum topics and ongoing research needs. The master's program has been experimenting with a range of options including partnering with other higher education institutions to obtain access to their online databases, purchasing external hard drives containing educational resources (such as the eGranary digital libraries), subscribing to an academic database, and accessing free or low-cost journals available to developing countries (exhibit 5.32). Some things have not worked (for example, database licenses prevented us from accessing resources of another institution) or are too expensive (the eGranary hard drive is \$750 per student). Finally, after considerable research and discussion, we identified the services listed in the previous section "Addressing the 2007 HLC Evaluation Review Report." This discussion is, of course, not closed. As we continue to identify resources and strategies to support student scholarship, they will be implemented. Of particular promise is that the field of electronic acquisitions is itself advancing so rapidly as the Internet develops and more materials come online for less cost; trajectories of growth by Future Generations on one hand and by the Internet on the other are converging in exciting ways for student learning.

The master's students also benefit from the research and culture of rigorous inquiry developed in Future Generation's four country programs. Currently there are seven research initiatives connected with the country programs: community-based primary health care, engaging people in peace building, community-based conservation, Himalayan ecosystem analysis, social change evaluative research, pregnancy history surveys assessment, and internal review of country programs. Within this culture, where the faculty is actively engaged in the acquisition of knowledge, the students see that research is valued, and they get guidance from faculty who are experienced. This substantive depth contributes greatly to grounding their practicum research and informing actions in the communities where they work. The information is wide-ranging, covering public health, local environmental conditions, demographic information related to education, crop productivity, and other topics. Knowledge gained from this data is always shared with the community. Moreover, the community is almost always a full partner in its collection. Vital to the research undertaken in the Graduate School and country programs is the Future Generations Institutional Review Board (IRB), registered in January 2008. The IRB vets institutional and student research to assure the ethical treatment of any research subjects. Although Future Generations does not conduct clinical medical studies, it does conduct social science research and gathers health-related information from different groups of people. The organization is also involved in a global research effort on engaging people in peace building, as well as conducting environmental and economic research. All of these bring with them important ethical issues that require monitoring and institutional oversight. The Future Generations IRB has already reviewed research



protocols in the following studies:

- 1) Evaluating the Impact of Kitchen Gardens in Kurung Kumey, Lower Subansiri, and East Siang Districts of Arunachal Pradesh Using Capability Approach. (The principal investigator is a JHU doctoral student under the supervision of Future Generations Arunachal.) The IRB exchange on this research project is provided in exhibit 5.33.
- 2) Pregnancy Histories to Measure Child Mortality Decline in Yakowlang District Bamian Afghanistan. (The principal investigator is Future Generations President Daniel Taylor.)
- 3) Exploring Synergies between Empowerment and Gender and Comprehensive Primary Health Care in Three Tribal Districts of Arunachal Pradesh. (The principal investigator is Future Generations Arunachal director Kanno Tage.)

The IRB process is handled somewhat differently with the master's students because of the nature of their research and their relationships with the communities where the research is taking place. Normally the students carry out their research with an internal rather than external constituency, significantly reducing the possibility of exploitation. In addition, the students' practica often involve project implementation in collaboration with the community rather than academic research performed "on" the community. Each student's faculty advisor in collaboration with the IRB chair makes the ultimate decision whether or not the student should submit his/her practicum research for a full IRB review. To this date, no student proposal has warranted such review.

Membership of the Future Generations Graduate School IRB is as follows; each member's affiliation is noted.

**Table 5.4** IRB MEMBERS AND AFFILIATIONS

Name	Position	Organization	Location
<b>Members</b>			
Dr. Laura Altobelli	Country Program Director	Future Generations	Lima, Peru
Dr. Chris Cluett	Sr Research Scientist	Batelle Corporation	Seattle, WA
Dr. Wade Davis	Ethnobotanist/ Explorer in Residence	National Geographic	Washington DC
Dr. Bob Fleming	Professor	Future Generations	Springfield, OR
Dr. Henry Mosley	Professor	Johns Hopkins University	Baltimore, MD
Dr. Mike Rechlin	Professor	Principia College (Joint Appt. at Future Generations)	Elsah, IL
Ms. Christie Hand	Registrar Chair of IRB	Future Generations	Franklin, WV
<b>Alternates</b>			

Ms. Fran Day	Dean of Institutional Advancement	Thomas College	Waterville, ME
Mr. Johan Reinhard	Explorer in Residence	National Geographic	Franklin, WV

The Future Generations Code of Ethics and the student code of conduct in the Student Handbook provide ethical guidance for students and faculty in the responsible conduct of research. The Code of Ethics references our IRB as a way of assuring appropriate high ethical standards. The code also addresses our commitment to intellectual freedom and the sharing of ideas as well as the grounding of all Future Generations work in a sense of equality, mutual respect, and cultural sensitivity. The Future Generations Code of Ethics also addresses the organization’s commitment to the respect of intellectual property rights. The Graduate School follows commonly accepted procedures regarding photocopying materials for class use and the protection of copyrighted software.

### Evaluation of core component 4.d

Future Generations has in place a rigorous process of evaluation to look specifically at ethical issues. The IRB has demonstrated its independence and its diligence in some complex and challenging reviews. In parallel, members of the graduate school faculty have submitted a significant number of their publications for peer review (during the last year, Daniel and Carl Taylor, a book manuscript to Oxford University Press; Henry Perry, three articles accepted for publication; Jason Calder, a chapter in *Worldwatch State of the World 2008*). Future Generations values learning and supports that learning in its faculty and staff.

One important additional vehicle that has been established in the last two years is the “occasional paper” series. Finished occasional papers are posted in PDF on the Future Generations Web site by both faculty and students, and can be easily downloaded anywhere in the world. Professor Robert Fleming has made 8 publications available this way. Future Generations had made dramatic progress with this since a full-time information technology specialist joined the organization in mid 2008, and this individual, a student in Class Four, will actively develop this information resource to a much greater extent.

### Conclusions

Future Generations is a learning institution. It is the value the organization places on learning that caused the parent CSO to form the Future Generations Graduate School. Future Generations faculty are scholarly professionals, who strive to impart an inquisitiveness and love for learning to their students. Country Programs are demonstration sites where knowledge of community change and conservation are acquired, improved upon, and extended to the larger community. The ethical conduct of the organization’s research endeavors and the socially responsible use of its research findings are central to the philosophy through which Future Generations operates.