

**Shifting Gears:  
The Role of Reference and Research Services  
in  
Curriculum Design**

**A Case Study of Faculty and Library Collaboration  
at  
the Harvard Business School**

**“Changing Points of Reference and Shifts in Higher Education”  
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## **Introduction**

Baker Library at the Harvard Business School (HBS) is in the third year of a large-scale change process that has realigned the Library's services in support of the teaching, research, and learning at the School. To realize its new mission and strategic plan, the Library has created several new departments that extend traditional academic library services. This paper outlines the process of establishing one of the new departments – the Curriculum Services Group, a unit within Baker that combines deep subject matter expertise and business information resource knowledge with expertise in curriculum development and teaching in higher education. It follows the Group's development from identifying a strategy to implementing pilot projects to evaluating outcomes and assessing impact.

“Shifting gears” looks at how roles and responsibilities have changed in moving from a more traditional faculty reference/research service model to a dynamic collaboration that embeds the Library's human and material resources in the curriculum development process at a graduate school of business administration. The “gears” represent the phases in the change process, a progression that begins with the mandate for change and ends with reflection on the approach and the impacts achieved.

With this paper, Baker hopes to start a dialogue among a community of interested people who would like to explore this new role in curriculum development for reference and research services – a role that partners with faculty in the creation of learning opportunities for students, leverages information resources, and increases faculty productivity as part of a comprehensive course development approach.

### **1<sup>st</sup> Gear – The Alignment Challenge**

In Fall 2004, Harvard Business School named a new executive director – a non-traditional information professional who had never managed an academic library, but had been responsible for knowledge and information asset management at a major US software technology firm. This move signaled the School's commitment to change. With a mandate to more closely align library services with faculty needs, the senior

management team led a strategic planning exercise that identified a new mission and a series of goals, strategic objectives, and key initiatives – all based on the Library’s four distinctive capabilities:

- **Information research:** expertise on the HBS institution and in the School's areas of teaching and research.
- **Knowledge sharing and information management:** expertise in enabling the sharing of what people know, and in capturing, organizing, managing, packaging, preserving, presenting and disseminating content (historical, archival, institutional, published) both physically (i.e., at Baker Library and across Harvard Libraries) and virtually.
- **Information product design and management:** expertise in understanding user behavior and implementing an information environment that best meets the requirements. (e.g., portals, personal workspaces, Web sites)
- **Information architecture:** expertise in structuring information so that the right information is available at the right time and place. (e.g., search, taxonomy, navigation, thesauri, topic maps).

As a way to manage audience expectations and measure goal achievement, the Library implemented a balanced scorecard (see Kaplan and Norton 1996) that assesses progress against the strategic plan in terms of four perspectives (customers, internal processes, employees, and financial). In addition, an audience portfolio management approach was implemented that identifies audience-specific needs, provides oversight for related service initiatives across Baker, and manages the overall audience/customer relationship.

Workforce planning, including the identification of core competencies, job families, succession planning, and the expected customer service experience, is a current initiative focused on building the capacity needed to achieve Baker’s mission:

*Baker Library supports Harvard Business School’s mission  
by enabling the creation and exchange of ideas, expertise, and information.*

The elements outlined above lay the foundation for the change agenda in general, but more specifically, provide the framework for shaping the Library's role in supporting curriculum development at HBS.

## **2<sup>nd</sup> Gear – The Curriculum Strategy**

Harvard Business School faculty pioneered the case teaching method in 1920. Today, cases remain the primary learning vehicle for MBA students and Executive Education participants. While Baker Library already had a successful service to support faculty research and related case development, there was less understanding of the mechanics of the curriculum – in particular, how courses were developed, the life cycle of cases, and the case-based teaching methodology. Baker's new strategic plan identified information research services in support of course development and teaching as a growth area. To that end, a managing director position was created with overall responsibility for defining and managing an information support strategy for the curriculum and research programs at HBS.

In Fall 2005, the position was filled with an educator who had experience in curriculum development in graduate professional schools and knowledge of academic libraries gained from experience in the information and professional services industries. The mandate was two fold: within Baker Library – to create a service portfolio for curriculum and research processes; and, across HBS and eventually Harvard University – to build partnerships at the programmatic level (e.g., MBA, Doctoral, Executive Education, IT, Global Research Centers, Division of Research and Faculty Development, Christiansen Center for Teaching and Learning).

Using Tushman's (2004) research on how to manage strategic innovation and change, the Curriculum Services Group was created in early 2006. Three positions from Reference Services were assigned to the new Group and filled by individuals who had varying combinations of: strong relationships in the programs, deep business-related subject matter expertise, extensive business information resource knowledge, research skills, and higher education teaching experience.

The Group developed a strategy framework (see Appendix A) with the overarching goal:

*Enrich the teaching and learning experience at HBS*

*by leveraging Baker Library's expertise and resources to support curriculum and course development processes.*

As well, a three-pronged approach was created that outlined the Group's work in the first year: map the teaching and learning landscape, map the case development process, and implement a small number of pilot/proof of concept projects that identify faculty needs and the components of a service model to support the course development process.

The Group's work was focused by a guiding principle:

*If learning is the process of turning information into knowledge in order to take effective action, then we need to be strategic about the use of information throughout a course – from creation to implementation to evaluation.*

With the overarching Baker strategy and a roadmap for their Group, Curriculum Services was ready to shift gears again and build the capabilities they needed before they could engage faculty in the pilot/proof of concept projects.

### **3<sup>rd</sup> Gear – Mapping the Landscape**

Baker's reference librarians were not total strangers to the MBA, Doctoral, or Executive Education programs. They had supported student research work, answered in-depth reference questions, worked with faculty on course support materials, maintained a comprehensive Web site with research guides, subject guides, industry guides, and country guides (see <http://www.library.hbs.edu>), provided in-class and special event database training, hosted student orientations and club activities, and maintained liaisons with teaching units. (Please note: this is a representative, not an exhaustive list of services.) Basically they responded to a whole host of information access/reference needs of the HBS community.

However, they were less familiar with the decision-making process about curriculum, course, and case development and needed to understand more about the life cycles, governance structures, and timeframes in order to be “at the table” in a proactive position at the beginning of the course development process. To that end, the Group divided up the landscape in order to focus their efforts at the program level (e.g., MBA program, Executive Education program, case development and management). They then began to systematically review available HBS information and meet with key stakeholders (e.g., senior administrators, faculty, and program staff) in order to understand the life cycle components, the decisions and tasks, time frames, and the entry/engagement points for information use. They also identified what services and resources Baker was already providing in order to assess the gaps and identify opportunities to engage in the curriculum, course, and case design and development processes.

In addition to the program reviews, Curriculum Services staff interviewed a number of faculty who had developed courses in the last several years to understand their approaches and to explore ways that Baker could have supported them in their efforts.

This mapping initiative not only yielded a wealth of information and a deeper understanding of the general curriculum and the workings of the School, but served as a marketing opportunity to build stakeholder awareness of Baker’s strategy and the Curriculum Services Group’s capabilities to support the programs’ work.

In conjunction with mapping the landscape, the Group began to increase their own capabilities through a study group that met on a bi-weekly basis. They learned key educational concepts (e.g., Dewey 1910/1997; Tyler 1949; Garrison and Anderson 2003) and studied HBS publications on teaching (e.g., Barnes et al. 1974; Christensen et al. 1991). They also designed an action research project that would document their work and focus their reflection on its impact (Schon 1983).

#### **4<sup>th</sup> Gear – Establishing the First Pilot Project**

As was learned in the mapping exercise, the case development process is a thoroughly documented and managed process and the MBA curriculum is equally outlined and administered. However, there wasn't a standard course development process outside of the approval and funding stage at the beginning of a course development initiative. It was basically open to the individual practice of faculty, especially in the development of Elective Curriculum (EC) courses that students take in their second year. Faculty openly share their approaches with one another and there is an opportunity for faculty members to obtain feedback on their course development in a seminar format (i.e., presentation, discussion, and feedback in a trusted environment). Due to the variations in course development approaches, the Curriculum Services Group decided to identify at least three pilot projects, each with different variables, so that they could explore a wider variety of service options to meet individual faculty needs.

Through sheer serendipity (a chance conversation at a seminar on private equity investing), one of the Curriculum Services Specialist learned of a new course development project and offered her help. She met with the faculty member, outlined the Library's thinking about what value could be brought to the process, and obtained agreement to enter into a pilot project where Baker would collaborate with the faculty member on the development of a half course slated to be taught in the Fall 2006 term.

A team was formed that included the faculty member, his research associate, a member of the Curriculum Services Group (who was the project team lead from Baker), the Associate Director of Baker's Research Services Group (BRS), and the Managing Director of Baker Library Services (who acted as an observer for the action research project and an advisor on the curriculum development process). To guide the process, the team used the generic ADDIE model – analyze, design, develop, implement, and evaluate (see Molenda). For the next eight months, the team worked through the analysis, design, and development phases. Central to the work was developing the 12 cases that comprised the course content. Early in the case development, the team realized that additional research help would be needed and a BRS researcher joined the team.

In addition to the case research support, the team proposed a learning activity that would run throughout the course. A subset of students (self identified) would complete industry research that would help set the context for each case – to act as industry experts to advise on the investment decision to be discussed in each class. Resource pages for each industry were developed to support the specific focus of each case and assist the students in their research efforts. In discussion, the team realized that students would benefit from more specific guidance on how to complete industry research. A technical note was co-authored (El-Hage and Cullen 2006) and distributed to the class.

During the three-month course, at least one member of the Baker team attended each class, observing the degree to which the students' insights, acting as industry analysts, contributed to the case discussion, including how the faculty engaged them in cold calls. The team also provided continuous research support, adding finishing touches to the new cases, supporting the teaching points, and providing updates on current events surrounding the cases and their protagonists. The Baker team was somewhat misguided in thinking that once the course was underway, the intensive support of the first phases would subside and their attention would shift to observation and assessment. In the end, they provided almost as much research support during implementation as they did in the analysis, design, and development phases.

The key objectives for the pilot were to identify the support Baker Library could provide to the course development process (see Appendix B for the list of service components drafted for the Group's strategy) and to assess the benefit of that support to the faculty member. Based on these findings, Baker could then develop a service model. After the course was finished, the team engaged in a debriefing that reviewed the chronology of events (see Appendix C for a sample of the activities and Appendix D for a sample of course processes and outputs) and obtained the faculty members' assessment of the Baker Team's contribution to the course development process. Comments included: "I was more productive with your input." "You helped create a deeper learning experience for the students." "You brought a level of organization to the course design process that I



couldn't have done.” “You provided opportunities to use information in ways we'd never thought of before.” It was clear that the Baker team had added value to the process and that this first pilot project provided a wealth of experience that could be translated into a viable service offering for the Library.

At HBS a new course is typically offered first as a “half course” where ideas are tested and student feedback obtained. In the following year, the course is expanded to a full course, often adding a new module, revising existing cases, and developing new ones. To the Baker team, resounding success came when the faculty member wanted to know when they were going to start on the course expansion – an opportunity to continue the collaboration and further extend the Curriculum Services Group's support model. At the point of writing, the team has already met to discuss ideas for an additional module, identify the cases that need revision, and brainstorm ideas for new case development.

From this pilot project, the Curriculum Services Group has:

- Identified components of a service model based on a dynamic, iterative exchange of ideas to formulate content, learning activities, learning resources, and teaching support
- Assessed the individual capabilities required to support the service model, including expertise in: the subject matter; related information resources; research methodologies; learning activities, resources, and material development; collaboration; and relationship management
- Identified the resource allocation needs (material and human) to support a course development project of this nature
- Created a framework for a technical note on industry analysis that can be used to create additional notes (e.g., company analysis, competitive analysis, etc.)
- Added to their knowledge of the teaching and learning environment at HBS
- Leveraged Baker's content as a supplement to the case-based learning methodology.

## **5<sup>th</sup> Gear – Establishing the Second Pilot Project**

Several months into the first pilot project, Baker's Executive Director was meeting with one of the School's Research Directors, a senior faculty member responsible for stewarding the research agenda of two of the School's ten teaching units. He was preparing to expand a course that he had taught for the first time in the previous term. When he heard about the work Baker was engaged in to develop a curriculum support model, his immediate response was, "I want one of those, too!" And like the serendipity of the first pilot project, a second opportunity to test a curriculum support model was identified.

For this pilot project, the majority of the course content had already been identified. The opportunity for Baker to support the faculty members' work took a different direction. It did not focus on case development as did the early phases of the first pilot project. Rather given the emerging body of work (i.e., the study of business's role in alleviating poverty), there was a greater need to create an information portal to support the central question, "How can we use our collective intelligence to find answers?" And linked to this question, a need to support the research projects the students would undertake to identify opportunities to create viable businesses serving base-of-the-pyramid (BOP) markets.

Further discussion with the two faculty members teaching the course led to identifying three short and long-term objectives for the collaboration with Baker: build a knowledge center, prepare course support materials, and provide additional support to the HBS Social Enterprise seminar series. (See <http://www.hbs.edu/socialenterprise>). And, a fourth objective of identifying a collaborative research and course development model to guide Baker's service portfolio was included to tie this project into the Curriculum Services Group's strategy and action research project. (See Appendix E for excerpts of the project plan.)

Early in the pilot project, the core project team brainstormed about what this portal might look like with Baker's Information Project Group and the Knowledge and Information Assets Group (two other groups created to support Baker's new strategic plan).

Additional ideas were contributed by the Executive Director, whose information industry expertise was key in helping the concept of a “knowledge center” take shape. With the identification of articles and cases underway by the Baker knowledge analyst, the project team expanded to include Web product designers and developers and two taxonomists to provide the repository and the organization of the knowledge center content. The realization that HBS did not have the middleware needed to support a dynamic build capability led to utilizing the framework for an existing Baker Web product, *Working Knowledge*. (See <http://hbswk.hbs.edu/>.) While not the perfect solution, it was an interim solution that enabled the team to support the January start of the class.

Preparing the course support materials for the start of class in Winter Term (January 2007) built on Baker reference librarian’s past work. However, new dimensions included:

- Write a primer that provides an intellectual underpinning for the course. The team was asked to prepare an overview of “what is poverty.” The reference role was expanded from identifying sources, to analyzing key concepts and preparing a paper to be posted in the knowledge center.
- Create a reading list of 20 seminal articles on key concepts discussed in the course and case studies (non-HBS), tagged by concepts. This became an annotated bibliography of sorts, but housed in the knowledge center.
- Compile data sets by country that could be used to identify BOP opportunities in a given market or sector based on the analysis of country macroeconomic data, understanding of the poor and their needs, consideration of business models, and an analysis of successful leaders’ behavior.

At the point of writing, the course is nearing its midpoint. The project team and Baker reference librarians presented the BBOP Knowledge Center (see Appendix F) to the students and their research is now underway. The faculty is considering how to represent the students’ work in the BBOP Knowledge Center as a way of adding to the discussion that first framed the concept – “How can we use our collective intelligence to find answers?”

From this pilot project, we have:

- Established a model for collaboration across three of Baker’s new functional groups
- Developed a concept design of a knowledge center (scalable, extensible, and sustainable) and identified the technology infrastructure needed to build it
- Established an approach to taxonomy development for course support (See Appendix G)
- Engaged in supporting the Social Enterprise Initiative
- Identified additional components to Baker’s curriculum development support model.

## **6<sup>th</sup> Gear and “R” – Next Steps and Reflections**

The “gear shift” metaphor breaks down somewhat at this point – *over drive* and *reverse* suggest a high-speed cruise and a backward motion, neither of which are appropriate for describing where the Curriculum Services Group is in relationship to their strategy. Rather, *next steps* and *reflections* are apt categories to summarize the Group’s development approximately a year after its inception.

The pilot projects outlined in this paper have confirmed that there is an expanded role for Baker in supporting curriculum development at HBS. And as was suspected, each project followed a slightly different path with unique needs identified and different services offered to meet those needs – an opportunity to create a portfolio of service components that can be assembled depending on future curriculum development project needs.

Concerning next steps, the Curriculum Services Group plans to:

- Develop a service delivery model. Identify the components, articulate the user experience, and describe the collaborative framework
- Establish the infrastructure to support the service model. Create a scalable framework that addresses resource allocation and capability development implications

- Expand the market. Create awareness of the service with a dual track communication strategy aimed at program administration, chairs, unit heads and other stakeholders and at individual faculty members
- Establish Baker's role as a trusted advisor and partner in the life of the School's curriculum. Align with the Dean's initiatives, the Centennial project initiatives, and current program reviews.

As for reflection, we've just begun the analysis of the first pilot project and plan to review the second later this spring. First we've identified what has changed from past involvement in course support projects (i.e., projects that were completed as information research support provided by Baker Research Services or through course support and student training provided by Baker Reference Services – both units are part of Baker Library Services). This preliminary reflection can be categorized as changes in the type of work completed (i.e., the deliverable or product) and how the work was completed (i.e., the approach or methods).

Central to this change is the collaborative nature of the work. Baker staff members are valued by the faculty not only for their professional skill, but for their ability to engage in an exchange of ideas – an iterative process that creates new knowledge and packages that knowledge in support of learning opportunities. It is a proactive versus reactive engagement where Baker is “at the table” early in the design phase. Where resources are not just identified, they are created and new ways of using them are identified in order to inform student learning. Where deep subject matter expertise gives credibility to the discussion and Baker is established as a trusted advisor, not just of resources, but of the concepts, theories, and practice that comprise the faculty's area of research and students' study.

The comprehensiveness of Baker's engagement in the analysis, design, development, implement, and evaluation of a course and the involvement at programmatic or administrative levels are also significant changes from past course support efforts.

All of this change has meant we've needed to build new individual capabilities – to increase our understanding of teaching methodologies and curriculum development approaches in higher education. And to build the organizational capacity to support an *infostructure* (i.e., an information infrastructure) that surrounds the teaching and learning environment at HBS.

## **Conclusion**

This work embeds libraries and information professionals in the higher education learning process. It expands the more traditional “instructional” role of reference librarians as purveyors of information literacy and research skills and situates them as partners in the curriculum development process – the creation, management, and use of information to provide learning opportunities that achieve course-specific educational or learning objectives. It also illustrates the need to develop the organization’s capability to collaborate – both across functional groups within a library and with faculty and program administration.

This case study about one aspect of Baker Library’s realignment provides an example of how reference librarians and information researchers can be repositioned to support faculty in order to increase faculty productivity, reduce the time it takes to develop a course, leverage research and resource investments, and enrich the student learning experience.

As noted in the introduction, Baker hopes to start a dialogue and engage a community of interested people to further explore this new role in curriculum development for reference and research services – to increase our understanding of the capabilities (individual and organizational) required to support a comprehensive course development service and the contribution this service makes to higher education.

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**Appendix A**  
**Curriculum Services – FY06 Strategy**  
(Draft for Discussion #1 – February 2006)

**Goal:**

Enhance the teaching and learning experience at HBS by leveraging Baker Library's expertise and resources to support curriculum and course development processes.

**Objectives:**

- Map the teaching and learning landscape for MBA (RC and EC) and Executive Education programs
- Identify the life cycles and entry points in the curriculum, course, or case development processes where Baker Library could collaborate on design and development activities
- Identify models for creating leading-edge learning resources, support materials, learning activities, etc. that are based on Baker's knowledge and information assets as well as business information resources beyond our holdings
- Identify how information resources can support the development of learning resources or materials that are developed as e-learning technologies
- Map the case development cycle and identify opportunities where information management principles/approaches could be applied to enhance access and use
- Identify the stakeholders/partners in the curriculum course, and case development process with whom Baker could collaborate
- Identify other libraries' approaches to support curriculum and course development
- Compile a portfolio/catalog of curriculum and course support services
- Begin to develop standards for Baker Library Curriculum Services, including: vocabulary, service delivery expectations, evaluation/feedback on work, etc.
- Undertake an action research project on our curriculum services and support initiative
- Begin to create awareness of Baker Library's proactive, programmatic curriculum services strategy
- Map relationships and interdependencies with curriculum initiatives and other Baker Library strategic initiatives (e.g., Information research standards, Content management strategy, etc.), mission, and goals.

**Strategy:**

1. Map the Teaching and Learning Landscape:
  - Process – points where information resources are used/consulted
  - Development life cycle
  - Decision makers
  - Information needs
  - Budget implications/consideration
2. Map the case development process
  - Stakeholders



- Life cycle – create, revise, update, retire
- Use of information resources to develop
- Information management issues

3. Identify a small number of pilot projects to identify faculty needs and the components of a service model to support the course development process

**Appendix B**  
**Course Development Services:**  
**Leveraging the Baker *Infostructure***  
(March 2006)

**Hypothesis:**

The process of developing a course can be enriched through a collaborative approach whereby the faculty member, research associates, and Baker Library Services staff form a team that works together to maximize the students' learning experience by integrating a wide-range of customized activities, learning materials, and business information resources into the course design.

**Guiding Principles:**

If learning is the process of turning information into knowledge in order to take effective action, then we need to be strategic about the use of information throughout a course – from creation to implementation to evaluation.

The combined knowledge of a faculty member's field of study, research and teaching expertise and Baker curriculum support librarians' subject and related resources expertise coupled with HBS's course and case development resources enable a dynamic, iterative process.

**Components:**

The course development process has multiple entry or engagements points where information is required. In collaborative course development projects, we explore the possibilities of how, where, and when Baker Library research and curriculum services staff can support the faculty member, who is leading the course development initiative, including:

- Framing the course context – analyzing the context surrounding the course topic; identifying industry trends, major issues, and components of “the story” from which the course content will be drawn.
- Identifying the general learning goals and the specific learning objectives/outcomes – understanding what students are expected to learn from the course, the emphasis the faculty member wishes to make, the outcomes that are expected to be achieved through the learning experience, including the development of subject expertise as well as analytical skills.
- Providing research support for case development.
- Designing information-intensive learning activities that extend course knowledge and related skill development.
- Developing learning/resource guides in support of course topics.
- Identifying existing or developing new teaching resources (print and non-print) to supplement teaching approaches. (Note: Courseware development is by HBS IT's Educational Technology Group.)
- Working through the logistics of making the course information available (e.g., course links and resources mounted on the course platform) and other related logistics

- Exploring opportunities to leverage the web in course design and delivery
- Supporting course implementation (e.g., individual or group training on specific database use if necessary and approaches to information analysis if appropriate)
- Participating in course development and implementation process assessments (formative and summative).
- Exploring next steps in leveraging the body of information and knowledge created for the course (e.g. further publication requirements).

### **Pilot Project Approach for EC Illiquid Assets Course:**

Step 1: Create a course development team, including:

- Faculty member:
- RA:
- Baker Library Services staff (curriculum services librarian and research services team member):

Step 2: Identify a course development process and pay particular attention to the information resources (human and material) needed at each stage of the process:

- Analysis: understand the context for the course and content to be covered, intended audience, constraints, assumptions, and risks
- Design: identify the learning objectives, expected outcomes, success measures
- Development: design instructional approaches, activities, resources, and assessment tools; plan logistics
- Implementation: run the course
- Evaluation: obtain feedback, reflect, revise and follow up

Step 3: Develop a project plan and begin the work!

**Appendix C:  
Sample Activity Analysis**

As part of the action research project, the project manager for the private equity course development compiled a spreadsheet that tracked the interactions and deliverables produced by the Baker team. The following experts are typical of the types of entries found in the original document, which spanned the pilot project’s first phase (Feb. 2005 – March 2006) and included over 100 entries.

**AIIA-Baker Project - Major Events/Activities - Highlights Summary**

Month/Year	Date	Activity/Event Description	Key Points	1	2	3	4	5	6
February-06	2/4/06	VCPE Conference - "Private Equity-Hedge Fund Convergence" panel - faculty member was the moderator. (CS project manager covered this for a 2/20/06 article she wrote for Working Knowledge.)	First connection; article for Working Knowledge						X
February-06	2/10/06	First meeting with faculty member regarding this project. Some key comments: 1) Do industry research to understand the industry dynamics, 2) Baker could assist with helping to frame the story of the course and the course context and help with direction of cases, 3) Baker could design learning activities to fulfill learning outcomes, 4) Help answer questions - How do you use information to inform the decision making process - how to uncover information that the due diligence memorandum doesn't provide, 5) What can be incorporated in the course to develop their analytical reasoning skills. Dean requested that a course be put together on this topic.	First meeting with faculty member				X		
February-06	2/23/06	Baker Library Services Managing Director sent faculty member a "Draft for Discussion #1" - laying out the hypothesis, scope and how the project would be approached. Entitled "Testing a Collaborative Course Approach". Included that the ADDIE model would be used and that this would be an "action research project".	Process outline - first draft for discussion - action research project			X			
March-06	3/1/06	From March RA sending Baker project team lists of cases under development as a means to let us understand their thinking about what the course would be.	case development				X		
March-06	3/12/06	AIIA Course-Baker Project Plan finalized and accepted by faculty member.	Project Plan finalized			X			
March-06	3/19/06	CS project manager made up a document mapping a list of possible cases within the course structure as currently understood. This document was then built up throughout the Analysis and Development phases of the project. This became a working document for faculty, RAs and Baker.	List mapping possible cases to the course structure.				X		
April-06	4/12/06	Team Meeting - Main point discussed was potential activities and library created resources for the course.	Potential Classroom				X		

			activities brainstorm						
May-06	5/1/06	Baker Library Services Managing Director devised "Learning Activity Framework" - to structure proposed learning activities around.	Learning Activity Framework template			X			
June-06	6/16/06	Team Meeting - Discussed having only one learning activity that would continue through whole course. Selected one of the three proposed learning activities. Decided members of the Baker team will create an outline for "How to do Industry Research" connected with the learning activity selected.	Learning Activity for course				X		
August-06	8/1/06	Team Meeting - Faculty member told the story of the course, which was taped so a transcript could be made. Ongoing development discussion on learning activity and "how to do industry research guide".	Tell the story of the course				X		
August-06	8/7/06	Team Meeting - Industry Expert activity devised in this meeting. Because the course was over-subscribed, an additional faculty member was brought on board to teach a second offering of the same course.	Industry Expert activity, and Industry Research Guide				X		
August-06	8/21/06	Baker Information Product's Group support for AIIA-Baker project - Explored options for making Industry research guide interactive. After some exploration and discussion, found given the tight deadline that at this late stage creating an interactive product was not an option.	making Industry research guide interactive				X		
September-06	9/1/06	Industry Expert Learning activity draft created for review.	Industry expert activity	X			X		
September-06	9/12/06	Team Meeting - At this meeting determined the industry research exercise needed to be rewritten and that it would have to be immediately relevant to the case being taught that day. Also finalized how industry experts identified in class and that Faculty Assistants would be responsible for industry expert sign-up. (Altogether about 140 students signed up for both courses.)	Resource Pages; exercise relevant to case; Industry expert sign-up by Faculty Assts; How industry experts identified in class discussion				X		
September-06	9/13/06	Faculty member assisted in the final version of the industry research note. Assisted in moving tone from "Baker voice" to "HBS voice".	Input from faculty member on Industry Note				X		
October-06	10/6/06	HBS "Technical Note: Performing Industry Research to Inform Investment Decisions" - distributed to students.	Industry Research Note	X					

October-06	10/10/06	AIIA Industry Expert Assignment - sent out as an email from the faculty members several days before the course started. Included in explanation: What is this? Why are we doing this? "This industry investigation is intended to parallel what you are likely to be asked to do in the private equity world..."	Industry Expert Assignment	X						
October-06	10/19/06	First Resource page posted, first day of class	Resource Page; Research Support	X	X					
November-06	11/2/06	Baker met with faculty member - to go over remaining deliverables for course. [Need arose, with realization that initial plans for resource pages had shifted somewhat] In preparation CS project manager read through all the remaining cases and made a chart to work from for remaining deliverables.	Remaining Deliverables; Resource Pages				X			
November-06	11/17/06	AIIA Class Observation Debrief - Review Baker team observations of classes so far and how and whether the industry expert exercise was included as part of class discussions.	Baker Team Class Observation - Pilot project approach				X			

**Type of Partnering/Support Rating Key:**

- 1=Deliverable
- 2=Research Support
- 3=Course Support Model
- 4=Admin. Services/Process Support
- 5=Curriculum Support Model
- 6=Other

## **Appendix D: Processes and Outputs**

An illustration of the processes and outputs achieved during the first phase of the EC Illiquid assets course development pilot project.

### ***Course Development Support Process:***

- **Project proposal** "Testing a Collaborative Course Approach" – laying out hypothesis, scope and how the project would be approached
- **AIIA-Baker Project Plan** following ADDIE model [Analysis, Design, Development, Implementation, Evaluation]
- **Structured project team meetings** approximately once a month – Mapped to project plan; concrete action items; structured discussion. Iterative course development process anchored by these regular meetings – allowed face time for discovery, review, reflection.
- **Created mapping list of possible cases to the course.** Became a working document for faculty, RAs and Baker team throughout course development process.
- **“Telling the story of the case”** – activity to help solidify understanding of course flow.
- Providing research ideas for cases at group meetings
- **Learning Activity Framework** – used to structure proposed course learning activities.
- **Formalized learning activity exploration process:** 1) reading through case drafts to determine where a research exercise might work, 2) Then devised exercise following the Learning Activity Framework template.
- **Industry Note** - Collaborative effort to determine final necessary form of deliverable.

### ***Research Support:***

- Course Development Research Support
- Data/Information Gathering and Analysis for case writing
- Faculty Teaching Preparation Research Support Research

### ***Course Output/Deliverables:***

- **Industry Expert Learning** activity assignment played a role in the entire course - “Industry Experts” as part of the class discussion and the requirement to create briefing papers to support role
- **“Technical Note: Performing Industry Research to Inform Investment Decisions”** by Nabil El-Hage and Ann Cullen, 207-069
- **12 Research Resource Pages** created for each of the cases taught in the course excluding the case for the last class. Provided information on relevant resources and how to locate them.

- **List of PE deals** since class started [10/16/06 to 12/1/06] from Capital IQ, with instructions of how to do this search. Used to support lecture of last class on the state of PE.
- **Capital IQ database demonstration** at beginning of last class (Baker provided)
- **Bibliography of Private Equity sources** - “Resources to Support Your Future Private Equity Investigations” – distributed last class
- **Markers for Industry Experts** in class discussion.



## Appendix E

### Markets (course# 1908) and BOP Business Opportunity Analysis

September 27, 2006

#### Project Outline

**Overview:** This project is composed of interrelated work streams that yield specific deliverables and create a foundation for a significant research project focused on developing an index to assess business opportunities in base-of-the-pyramid (BOP) markets.

The BOP WIKI: <http://beta.hbs.edu/confluence/display/bbop/Home>

#### Project Deliverables

1. Build a **knowledge center** of resources, including: Web sites, articles, reports, case studies and macroeconomic data organized/tagged around several variables:
  - BRICS + countries/regions,
  - Designated industries/sectors,
  - Characteristics of the poor (e.g. segmentation, behavior as consumers and producers, etc.)
  - Successful BOP companies
  - Successful BOP leaders
  - Successful forms of cross-sector collaboration.

This repository creates the “knowledge center” from which:

- Course support materials will be created
  - A collaborative learning space can be sustained where people can continue to learn more about the topic by sharing their ideas and other resources that they locate
  - Seminar series 2006-2007 will be integrated and supported.
  - Future research projects can draw information and knowledge.
2. Prepare **course support materials** for the January '07 start of class, including:
    - A primer: 5 page primer that provides the intellectual underpinning of the course
    - Reading list: Approximately 20 seminal articles on key concepts outlined in the course, tagged by concepts
    - Case studies: Identification of case studies related to the course topic areas, tagged by concepts
    - Opportunity maps: data sets by country that could be used to identify BOP opportunities in a given market or sector based on analysis of country macroeconomic data, understanding of the poor and their needs, consideration of business models, and analysis of success leaders' behavior.
  3. Support the **Seminar Series**. Plans are underway for a 6-7 session seminar series on campus in FY07. These sessions may be open or by invitation. Initial thinking is: each session will host 1-2 people presenting their research for 1-2 hours, followed by

questions and a reception. The first session is slated for November 1, 2006. We will explore the role the knowledge center will play, both as a resource in preparing for each session and in capturing and disseminating knowledge generated during and after these sessions.

4. Identify the **collaborative research and course development model** between faculty and Baker Library that was created in order to reach the project goals.

All 4 project deliverables are aligned to a central purpose for this project: **How can we use our collective intelligence to find answers?**

**Knowledge Center Research Objective**

Secondary research will identify replicable, scalable and cross-sector business models that are successful at the BOP level, as well as ways of assessing business opportunities in BOP countries/regions. Questions that guide the research process that will populate the knowledge center are listed below:

<b>Research Questions (Discovery Points)</b>
1. Who are the poor? What are the socio-cultural, socio-economic, gender and culture characteristics of the poor living in poverty and submerged markets?
2. What are the basic needs of the poor and what is the role of business in meeting them (e.g. through innovative product/ service design and delivery/compliance mechanisms)
3. Who are the poor as consumers and producers and how businesses successfully adapted to serve them as customers and leverage them as producers?
4. What are the characteristics of the companies that successfully serve BOPs? What are their business models, strategies, types/models of innovation? What challenges do they face?
5. What cross-sector collaborative models of partnerships are required for or are conducive to success?
6. Who are the subject experts, successful entrepreneurs and business leaders?
<b>*** Draft – to be confirmed</b>
7. Which BOP markets/countries present a good business opportunity?

**Course Objective (#1908)**

By gaining knowledge of the many business approaches that create value at the base of the pyramid, enhance the sensitivity and understanding of prospective managers as to how they can serve environments characterized by low income and/or poor consumers.

In addition to this course objective, several educational objectives have been identified to be used in creating course support materials. Please note: there is a direct correlation between the research and course objectives.

<b>Educational Objectives (Teaching/Learning Points)</b>
1. Identify the characteristics of the people and the environment they live in.
2. Identify these people's basic needs for physical security, food, water, shelter, health care, and energy and the ways in which companies can help meet those needs.
3. Understand the role business plays in creating employment opportunities and helping to facilitate integration of the poor into the global production system.
4. Identify overarching business principles for serving the BOP and the challenges that companies face, including market intelligence and outreach, corporate leadership, organizational culture, lack of infrastructure, scale and sustainability.
5. Understand how to build partnerships and collaboration with government structures, civil society groups, and NGOs.
6. Identify the characteristics (e.g. roles/responsibilities) of the people leading in this space.
<b>*** Draft– to be confirmed</b>
7. Conduct a macroeconomic data analysis of BOP countries to identify those with high/low BOP business opportunity

### **Project Scope**

Countries (a starter set):

BRICS (Brazil, Russia, India, China, South Africa)

Indonesia

Egypt

Mexico

Bangladesh

Philippines

Kenya

Industries/Sectors:

Utilities (water and energy)

Health care

Consumer products (e.g. electronics)

Telecommunication & IT

Personal care (e.g. cosmetics)

Agriculture

Construction

Retail (e.g. food, clothing)

Financial services, banking (e.g. microfinance)  
Education (indirectly, since this is mostly where NGOs and governments focus their efforts)  
Housing  
Tourism  
Insurance

**Project Approach:**

At the outset, the knowledge center acts as a repository of resources about the topics and issues connected with doing business in base-of-the-pyramid markets.

The knowledge center will be built by a team from Baker Library in collaboration with the faculty and course research associate. The core team will be augmented with Baker staff, including researchers, database specialists, reference librarians, taxonomists and information product designers.

## Appendix F

Pilot project #2 Web product home page.

**BBOP Knowledge Center**HARVARD | BUSINESS | SCHOOL



- ▶ **Home**
- ▶ [Country Datasets](#)
- ▶ [Articles](#)
- ▶ [Notes on Poverty](#)
- ▶ [List of Companies](#)
- ▶ [Tools](#)
- ▶ [External Links](#)
- ▶ [Contact Baker Library](#)

**HBS Links**

- [Course Platform](#)
- [Global Poverty Seminar Site](#)
- [HBS Social Enterprise](#)

### **Business Approaches to Serving the Base-of-the-Pyramid Markets**

The world consists of about 6.2 billion people. The 4 billion consumers at the base-of-the-pyramid do not indulge in the kind of consumption to which most of marketing is directed. Their needs are more basic, including health care, education, and even food and clothing. Businesses, NGOs, Aid Agencies, and Governments all play a role in serving their needs. This course will consider the several challenges and opportunities in addressing this market.

#### **About This Site**

This site is designed to support student research for the Business Approaches to Serving the Base-of-the-Pyramid Markets course, Winter 2007. While additional content will be added during the course, the site is not being systematically updated. Students are encouraged to make suggestions and provide feedback to [Barbara Esty](#) at Baker Library.

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## Appendix G BBOP Knowledge Center Taxonomy Development

Illustration of how standard terms were linked to terms the client wanted to use (i.e., BBOP Rollup Topic).

KIA_File_Name (Resource ID)	ARTICLE TITLE	Thesaurus Notation	Thesaurus Term	BBOP Roll-up TOPIC	BBOP INDUSTRY Rollup	BBOP REGION	BBOP REGION Rollup to continent
BBOP_0081	Visionary 'Dr. V' changed eye care in India	EU2	consumer needs	consumers			
BBOP_0081		IF24.8	visual system disorder	health & nutrition			
BBOP_0081		IL	health care delivery and administration		health industry		
BBOP_0081		IP	health care economics				
BBOP_0081		NK16.2	profitability		finance		
BBOP_0081	How Merck Is Treating the Third World.	SL8.6.2	poor	demographics & psychographics			
BBOP_0081		UC4.6	India			India	Asia
BBOP_0082		CK2	research and product development	products			
BBOP_0082		HF54.4.2	drug efficacy	health & nutrition			
BBOP_0082		ID16.12.20.2.2	acquired immunodeficiency syndrome				
BBOP_0082		IF24.8.4.4	blindness				
BBOP_0082		PB12.2.2	pharmaceuticals industry			health industry	
BBOP_0082		TC2	developing areas				
BBOP_0082		UA4	Latin America				Latin America
BBOP_0082		UE	Africa				Africa