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Paths to Knowledge as a Foundational Course in an Honors Program

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Paths to Knowledge as a Foundational Course in an Honors Program

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INTRODUCTION

In this article we describe an honors course titled “Paths to Knowledge,” which was created to provide students with an understanding of the ways different disciplines create and evaluate knowledge. This is the only specific course within our honors curriculum that is required of all honors students. After seeing it evolve over several years, multiple instructors, and a variety of approaches to the theme, we believe that Paths to Knowledge may be a good model for a foundational course within an honors program.

INSTITUTIONAL, NATIONAL, AND HISTORICAL CONTEXT

At Drake University, students can complete the general education requirements via two distinct routes: 1) the Drake curriculum or 2) the honors curriculum. The vast majority of students opt for the standard Drake curriculum, which resembles traditional general education programs in its requirement that students complete one or two courses within disciplines/areas of inquiry. The honors curriculum, in contrast, requires a minimum number of honors credit hours, a laboratory science course, a mathematics/quantitative course, and an artistic experience course. The only specific required course is Paths to Knowledge. Beyond this requirement, students are free to select from a range of honors courses representing a wide variety of disciplines and professional colleges (e.g., Business, Education, Journalism, Law, and Pharmacy). To graduate with honors, students must also complete an honors project and have a grade point average of 3.5 or above. Approximately thirty students graduate with honors each year.

While all honors courses contribute to a student’s liberal education, courses that directly deal with the creation and evaluation of knowledge play a critical role in a student’s intellectual development. Furthermore, such courses, particularly in the way we have structured our offerings, might serve as models

PATHS TO KNOWLEDGE AS A FOUNDATIONAL COURSE

for needed reform in higher education for which many have called. For example, Nussbaum (1997) identified three capacities essential to the cultivation of humanity toward which liberal education aims: 1) the capacity for critical reflection on oneself and one's traditions, 2) an ability to see oneself as a human being bound to all other human beings rather than simply as a citizen of a local or regional group, and 3) an ability to imagine what it might be like to be in someone else's position. By taking a course that explicitly questions sources of knowledge and that examines issues from multiple perspectives, students begin to develop the capacity for critical analysis as well as the ability and disposition to view issues from other people's positions. More recently, the Association of American Colleges and Universities (AAC&U) released two reports that call for a reinvigoration of liberal education: *Greater Expectations* (2002) and *College Learning for the New Global Century* (2007). These studies enumerate the intellectual abilities that students should develop while in college. *Paths to Knowledge* is consistent with many of the educational goals discussed in these documents. For example, by examining how different disciplines create and evaluate knowledge, and by bringing multiple perspectives to bear on issues, the course cultivates the "intellectual flexibility" called for in the *Greater Expectations* report (AAC&U, 24) and the "inquiry and analysis" skills that are listed as essential learning outcomes in *College Learning for the New Global Century* (AAC&U, 3). More philosophically, the examination and questioning of knowledge claims from multiple perspectives promotes the "freedom and growth" (Cronon, 74) and the "cultivation of humanity" (Nussbaum, 8) that are the historical legacy of liberal education. For all of these reasons, requiring courses like *Paths to Knowledge* as a foundation for a student's education is critical, particularly when such a course is the only specifically required course for the completion of the general education component of an undergraduate degree, as it is for Drake's honors students.

CREATION OF PATHS

Paths to Knowledge was begun by Colin Cairns, Clive Elliott, William Lewis, and David Skidmore, representing chemistry, theater, rhetoric, and political science, respectively. The course was first offered in 2000/2001 to introduce students to the types of intellectual inquiry pursued in different disciplines. In this original offering, the course was designed as a two-semester sequence for which students would get four credit hours per semester. An early syllabus in the course's history states,

The principle aim of this course is to help us better navigate our way through an increasingly information- and knowledge-saturated society. In pursuing this aim, we will explore the modes of reasoning and inquiry that are typically employed in the production of various forms of knowledge. Among the questions we will examine are: Why do we seek knowledge? How is knowledge created? How should we judge the value and validity of knowledge claims? How should society make

decisions about the uses to which knowledge is put? In seeking answers to these questions, we hope to hone those critical and analytical skills that allow us to become sophisticated producers/consumers of creative output.

Thus, the course sought to compare and contrast how individuals coming from different intellectual frameworks and disciplines create and critique new knowledge. We also agreed that a focus on critical and analytical thinking would be an important component throughout both semesters. Given these goals, the course was not initially intended to be an interdisciplinary analysis of a single topic or event, nor was it designed to be an epistemology course, although elements of these approaches have clearly been involved and have taken on larger roles in subsequent offerings. Some additional goals of the course included:

- Help students better integrate their learning experiences.
- Provide students with the skills necessary for life-long learning.
- Familiarize students with various modes of inquiry and styles of learning.
- Promote interdisciplinary learning and collaboration among faculty and students.
- Strengthen social bonds among students by inserting each into a learning community that stretches across an entire academic year.

FIRST SEMESTER

To accomplish our goals, we selected readings and wrote questions that stressed meta-issues. For example, Jane Tompkins' "Indians" article (1986) was the first assigned reading. This article uses the relationship between American Indians and Puritans in early America to address "the difference that point of view makes when people are giving accounts of events, whether at first or second hand" (Tompkins 102). Tompkins details numerous accounts of these interactions from both primary sources and secondary scholarly accounts. By comparing a number of these sources, she details the difficulty of extrapolating from any one source because of the inherent perspective or bias built into it. She concludes:

The effect of bringing perspectivism to bear on history was to wipe out completely the subject matter of history. And it follows that bringing perspectivism to bear in this way on any subject matter would have a similar effect; everything is wiped out and you are left with nothing but a single idea—perspectivism itself. (Tompkins 117)

Such a realization, she notes, seems to eliminate any possibility of constructing knowledge about any topic or event, but she offers an alternative conclusion. She writes: "What this means for the problem I've been addressing is that I must piece together the story of European-Indian relations as best I can, believing this version up to a point, that version not at all, another almost entirely, according

PATHS TO KNOWLEDGE AS A FOUNDATIONAL COURSE

to what seems reasonable and plausible, given everything else that I know” (Tompkins 118). Students can thus conclude that studying various “paths” or accounts and critically analyzing and weighing them in terms of their merits and drawbacks—including inherent biases of the author—can lead to a more thorough understanding than taking a single path or viewing a single source as authoritative.

Related themes about perspectives, facts, and the effects that disciplinary culture can have on the understanding, production, critique, and synthesis of knowledge emerged through readings such as Lessl’s “The Galileo Legend as Scientific Folklore” (1999), Wilson’s *Consilience* (1998), and Gergen’s *The Saturated Self* (1991).

The course next turned to an examination of Science in Society, focusing on the construction of scientific knowledge through readings such as *Ants at Work* (Gordon 1999), *The Social Construction of What?* (Hacking 1999), *The Racial Economy of Science* (Harding 1993), “Why the Future Doesn’t Need Us” (Joy 2000), and Gardner’s writing on multiple intelligences (1983). In this section of the course the students’ views of science were challenged. In particular, students were asked to question their preconceptions about the rationality of science. Using the standard classical model described in Merton’s “The Normative Structures of Science”—communalism, universalism, disinterestedness, and organized skepticism (1973)—we showed how these precepts tend to be “more honor’d in the breach than the observance.” In subsequent offerings of the course, students were challenged to explore the boundaries of science: for instance, are fingerprinting, lie detecting, or craniology scientific enterprises? Bruno LaTour’s writings on the sociology of science also highlighted the role that subjective social norms, such as the preference for elegance in theory construction or hierarchies of prestige within the scientific world, play in generating scientific consensus around knowledge claims (1979, 1999).

The third and final section of the first semester focused on the arts and society. Themes developed in this section included 1) do the arts have a purpose?, 2) illusion/reality and individual perception, 3) governmental/private patronage, 4) the artist and society, and 5) life without the arts (is it possible?). Students were also introduced to selected music, theater performances, paintings, and sculptures, all chosen to span a range of considerations such as the relationship of art with individuals, governments, morality, and social mores. This section also included an interesting discussion of “what counts as art,” “high versus low art,” and standards of evaluating art. Furthermore, this section challenged students to recognize that the study and production of art has parallels to the study and production of other forms of knowledge. For instance, artists and art critics, like scientists, develop specialized terminology, agreed-upon methodological principles, common standards of evaluation, and systems for classifying knowledge production. These parallels become easier to grasp if the students have accepted some of the concepts about the social construction of science earlier in the course.

The various sections of the course blurred the lines for students so that they, over the course of their college careers, can view other courses with multiple ways of understanding instead of through the single lens of their major field of study. Throughout the course, writing assignments, group presentations, and in-class discussions engaged students in critical reflection on the readings and experiences they had in the class. A class session near of the end of the semester focused on combining the three major sections of the semester to analyze, in an overarching way, the various Paths to Knowledge that had been examined and to explore comparisons and contrasts between, for example, science and art in the construction and evaluation of knowledge.

SECOND SEMESTER

Many of the main themes and questions introduced in the first semester were carried over to the second. The major sections of the course in the second semester were:

1. Social Construction and Postmodernism,
2. Metaphor and Understanding,
3. Cultural Interpretation, and
4. Reinventing Liberal Education for the 21st Century.

Sequential readings associated with these sections include *Is There a Text in This Class?* (Fish 1982), *Metaphors We Live By* (Lakoff and Johnson 1980), *Notes on a Balinese Cockfight* (Geertz 1973), “Shakespeare in the Bush” (Bohannon 2006), and “On the Uses of a Liberal Education as Lite Entertainment for Bored College Students” (Edmunson 39–50).

This semester also included comparisons between pre-modern, modern, and post-modern thought. Specifically, James Scott’s *Seeing like a State* (1998) offered an important discussion of the differences between universal (or synoptic) knowledge and local knowledge, including what is lost through standardization of knowledge. Also interesting in this regard was the contrast between bottom-up and top-down approaches to urban planning. In one assignment, different groups of students redesigned the physical layout of the university using the contrasting design principles of Le Corbusier on the one hand (cf. *The Foundation Le Corbusier*) and Jane Jacobs on the other (1961).

The second semester ended with a section based on the theme “Reinventing Liberal Education for the 21st Century,” which culminated in a campus conference. The Paths students gave group presentations about the kind of curriculum and educational plan they would create based on what they had learned in the two-course sequence. Clearly, this component of the course was designed to encourage students to integrate what they had learned about the construction and evaluation of knowledge over the two semesters in order to synthesize a new vision of education. Furthermore, this course coincided with a university-wide program review in which all units of the university were under intense evaluation; students were encouraged to place their analyses in this context.

THOUGHTS ON THE FIRST OFFERING

While many parts of the course appear to be discipline-specific, the fact that the course is team-taught broadens the perspective of each section. All four instructors were present at each session, so the students were not just interacting with their fellow students but also with faculty members from across the Arts and Sciences (this has been broadened to the professional schools in subsequent offerings), thus significantly enhancing the range of responses students received to questions they asked or papers they wrote about the readings.

In addition to the traditional class time, there was a lab component of the course, which met in the evenings in a commons area of the student dorms. Each student was assigned to an instructor, and each instructor met with his or her group members in a separate space. We hoped that meeting the students in their living spaces would encourage them to apply the course material to their everyday life rather than thinking about it just three times a week in a one-hour block of class time. These evening sessions allowed further discussion of the class material, peer review of writing, and time for groups to work on their presentations with a faculty member present to answer questions.

In summary, then, the first offering of this course was designed to explore the seeming subjectivity of knowledge as it is created in different disciplines, the mechanisms of the construction of scientific knowledge, the knowledge created by the arts and its interplay with a number of social dimensions, and the way these separate considerations can be seen as fitting together in a broader context of constructing and deconstructing knowledge. As revealed in the sample of readings, the course was not about specific knowledge within the disciplines but rather about how the different disciplines approach and analyze the facts and knowledge they create.

Whether the course succeeded in its goals is largely unknown as no firm assessment mechanism was in place at the time. However, even in that first year, we did learn that the main themes and goals of the course must be repeated often and that students must constantly be asked to view specific assignments within the Paths to Knowledge context for maximum impact and understanding. Otherwise, it is easy not to see the forest through the trees in a course such as this. There were also practical issues in scheduling students (and faculty) for a two-semester sequence of courses. Because of these issues, the course is now a one-semester course, most commonly taught by two faculty members.

PATHS AS A FOUNDATIONAL HONORS COURSE

We originally established Paths to Knowledge as a sophomore- or junior-level course to provide a bridge between Drake's First Year Seminar experience and our senior capstone requirement, and students still routinely take the course at the upper level. However, such a course could serve as a foundational course for an honors curriculum. Furthermore, if instructors teaching honors courses could be assured that their students had already taken Paths, they could

draw on these ideas and expect students to apply the critical-thinking skills and common vocabulary they learned to the new course. At the same time, one drawback to offering it in the first year is that students may not have had enough disciplinary courses to make the critical comparisons *between* disciplines upon which the course is based. Additionally, a lack of experience with college courses and expectations could also be an obstacle to students' getting the maximum benefits from the course.

EVOLUTION OF THE COURSE

The specific nature and design of the course has changed since it was first offered in 2000/2001. As mentioned above, it is no longer a two-semester sequence but a one-semester course. Furthermore, it is no longer taught by four instructors because of scheduling problems and workload accounting issues. Most commonly it is taught by two instructors, but single-instructor courses have also been offered. In the case of team-taught courses, both faculty members have received a full course credit toward their teaching loads. These changes largely result from the dramatic growth in our honors program from 150 total students completing the honors curriculum in 2000/2001 to 240 students in 2008/2009. In 2000/2001 we offered just a single section of the course, but the demand has grown to three sections in the spring of both 2008 and 2009. We have maintained the enrollment cap at twenty students per section. We offer the courses in the spring semester because of lighter teaching commitments in the primary disciplines and also because of the university-wide demand for instructors of our first-year seminars, which are concentrated in the fall semester. The course still has a laboratory component, which is now usually held in a classroom in the early evening (e.g., 6:00 p.m.) in contrast to the late-evening residence hall meetings (9:00 p.m.) of the original offering. The lab time, however, is still used for peer review of writing, preparation of presentations, and other group work. Changes in the content and focus of the course have also occurred in response to student evaluations, faculty impressions, faculty scheduling pressures, and the specific instructors teaching it.

Another change is the periodic offering of week-long summer workshops in which faculty must participate before teaching their first Paths to Knowledge course. Participants are paid \$625 for the five days, with the funds coming from the honors program budget. These workshops introduce faculty to the intent of the course and provide examples of courses that have been taught in the past. They also get new faculty involved and introduce faculty from different disciplines to one another, important effects that often result in the pairings used in the team-taught offerings in subsequent semesters. Last, and equally important to all of the above, the workshops allow for intellectual exchanges that promote the evolution of the course.

In all the workshops, we have used Tompkins' "Indians" article to initiate discussion about the philosophy behind Paths to Knowledge. While this article has been a constant, the conversations about it have varied dramatically

PATHS TO KNOWLEDGE AS A FOUNDATIONAL COURSE

depending on the participants, thus encouraging the emergence of new philosophies about the course, new interpretations of the course title, and new course offerings. The summer workshops have become integral to introducing faculty to each other and to the course while allowing for creative adaptations that maintain the growth and vitality of the course and the faculty.

Because the syllabus is not fixed, the content and style of the course vary depending on the individuals teaching it, with the expectation that the instructors are at times throughout the semester stretching themselves beyond the boundaries established by their disciplines. The types of offerings that have evolved can be categorized as follows:

1. Courses that retain the fundamental approach explained above but with different readings.
2. Courses that take themes such as “things,” “nature,” “values,” and “art” and address them using a multi-disciplinary approach (a more detailed description of such a course is given below).
3. Courses that address the original course themes for part of the semester and then apply them to a specific case-study in the second part of the semester.
4. Team-taught courses that take two case studies (e.g., racism and nuclear weapons) and compare their treatment in different disciplines.
5. Courses that are focused on a single topic (e.g., nuclear weapons) but viewed in a multi-disciplinary way to introduce students to the idea of Paths to Knowledge with an emphasis on the plural—the need to study an issue from multiple perspectives to arrive at an integrated “truth” in the manner Tompkins has described.

In any single semester, multiple sections of Paths to Knowledge are offered, so not all students experience the same type of course or the same content even within a semester. Ideally, students would know the nature of the course and the specific topics/cases to be covered in each section prior to registration, but this ideal depends on advanced planning and staffing that are often difficult given sabbatical leaves and unforeseen departmental needs. Therefore, students more frequently register for a section knowing only the instructor(s) teaching the course and the broad goals of all Paths to Knowledge courses that are articulated to them in honors orientation programs and through other communications.

SAMPLE OF THEME-BASED COURSES

As an example of a theme-based course, one faculty member each from the Department of Art and Design and the Department for the Study of Culture and Society team-taught a course based on the themes of “things,” “nature,” “values in wartime,” and “art,” devoting approximately equal portions of the semester to each. The course began with an investigation of the relationship between knowledge and ideology, exploring the often unspoken decisions and assumptions that lead to the cultural consensus known as knowledge. The four themes provided

the means for exploring various forms of knowledge and the way that a specific worldview can license particular actions, values, and priorities in a culture.

As an example, during the “things” segment of the course, students first read excerpts from the writings of Karl Marx about commodities and discussed different forms of value and the dynamics of exchange. They next considered a chapter from Nicholas Thomas’ *Entangled Objects: Exchange, Material Culture, and Colonialism in the Pacific* (1991) that examines different cultural attitudes toward objects and the social purpose of exchange for Europeans and native South Pacific islanders, showing that differences in knowledge created miscommunications because neither group fully understood the social system of the other. To accompany this section, clips from the movie “Mutiny on the Bounty” that depict the exchange of objects between British sailors and Tahitians were shown. In an attempt to connect the historical accounts to their own lives, students wrote about an object they possessed, analyzing its personal and social meaning in light of the readings. The students also watched the movie *The Gods Must Be Crazy*, in which an aborigine tries to return a Coke bottle to the Gods.

The ‘values’ section of the course dealt largely with the values associated with war, including wartime constructions of masculinity and femininity. For example, students

1. read sections of *The Iliad*,
2. watched the movie *Troy* to examine its continuities and discontinuities with the ancient text’s view of war and masculinity, and
3. read Christa Wolf’s *Cassandra* (1984) which explores the battle of Troy from a woman’s perspective of the homefront.

The collage series “Bringing the War Home” by the artist Martha Rosler, which inserted photographs from the Vietnam War into the domestic interiors featured in *House Beautiful* and *Life* magazines, reinforced the warfront/homefront analysis and led to discussions of current conflicts.

One reading that connected the “things” section with the “values in wartime” section was *The Things They Carried* by Tim O’Brien (1990). This novel catalogs the equipment that Vietnam soldiers were obligated to carry (machine guns, helmets, etc.), the personal objects they chose to carry, and the intangible emotions they symbolically carried. Students examined what these objects signify to the individual and to society more broadly.

The “nature” section of the course introduced students to views of nature in which human beings do not take a central role. Examples of readings in this section included the chapter on apples in Michael Pollan’s book *The Botany of Desire* (2001), which chronicles how apples “used” humans to spread across the United States. Students also read Jennifer Price’s essay “Looking for Nature at the Mall: A Field Guide to the Nature Company” (1996), which illustrates the irony of going to the mall to buy nature—sometimes the very nature that the mall replaced or that it consumes in its day-to-day functions. To continue the

PATHS TO KNOWLEDGE AS A FOUNDATIONAL COURSE

exploration of alternative views of nature while connecting with the earlier part of the course about wartime values, the instructors selected *Ceremony* by Leslie Marmon Silko (2006). The novel traces the experiences of a Native American veteran returning to Laguna Pueblo, New Mexico, after surviving a prisoner-of-war camp, chronicling his attempts to reestablish ties to the land and to his cultural heritage. His persistent feelings of alienation parallel a drought in New Mexico, thereby introducing Dine' beliefs about the interconnectedness of humans and the natural world.

The art section, grounded in the theory of semiotics, focused on the symbolic language of art and how art constructs knowledge about the world. The class attended an exhibition by the contemporary artist Richard Tuttle at the Des Moines Art Center, where the students interpreted one artwork and explained how it referenced the world. Because Tuttle's work is abstract and incorporates unconventional materials, the assignment was difficult, but it encouraged students to think about how meaning is created by non-representational elements. Tuttle's use of unconventional materials also allowed for connections back to the "things" portion of the course.

In general, the instructors felt that the 'things' portion of the course was the most successful in accomplishing its goals. They are currently reformulating the materials to create stronger connections between the themes and to create assignments that ultimately lead students to make those connections more explicitly.

OTHER SAMPLE COURSES

Other courses use specific case studies or topics to exemplify the ideas behind Paths to Knowledge. For example, one course took half the semester to address basic problems in representation and interpretation. Here, students considered 1) how to describe places, other people, actions, and texts, 2) the idea that all descriptions have to be addressed to an audience, and 3) the ways in which describing nature requires modifying habitual practices and conventions of representation. This part of the course also focused on the more extensive task of explicating a complex event. Examples of readings from this section included Durkheim's "What is a Social Fact?" from *Rules of Sociological Method* (1982), Raines' *A Martian Sends a Postcard Home* (1980), Feynman's "The Law of Gravitation" from *The Character of Physical Law* (1964), Bazerman's "What Written Knowledge Does: Three Examples of Academic Discourse" from *Shaping Written Knowledge* (1988), and Chandler's "Denotation, Connotation, and Myth" from *Semiotics for Beginners* (1994).

In the second half of the class, the students applied the theories and ideas they had learned to the analysis of an event. They examined the events described in Foucault's *I Pierre Rivière, Having Slaughtered My Mother, My Sister, and My Brother...*(1982). The book catalogs the police description of murders committed by a Frenchman in 1835, interviews of townspeople who knew him and his family, his subsequent month of hiding in the forest outside

of Aunay, three psychological examinations by different physicians with differing opinions as to “mental derangement,” court papers, and most intriguing, part of the murderer’s memoirs that he wrote in jail after his capture. In these memoirs, the reasons he gives for the murders vary in quite remarkable ways, including that God compelled him to do it and his acts were equivalent to those of other noble historical figures. His writings introduce the question of his sanity and the difficulty of defining sanity/insanity. They also reinforce the ideas established earlier in the course that, when we write about ourselves or other people, we are positioning ourselves in particular ways. Students examined how the murderer positioned himself within his narrative and why he might have made the decisions he did.

The memoirs and all of the other documents and records about the case provided multiple “Paths” or perspectives to develop a more thorough understanding of “what really happened.” They also illustrated some of the different theories and ideas covered in the first part of the class; the psychological examinations of Rivière, for instance, tie back to the descriptions of scientific ideas discussed earlier in the course, and the townspeople’s descriptions of the murder illustrate some of the complexities of describing other people. As a culmination of the course, students selected an event and did a thorough analysis of it from as many perspectives as possible and noted those that could have been added to the study. In this way, the general principles of Paths to Knowledge and the different ways of knowing that can be brought to the analysis of a specific event were exemplified through the study of specific cases.

In another course, the semester was broken into case studies of two essentially unrelated topics: race and the atomic bomb (each reflecting interests of the instructors). The syllabus for this course stated:

Invariably, analysis of situations and concepts leads to the acknowledgement that bringing multiple perspectives to bear on any given situation or topic leads to a more complete understanding than does any single perspective. In that light, the first portion of this course focuses on the issues of race and atomic energy as dynamic and powerful cultural concepts, with the aim of showing how the consideration of multiple perspectives can alter, refine, and perhaps even radically change our ideas and attitudes . . . The goal of the course, then, is to generally make us question what we think we ‘know’ and explore ways in which questioning what we think we know can enhance our understanding.

In the race section, students read texts focused on Hitler’s race ideology, scientific attempts at defining race, interracial couples, issues faced by those who identify themselves as biracial, the legal rulings in *Plessy v. Ferguson*, and the problematic nature of defining particular races based on geography, phenotypes, etc. In the atomic bomb portion of the class, students studied H.G. Wells’ 1914 fictional account of atomic war, which pre-dated the first successful nuclear fission experiments, Bernstein’s biography of J. Robert Oppenheimer

PATHS TO KNOWLEDGE AS A FOUNDATIONAL COURSE

(2005), technical readings about the design and construction of the first atomic weapons, government documents about discussions related to dropping the bomb, analyses of the “empty” desert in which the first bomb was tested, and John Hersey’s *Hiroshima* (1985), about the experiences of Japanese citizens after the bomb was dropped. Students also viewed interviews with some of the scientists, the TV adaptation of the play *Copenhagen*, and the movie *Dr. Strangelove*.

The goal was to have students understand, through prolonged study of a single topic or case analysis, that a more thorough understanding of issues, events, and topics emerges from multiple perspectives and disciplinary approaches than from a single approach. The purpose of using science fiction, plays, and movies, in addition to scholarly writings and primary documents, was to illustrate to students that such sources also provide perspectives on the topic at hand and serve as paths to knowledge. We further hoped that the pairing of an English professor with one from the sciences exemplified that people from disparate fields can, with preparation, engage in other disciplines and contribute to the analysis of and discourse about an issue, regardless of the topic.

The model of bringing multiple perspectives to bear on a single case study was taken to an extreme in a recent offering focused entirely on the development and use of nuclear weapons. For several reasons, the course had to be offered by a single faculty member. He chose to develop the case study he had prepared for the team-taught course described above. Much of the source material was similar, but it was expanded to include the environmental legacy of atomic weapons, post-WWII attempts at controlling the proliferation of nuclear weapons, Cold War nuclear weapons policies, increased emphasis on the scientific developments that led to the conception of atomic weapons, and readings about “just war” theory as a way to consider the ethical issues surrounding the first use of atomic weapons. To offset the limitations presented by a single instructor, colleagues from multiple disciplines were asked to contribute readings and to lead class discussions/lectures; these included an environmental historian, an ethicist, and a historian of the Cold War. The course culminated in group projects in which students prepared a written report and oral presentation to President Truman advising him to use, or not to use, the nuclear bombs on Japan. Moreover, they were asked to base their recommendations solely on sources and facts available in 1945 and to do so from a specified perspective of either scientists or government/military officials who were for or against using the bombs. After each presentation, the other students in the class asked questions of the presenters, often using the arguments they had learned in preparing their own presentations and papers. Requiring students to take a given perspective and argue from that viewpoint illustrated to them the complexity of the decision at the time and also illustrated the multiple perspectives that must be considered when making modern-day judgments about a decision to drop atomic bombs.

Another recent offering called “Dominant, Subjugated, Local, Alternative and Subversive Knowledge(s)” used the case-study approach, again preceded

by a sequence of readings that attempted to familiarize students with two overlapping themes of the course. The first theme could be described as modernism vs. pre-modernism. Students read texts that showed the differences between typical pre-modernist and modernist thinking in order to recognize that the distinctions between the two are not clear-cut. For example, J.R.R. Tolkien's essay "On Fairy Stories" (1947) demonstrated that pre-modern, or perhaps more accurately anti-modern, beliefs persist. The second theme of the course—dominant vs. alternative knowledge(s)—asked the question "what reasons have we to believe that what we know (or think we know) is in any way superior to other beliefs?" Students read texts that demonstrated strategies used by non-dominant groups—classified, for example, by race, ethnicity, geographical location, or religious beliefs—to resist dominant ideologies. Since these dominant ideologies—liberalism, capitalism, scientific modernism—tend to be those that students themselves take for granted, this section of the course challenged students to practice perspectives that do not come naturally to them. In the final section of the course students read several chapters from the Scott text *Seeing Like a State*, which to some extent tied these two preceding themes together; chapters on "The High-Modernist City," "Soviet Collectivization," and "Taming Nature," among others, showed how a particular form of modernist ideology, which Scott calls "High Modernism," has led to a variety of planning disasters. The text also enumerated ways this dogma has been resisted or subverted by local populations. Thus, throughout this course students were confronted with the possibility that the present state of affairs is contingent, not natural, and that "things need not be the way they are." In Hacking's (1999) scheme showing various gradations of commitment to social constructionism, this strategy corresponds most closely to the "unmasking" level.

The courses described above are not exhaustive in the variations of Paths that have evolved since 2000/2001. Rather, they give some indication of the types of styles and content that broadly fit into our understanding of Paths to Knowledge. Also, as noted above, in any given semester several Paths sections are offered, so sections with a broad range of content and style are offered concurrently.

SUCCESSSES, FAILURES, AND STUDENT REACTIONS

When Paths began, assessment was not a major focus at the university, and the assessment of the honors program that was done for an accreditation visit did not assess the Paths to Knowledge course(s) independently from the entire program. While that assessment provided evidence that the overall program was achieving its goals, all that could be inferred about Paths was that it was part of that success. Thus, at this point, we have no firm evidence that the goals of the class are being met.

Student evaluations of the individual sections of Paths can, however, provide some insights into how students are responding. Since the course's inception, Arthur Sanders, Director of the Honors Program, has read the evaluations of all

PATHS TO KNOWLEDGE AS A FOUNDATIONAL COURSE

sections, so one individual has followed the evaluations over several years. Obviously, each faculty member has also seen the evaluations for his or her individual sections. Such evaluations have been largely positive. Students overwhelmingly agree that the course belongs in the honors program, and most found the mix of reading, writing, and longer projects that characterize most classes to be challenging and valuable. In the years that Paths has been taught, two sections have received poor evaluations. In both cases the complaints centered on a lack of challenge (for example, assigned readings that were glossed over and not debated) and a lack of communication from the faculty about expectations and goals. Students in those two sections felt unclear about what they were supposed to be doing, but in the vast majority of classes, students did, at least to some extent, "get it." We should also note that the quality of the final projects also indicates that students generally understand what the course is aiming to elicit. However, we think that a fair reading of the evaluations indicates a need to better assess how well students understand the purpose of the class. A more comprehensive assessment is scheduled to begin in the next academic year.

CURRENT PERSPECTIVES

William Perry's *Forms of Intellectual and Ethical Development in the College Years: A Scheme* (1970), as modified by Belenky *et al.* (1986), provides a useful model for how we now perceive Paths to Knowledge. Perry describes how students develop intellectually and morally through their college years, starting from a position of dualism/received knowledge and developing through stages of multiplicity/subjective knowledge and relativism/procedural knowledge to a mature position of commitment/constructed knowledge. A summary of the scheme is available on-line (Rapaport 2003). While none of us had this scheme in mind when we developed the course, it does describe how we approach it. The course asks a fundamental question of the student: "what grounds do you have for your commitment to any particular belief?" The Tompkins article, which students read at or near the beginning of most versions of this course, serves a critical, if somewhat problematic, role: critical because it clearly sets out the problems inherent in constructing knowledge in order to come to a belief; problematic because students do not see how it gives a way out of a relativistic position toward knowledge. Perhaps Tompkins states the goal of the course best:

. . . the subject of debate [changes] from the question of what happened in a particular instance to the question of how knowledge is arrived at. (Tompkins 118)

RECOMMENDATIONS

Based on what we have found, we would make five recommendations for those wishing to establish a course such as Paths to Knowledge as a part of their honors program. First, and most important, is the need for faculty to meet and talk about the course. The original teaching team met regularly over a period of

a year and a half before stepping into the classroom; while this may seem extreme, it is essential that participating faculty be willing to invest considerable time and thought into course preparation. After all, few faculty, no matter how interdisciplinary their educational background, possess the breadth to address knowledge creation across the spectrum of academic life. In that regard, we have found our week-long summer workshops on the course to be particularly valuable. We have had these workshops approximately every two summers. They involve an experienced instructor leading sessions on the class with faculty members willing to consider teaching Paths in the future. All participants, including the discussion leader, are compensated with faculty development funds for their participation. The basic structure of the workshops is two days of readings and discussions about the types of issues that are covered in Paths and then a couple of days spent thinking about and discussing how to design a section. This structure has had two positive impacts. First, it allows the class to evolve over time. With each workshop we have seen the development of different structures of the course, thus keeping the class fresh and exciting. Such evolution tends to spread beyond the participants of the workshop to other Paths teachers, since we try, whenever possible, to pair new instructors who just came from the workshop with “veterans” who have taught the class before. Second, it provides a steady supply of new instructors for the class. Faculty members often find it hard to find space in their schedules for a class such as this since it is not part of any major or disciplinary program, so we have opened up these workshops to people with a *potential interest* in teaching the course. Taking part in the workshop has not required a commitment to teach the class but only to think about it. However, the vast majority of faculty members who have participated in the workshops have, within three years, taught the course. Besides facilitating course development, the summer workshops—and the experience of teaching the course itself—serve as a valuable learning experience for faculty. Teachers of the course emerge with a greater appreciation for the value of liberal education and develop a more personal stake in this dimension of the university’s mission.

Our second recommendation is to be clear and consistent with students about the purpose of the class and to continue to articulate it throughout the semester. Reminding students of why they are required to take the class and what its goals are helps students put together what they are doing and why they are doing it; it makes the learning environment more open, helps students become more vested in the class, and shows them how to use what they have learned in their other classes.

Our third recommendation follows from the second. The faculty involved in teaching a course like Paths should create a one-page document describing the core principles and learning goals that all sections should have in common. Periodic review (or revision) of the document can help maintain the course’s basic identity and integrity even as it evolves with the participation of new faculty. Distributing the document to the students can also help create a common understanding of the fundamental nature of the course and its objectives.

PATHS TO KNOWLEDGE AS A FOUNDATIONAL COURSE

Fourth, students should be required to complete the course no later than the end of their sophomore year. If one of the goals of the class is to help students see how different ways of exploring the world can enrich our understandings of ourselves and the world around us, then students need to apply these skills in other classes. More importantly, it has been our experience that the students who do not enroll until their senior year are more likely to see the class as “just a requirement” and therefore engage less deeply with the material. Of course, it may be that those students who wait to take the class until the senior year would not have been engaged in the material had they taken it earlier, but we have seen significant differences between the seniors in the class and students at other levels.

Finally, if different sections of a course like Paths offer different models and different topics but use the same course title for all of the sections, we recommend making the differences in the sections clear to students by posting specific section descriptions before they register for classes. In other words, provide more information about each section than the title and the general course description. Some students might be more attracted to particular topics and models, and allowing students to match their inclinations to the approach and intellectual focus of the class is likely to improve the quality of the learning environment.

SUMMARY

We hope we have provided some general ideas and a few specific models for a foundational course in an honors program that encourages students to question the nature of knowledge and how we construct it, in both general and specific disciplines. Because the course is still evolving, it is difficult for us to be definitive about what works and what does not, but we have given some indication of potential pitfalls that can be avoided, or at least mitigated, through continuous discussion between faculty involved in the course (or interested in getting involved) and through direct and frequent communication of the course’s purpose of the course to the students.

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