

EthicShare: A Collaborative/Virtual Community Planning Project Proposal

INTRODUCTION

EthicShare Program Goals & Objectives

The EthicShare partners propose to create a sustainable online environment for the practical ethics community that employs content and tools to build community, fuel scholarship, and stimulate engagement. The EthicShare partners envision a multi-phase effort, moving from planning to a phased implementation of a community commons, an online environment that will ultimately include a content repository, systems of access and exchange, and tools of analysis. This proposal calls for a six month planning period to identify and document the specifications for this online environment through a collaboration of institutional partners. During the planning phase, one area of practical ethics, bio-ethics, will be used as a model for creating the larger community site.

The EthicShare content repository will be a focal component of the online community environment and would be initially created and populated with help from the institutions involved. Ultimately it would be the responsibility of the practical ethics community to sustain and enrich the site through the contribution of citations and full text materials and participatory mechanisms to annotate, rate, and recommend materials in the repository. The planning process will outline the steps for progressing from the initial repository instance to a community-sustained resource.

Implementation Strategy

This planning project will focus on bioethics with the assumption that it provides an arena and an initial scholarly environment and community in which to assess technical and content requirements, as well as community needs and governance issues. Ultimately, EthicShare would be expanded to serve and support practical ethics scholarship broadly. While the timetable is compressed, it provides for processes of community engagement in order to address three specific deliverables:

- specification of target **content** for bioethics
- specification of desired **technology infrastructure** to support a content repository and critical functions of inquiry, exchange, and analysis, and
- specification of **organizational** requirements for EthicShare, including optimal governance structure, scope, protocols for contribution and exchange, as well as a financial model for sustained support and development.

Project Partnership:

Partners in the collaborative undertaking include three initial SCI-2 participant institutions with two additional partners who have interests and expertise in digital resources in practical ethics: the University of Minnesota, University of Virginia, Indiana University (both the Bloomington and Indianapolis campuses), and Georgetown University.¹ The University of Minnesota will

¹ SCI-2 included Duke and Indiana University and the Universities of Minnesota, and Virginia. Since SCI-2, the leadership at Duke University's Kenan Institute for Ethics is in transition and they will not be an initial partner in EthicShare planning.

provide project leadership and coordination; its planning team will bring together the expertise and resources of the Center for Bioethics and the University Libraries.

BACKGROUND

The 2004 Scholarly Communication Institute (SCI-2) held at the University of Virginia sought to capture the collective interest of the practical ethics community in exploring new models of scholarly communication and exchange. Building on the lessons learned at the first institute, SCI-2 selected *practical ethics* as a focus, recognizing the value of a scholarly community with an established track record of collaboration, openness to change, and receptivity to “pragmatism in the service of scholarship.”

Since the Institute, the participants have continued to explore the issues of communication and the potential for collaboration. At the Institute, each institution identified some pilot projects that it would pursue, and reported on progress at the annual meeting of the American Society of Bioethics and Humanities (October 2004) and at the annual meeting of the Association of Professional and Practical Ethics (February 2005). At the latter meeting, three of the institutions made presentations at a session devoted to digital technologies and practical ethics.

A March 2006 meeting of SCI-2 participants, along with Indiana University-Indianapolis and Georgetown representatives, revealed a commonality of interests. Specifically, all institutions were interested in addressing repository or content development and two of the participants (Minnesota and Duke) had begun investigating social tools as a mechanism to engage the community in the development and use of shared content. The University of Minnesota has made progress in this arena through inclusion of the ethics community in one of several component projects in an NSF-sponsored computer science project researching community-maintained resources. This component focuses on building a searchable database of scholarly resources related to the ethics, policy and legal issues raised by human embryonic stem cell research. While this research offers promise, the scope of the research project does not address the full range of issues and ongoing interests of the SCI-2 participants and the practical ethics community more generally.²

The University of Minnesota proposes to take the lead on an intensive planning project, working collaboratively with Institute participants and other practical ethics stakeholders to further the interests advanced in the 2004 institute. This planning effort lays the groundwork to build an online environment for the practical ethics community, beginning with a phase of planning and specification of requirements (using the subfield bioethics as a focus) and growing to a community-supported enterprise.

We propose a long-term goal targeted at the practical ethics community, to create a virtual community with the name *EthicShare*. We will position the *EthicShare* Internet site as a content

² The Department of Computer Science selected the practical ethics community (specifically bioethics with a stem cell focus) as one of several target communities for “Helping Hands,” an NSF-funded project to explore the nature of computer systems to support the building of high-quality community-maintained artifacts of lasting value (CALVs). The project explores fundamental questions about intelligent task routing, what structured review processes are most effective, and how community-maintained ontologies evolve over time. While a separate project from the proposed EthicShare program, the results will enrich the planning process and provide useful information about user preferences and behaviors.

repository with associated added-value services under community stewardship. The near-term planning effort proposed here will engage the practical ethics community in the design of an online *commons*. Specifically, the planning effort will result in the specification of requirements for the content system, assess and document requirements for technology infrastructure, and identify an organizational structure and policies to develop a sustainable commons for the future. While the planning focuses on bioethics, a subset of practical ethics, the ultimate goal is a broader online community to support the discourse, instruction, and scholarship of the practical ethics community.

The Community of Practical Ethics

Practical ethics is made up of several fields populated by humanities scholars working in a range of inter- and cross-disciplinary areas, applying humanities approaches to ethical issues in such arenas as health, new technologies, the environment, business, and engineering. The majority of scholars working in practical ethics have disciplinary training in humanities, whether it is philosophy (the largest proportion), religious studies, sociology, anthropology, policy studies, law, or others.

The practical ethics core group involved first in SCI-2, and now in EthicShare (Kahn—philosophy; Childress—religious studies; Walters—religious studies; Meslin—philosophy; Miller—religious studies) all have humanities doctorates. Practical ethics scholars often work collaboratively with scholars with other disciplinary expertise, and it is this cross-disciplinary feature that is a hallmark of practical ethics.

The community of practical ethics is ripe for digital scholarly communication resources, as the fields within practical ethics are rapidly maturing and creating their own literatures. Bioethics has a growing number of journals and several academic presses now have bioethics and applied ethics book lists. The field has two membership professional organizations, the American Society for Bioethics and Humanities (ASBH), and the Association for Practical and Professional Ethics (APPE). APPE has 871 members, including 146 Institutional members (126 of which are ethics centers). Membership is international with a dozen foreign countries represented. More recently the Association of Bioethics Program Directors (ABPD) has been created to address the growing needs and issues faced by academic bioethics programs within their institutional structures and as they relate to placement, funding, faculty advancement and other needs. Even with somewhat restrictive criteria for membership, the ABPD will likely have 75-100 programs represented. These and other factors are evidence that practical ethics is a field coming into its own.

As the field of practical ethics matures, there is increasing interest and urgency in developing the community infrastructure to record, access, manage, and use the knowledge resources central to its scholarship. At a base level, there is a compelling need within the practical ethics community for a repository where bibliographic information and literature relevant to the discipline would be available. The literature is a core element in fueling an online community where substantive inquiry and discourse can occur and wherein new genres of communication might evolve. The domain provides a rich context in which to exploit technologies in service to discipline and community needs.

Community Challenges in Scholarly Communication

Participant institutions in SCI-2 identified a mix of core needs, issues, and challenges. As the field(s) of practical ethics emerges and takes shape, the relevant information resources come

from and reside in a variety of sometimes far-flung sources: primary policy documents, secondary literature from a wide range of disciplines, print and online journals, monographs, op-eds, columns in popular media, and increasingly blogs and other electronic media. The scholarship and research materials necessary for practical ethics (including bioethics) scholarship are therefore increasingly large, of wide and varying quality, and unwieldy to capture in a systematic way even for relatively narrow topics. There are a number of reasons for these scholarly communications challenges:

- The field is highly interdisciplinary and requires access to literature from multiple disciplines, multiple sources (publishers, organizations, governments, news media, and professional societies), and multiple media. Adding to the difficulty is the importance of both research resources and popular/public commentary.
- The heterogeneity of source materials is matched by an equally heterogeneous environment of intellectual property rights and license restrictions that would be necessary to address within any repository.
- Existing tools and services lack the capability to federate distributed digital resources from heterogeneous sources and contexts. The diversity of disciplines, diversity of sources, and diversity of vocabularies make access strategies difficult. Without a coordinated body of literature for the field and no ongoing mechanism to draw content together, current practices for identifying and documenting source materials are idiosyncratic and highly distributed among individual research centers.
- Case-based or topic-based discussion is common in the field, but few tools exist to extract content in order to build cases or to capture the dialogue around these cases/topics.

While the field has produced some project-based exploration of discrete content sites, it has not successfully addressed the broader challenges associated with federating, sharing, and managing the complex mix of source materials that support discourse and engagement within the scholarly community. This planning effort will leverage existing resources, where possible, and create a plan to encompass the full range of needs of the practical ethics community.

PARTICIPANTS IN ETHICSHARE PLANNING

Project Personnel

Each of the partnering institutions (the University of Minnesota, University of Virginia, , both the Bloomington and Indianapolis campuses of Indiana University, and Georgetown University.) will contribute staff for both the content identification, technology assessment, and the organizational/governance assessment activities of the project. The University of Minnesota will provide project leadership and coordination; its planning team will bring together the expertise and resources of the Center for Bioethics and the University Libraries.

The project's organization and associated roles are detailed below:

University of Minnesota Project team:

1. Jeffrey Kahn (Center for Bioethics) will serve as principal investigator for the project and will play the lead role in convening the advisory committee and representing the project to the practical ethics community.
2. Wendy Pradt Lougee (University Librarian) will serve on the advisory committee.

3. Kate McCready (University Libraries, Academic Programs librarian) will serve as project director and manage the project workplan, coordinate communications, budget and oversee project documentation. She will also coordinate activities related to content identification and development.
4. John Butler (University Libraries, Digital Library Development Lab) will oversee the work of the Systems Analyst and technology specification, feasibility analysis, platform selection, and solutions planning. He will work in coordination with the project director.
5. Barton Moffett (Center for Bioethics, graduate student) will provide assistance in content identification and technology assessment and specification.
6. Systems Analyst (University Libraries, Digital Library Development Lab) will be responsible for documenting business and technology specifications from information gathered in the field, and evaluating existing repository platforms (and their extensibility) against these specifications. Will also create the technology implementation plan, to include hardware specifications, operations support, interoperability strategies, coding of required extensions, and periodic assessments.

Advisory Committee:

An Advisory Committee composed of representatives from the 5 institutions will have responsibilities for shaping the project planning, providing counsel on strategies for community engagement and input, and developing specifications for governance and future expansion of the EthicShare project. The Advisory Committee will make up the initial governing body for EthicShare during the planning phase. It can be expanded as necessary, with the expectation that the group will remain relatively small.

Partner Institution Background:

The following summary details participant strengths and particular areas of expertise and focus during the EthicShare planning.

The University of Minnesota:

The University of Minnesota's Center for Bioethics is a nationally prominent resource that conducts research and provides educational programs and services to help students, professionals, policy makers, and the public confront the complex ethical issues emerging in health care and the life sciences. Director Jeffrey Kahn will serve as the first president of the newly created Association of Bioethics Program Directors, providing an opportunity to bring visibility to the EthicShare project and to ally emerging issues from the ABPD group with EthicShare development.

The University Libraries' Digital Library Development Laboratory, working in collaboration with the Academic Programs division, develops the architecture, tools, and interfaces for the University's digital library and advances the integration of digital content and services into the online educational and research environments on campus and beyond. The Academic Programs division of the University of Minnesota Libraries contains the majority of the collection development librarians, instructional and research services, and academic department liaisons. The Lab has particular strengths in database development and web content management, the scaled delivery of customized web presentations to specific user groups, and the emerging technologies that engage the user in content creation and related social interactions with the larger user community.

Georgetown University Kennedy Institute of Ethics and National Reference Center for Bioethics Literature:

The Joseph P. and Rose F. Kennedy Institute of Ethics, established in 1971, is today the world's oldest and most comprehensive academic bioethics center. The Institute is home to a group of scholars who engage in research, teaching, and public service on issues that include protection of research subjects, reproductive and feminist bioethics, end of life care, health care justice, intellectual disability, gene therapy, eugenics, and other major issues in bioethics. The Institute and its library serve as an unequalled resource for those who research and study ethics, as well as those who debate and make public policy.

The specialized bioethics library and information services staff at NRCBL support contemporary scholarship in bioethics and create an organized and accessible record of scholarly and public opinion on bioethics issues. The oldest and largest collection of its kind in the world, the library is supported primarily by a contract from the U.S. National Library of Medicine and a grant from the U.S. National Human Genome Research Institute. The library's organizing structure and collection principles have served as a model for recently established collections in other countries.

The KIE library has a 33-year record of providing in-depth, multi-faceted information services for the field of bioethics. A staff of 19 information science professionals, subject matter experts, and paraprofessionals contributed to existing databases, including NLM databases PubMed and the NLM Catalog. NRCBL's web site, evaluated as "highly recommended" by *Choice* magazine in 2006 tallied 1.2 million accesses in 2005. The annual printed *Bibliography of Bioethics* serves as an authoritative record of bioethics publication and is used by academic libraries worldwide; the online publication *New Titles in Bioethics* complements the Bibliography by providing current awareness to researchers and librarians alike. Annotated bibliographies published in the Scope Note series of the *Kennedy Institute of Ethics Journal* offer overviews and selected annotations regarding bioethics topics.

For the planning phase, LeRoy Walters, who has published widely in the area of ethics and genetics in general, and stem cell research in particular, will identify the essential, core materials needed to inform research on the ethics, law, and public policy aspects of human embryonic stem cell research. NRCBL staff (including Library Director Doris Goldstein, Senior Bibliographer Tamar Joy Kahn, and Research Associate Laura Jane Bishop) will outline the methodologies used for the ongoing tasks of: 1) gathering new materials, 2) analyzing content (using NLM's Medical Subject Headings and NRCBL's Classification Scheme, and assigning specialized tags), and 3) devising effective search strategies to retrieve the desired information. In addition, NRCBL will host a site visit for the University of Minnesota Project Team, and, throughout the planning period, continue to apprise the Project Team of newly identified materials on topics to be covered.

Indiana University – Bloomington, Poynter Center for Ethics and the Study of Ethics and American Institutions:

The Poynter Center is a nationally recognized ethics center that promotes moral deliberation about a variety of interdisciplinary areas: science and technology, the provision of health care, the aims of higher education, the duties of corporate responsibility, and the challenges of democratic life and culture. Directed by Richard Miller, Professor of Religious Studies at IU, the Poynter Center sponsors collaborative work among faculty, graduate students, and undergraduate

students in the College of Arts and Sciences and professional schools, along with members of the wider community. Initiatives include a publication series, national seminars, interdisciplinary faculty fellowships, teaching and research workshops, symposia with visiting lecturers, and seminars with local professionals. Critical reflection about the meaning of rights, community, justice, diversity, power, and virtue provide the more general terms for much of the Center's inquiry. The Poynter Center houses the offices of the Association of Practical and Professional Ethics, a national organization that sponsors ethical inquiry among scholars and practitioners in professional life and public service.

Indiana University - Indianapolis, Center for Bioethics:

The Indiana University Center for Bioethics (IUCB) was established on the campus of Indiana University-Purdue University Indianapolis (IUPUI) in July 2001. Its mission is to provide leadership to advance the academic and public understanding of bioethics; to inform the development of social and public policy in health, research, and related fields; and to provide support for the provision of ethics services at Indiana University hospitals. The IUCB and the Indiana University School of Medicine Medical Libraries have been actively collaborating for more than 3 years to develop the Bioethics Digital Library (BEDL), a stand alone digital resource compliant with interoperability standards allowing for harvesting and sharing of content. BEDL is a multi-component system that currently includes a repository and archive for digital content, a Central Indiana Bioethics Portal (recently funded by the Central Indiana Community Foundation) that will provide access to bioethics content for central Indiana libraries, high schools and undergraduate programs, and a virtual Reference Center providing access to both physical and digital materials to scholars, students, and the public. The IUCB has been collaborating closely with the National Reference Center for Bioethics Literature at Georgetown on many of these initiatives.

IUCB participants: Eric M. Meslin is director of the IU Center for Bioethics, Assistant Dean for Bioethics at the IU School of Medicine, and Professor of Philosophy, Medicine, and Medical and Molecular Genetics. Amy J. Hatfield, is Digital Initiatives Librarian at the Ruth Lilly Medical Library at Indiana University at the IU Center for Bioethics

During the planning phase for this grant, the IU Center for Bioethics will produce an inventory of the digital content platforms utilized by the partner organizations which will identify short-term interoperability opportunities and challenges and will contribute to a broader analysis of digital library and social computing platforms used in academic communities. Both the short term and broader analysis will inform the architecture and infrastructure design for the prototype and implementation phases of EthicShare.

In addition to technological contributions, the IUCB team has expertise in developing specific bioethics content. Two special collections currently in development include the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research reports and meeting background materials and the History and Legacy of Indiana Eugenics, 1907-2007.

The IU Center to Bioethics is prepared to share all or selected materials within the EthicShare repository consistent with the needs of the community.

University of Virginia, Institute for Practical Ethics and Public Life (IPE):

The IPE was established in 2000 to foster interdisciplinary and interprofessional scholarship, teaching, and service in practical ethics across the several schools and departments of the university. Its university-wide status is recognized by its location in the office of the Vice President and Provost, rather than in one of the schools. Several of the IPE's own projects have focused on business and society, environmental ethics, public health, and biomedical ethics.

For the planning phase, the IPE, with James F. Childress as director and Ruth Gaare Bernheim, whose fields are public health, law, and ethics, as associate director, will undertake two projects. First, in the development of content, it will concentrate on methodology in practical ethics (with particular attention to biomedical ethics) and on public health, a domain that is related to bioethics but that is somewhat distinct because of its special issues and problems. Second, the IPE will take advantage of its role as a pan-university institute and the number of scholars in practical ethics at UVA to explore the needs and opportunities in three areas beyond bioethics: environmental ethics, business ethics, and engineering ethics. The IPE will work with specialists in these three areas to identify other parties around the country that will need to be involved as this project expands, beyond its pilot phase, into other areas of practical ethics.

Resource Consultants:

Individuals from discrete projects relevant to the development of online community resources will be engaged as resource consultants to the planning process. For example, faculty from the University of Minnesota Department of Computer Science "Helping Hands" project will provide input in the system development activities based on relevant research on community interaction and individual behavior. Ethics faculty from non-partner institutions will be invited to participate in relevant planning sessions to bring expertise and experiences from these projects to the planning.

In addition, issues related to intellectual property rights and licenses will require specific expertise and planning. Through IUPUI, the project will access to the Copyright Management Center (CMC) at IUPUI, directed by Professor Kenneth Crews, JD, Ph.D. MLS. Professor Crews is currently involved in the BEDL project, providing expertise and management of that effort's copyright issues and permission processes.

PROJECT WORKPLAN

The EthicShare project will draw on a distributed group of participants and will need to draw on distributed resources and expertise within this group and more broadly to define and document the requirements of the online community. The process will employ a mix of strategies, including: face-to-face meetings, site visits, conference calls, and online testing and assessment. While the Minnesota team will take the lead in coordinating efforts, contributions from the participant institutions and the broader community will be essential to the project's success.

The planning project period will span 6 months, from October 2006 through March 2006 and will include three phases. Note that specific expertise and roles at each site (above and beyond general contribution and assessment of content, technologies, and organizational issues) is described in the institutional descriptions above.

Phase I: Content Identification and User Requirement Analysis, Community Engagement and Organizational Requirements/Structure

Content Identification & User Requirement Analysis:

During the first phase (October 2006 - December 2006), the project staff will focus on content identification appropriate for inclusion in the EthicShare repository in the area of bioethics. This inventory will include the types of materials, formats of materials, and current platforms (digital, print, etc.) in use. Also during the initial phase is an assessment of interface and operational needs for the EthicShare community site. This assessment targets user requirements (mandatory and preferred) with regards to system functionality, interface, and support for workflow in a community-managed repository. Each of the participating institutions will be involved in this activity.

The Minnesota Project Director (librarian Kate McCready) and graduate student will work with staff, graduate students, and faculty at participant sites to inventory existing content resources and desired core content for the repository, as well as the local availability of digital content. Access requirements and rights will be reviewed and documented to inform requirements-setting for the repository system architecture. Key publishers for bioethics coverage will be documented. Publisher policies for access and redistribution will also be analyzed to inform the technical requirements and the development of the data model, data acquisition and access methods, and necessary authorizations. Project staff will also identify and pursue core content providers (both commercial and non-profit publishers) for appropriate sets of citation data and full-text. Given the short timeframe of the planning effort, this activity will emphasize identification of potential partners, while establishing contacts with possible target providers.

Minnesota project staff (project director/librarian, system analyst, and graduate student) will make visits to each project site to review local resources (content and technologies), engage participants in structured discussion concerning project requirements and features, and establish relationships essential to the project's development.

The outcome of the content review and specification will be a detailed bibliographic inventory of desired resources with essential information about access characteristics. The process will also identify existing digital content that can be ingested and included in prototype development for the technology infrastructure specification process. The user requirements assessment will result in a list of interface and system features that will help to guide the platform specification and site design decisions.

Community Engagement:

The EthicShare Advisory Committee will use a variety of communication mechanisms to announce the creation of the EthicShare project, program goals, and the initial focus on bioethics. The practical ethics community is really more properly described by a number of interconnected scholarly communities, including bioethics (the largest of the practical ethics scholarly areas). The communities are currently served by a number of resources for sharing news and information, including listservs, newsletters, announcements to members of professional societies and organizations, in widely read journals, blogs, and by word of mouth. Throughout the planning, these venues will be used to report progress and solicit input about priorities and issues. In addition, assessment of the prototype will be planned, employing a strategy of web-based evaluation by a small cadre of invited users, on the model of beta-testing.

The Advisory Committee will conduct its work through conference calls and in-person meetings. The project plan calls for one face-to-face meeting of all project participants as well as meetings of project faculty during relevant professional meetings (e.g., a meeting is currently planned during the annual meeting of the American Society for Bioethics and Humanities (ASBH), October 26-29, 2006, in Denver).

Organizational Requirements/Structure:

An ultimate goal of EthicShare is a sustainable community resource. While the project planners anticipate that implementation will, of necessity, require a phased transition from central management and support to community stewardship, this end goal will guide the necessary planning for organizational requirements.

During this phase, the Advisory Committee will play a lead role in addressing the organizational dimensions of planning. These dimensions include:

- The scope for the content repository and guidelines for maintaining quality and integrity of the resources.
- Protocols for participant contribution (or removal) of content.
- Intellectual property policies necessary to capture and make accessible commercial content.
- Protocols on rights associated with contributed commentary.
- Agreement on rights to computer code and systems developed for EthicShare.
- Governance structure to manage, expand, and sustain EthicShare.
- Optimal organizational status to sustain EthicShare (e.g., non-profit consortia).
- Processes to be employed to identify, review, and pursue financial models to support EthicShare.

The specific workplan for addressing these issues will be developed for and during the Project Meeting of all project staff and project partners. This meeting will occur during Phase I of the planning project.

Phase II: Technology Assessment, Planning & Community Feedback

A second phase (December 2006-February 2007) will move the project from initial specifications to platform selection and detailed implementation planning. Establishing a test environment of the core platform in this phase will allow for continued community engagement and feedback, and further refinement of the business/functional and technology requirements.

Using assessment data gathered in Phase One, the System Analyst, working with the Director of Minnesota's Digital Library Development Lab and the Project Director, will document specifications for content and metadata ingest, access, authorization controls, and features in support of analysis, community interaction, and community-based management. These specifications will lead to platform decisions and specifications for functional extensions.

Review and revision of the requirements document will involve scholars, librarians, and technologists at participant institutions, as well as an examination of relevant existing systems that some participants are currently hosting. A draft requirements document will be disseminated to project participants for review and comment. With final requirements established and approved, a platform will be selected.

Based on preliminary scans of the software environment, core functionality requirements for the repository are expected to be satisfied by one of the many existing open source repository/content management platforms. Detailed requirements will inform the selection of platform and will, more importantly, indicate the extensions and integrations needed to ensure a sustainable repository resource. The architectural plan will comply with recognized standards for format, descriptive standards, and storage to ensure interoperability, but will be open to exploring novel community-defined metadata that may fall outside of standard practice (e.g., tags and community-managed tag ontologies). The plan will also incorporate, as needed, standard protocols for search (e.g., SRU/W, Z39.50), harvesting/ingest (OAI-MPH), object storage, and link resolution (OpenURL, CrossRef/DOI) to accommodate the mix of open and commercial/restricted resources. . Controls for user authorizations, document-level permissions, version control/history and rollback are expected as requirements for the repository's community-oriented functions.

The selected platform will be implemented in a test environment to continue the process of engaging the community and soliciting feedback on design questions. Using this test instance, basic prototypes (interface and core functional features, especially those relating to community-stewardship tasks) will be prepared for assessment by a group of colleagues from within the bioethics identified by the Advisory Committee. These individuals will be invited to review the prototypes, following the notion of beta testing of a new device or software application.

Concluding this phase of the project will be the creation of a detailed technology implementation plan, to include hardware specifications, operations requirements, interoperability strategies, interface requirements, coding of required extensions, and timeline for implementation, deployment, and evaluation.

Phase III: Reporting (February-March 2007)

A final report, compiled by the Project Director with inputs from the project staff, will include recommendations for action and collaboration. It will be shared with the Andrew W. Mellon Foundation, the Council on Library and Information Resources, and the partnering institutions. The specifications for content, technology infrastructure, and organization will be documented and incorporated in a plan for a multi-phase implementation of EthicShare. The plan will include an articulation of the phases to move from a pilot implementation to a community-sustained resource and will be the basis for a grant proposal to potential funding agencies.