Summer 2013

# The Role of General Education in the Development of Ethical Reasoning in College Students: A Qualitative Study on the Faculty Perspective

Deborah J. Erie
*University of Nebraska-Lincoln*, dje4@psu.edu

# The Role of General Education in the Development of Ethical Reasoning in College Students: A Qualitative Study on the Faculty Perspective

By

Deborah J. Erie

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Educational Studies

(Educational Leadership and Higher Education)

Under the Supervision of Professor Richard E. Hoover

Lincoln, Nebraska

July, 2013

# The Role of General Education in the Development of Ethical Reasoning in College Students: A Qualitative Study on the Faculty Perspective

Deborah J. Erie, Ph.D.

University of Nebraska, 2013

Adviser: Richard Hoover

Historically, colleges and universities saw their purpose as educating individuals to be productive, civic-minded individuals. General education was the curricular structure used to provide students with the skills and knowledge that promoted moral and ethical behavior. As societal forces changed the complexion of higher education, the singular purpose of a college education also changed.

There has been extensive research on the ethical and moral development of college students, but little research on the faculty role in the development of ethical reasoning in college students through general education coursework. The purpose of this qualitative study was to explore the attitudes of faculty who taught general education courses in relation to their role in the ethical reasoning development of college students. Understanding how faculty members chose to adopt particular educational purpose(s) such as ethical reasoning, how they translated this into educational outcomes, how they planned educational activities that reflected these purposes and outcomes, and how they integrated this into their syllabi and teaching, has practical implications for the

institution's future planning for general education and for faculty professional development.

The focus of the research was on fulltime faculty members who taught general education at three campuses of the Pennsylvania State University. A content analysis of general education course syllabi, in-depth interviews with faculty who taught general education courses, and interviews with their past students were used to determine the intentionality that faculty members employ in creating opportunities for the development of ethical reasoning. This study revealed that faculty teaching general education courses created opportunities for ethical reasoning development, but for most of the faculty, there was little or no intentionality. Students, however, remembered those courses where there was an intentional ethical component. No differences were found among the four knowledge domains of communication, humanities, natural sciences, and social sciences.

**Acknowledgments**

There are many people who have contributed to this long journey to achieve my lifetime goal of a doctoral degree. Without their support, their words of wisdom, their time, and their inspiration, this would not have been possible.

I would like to thank my advisor, Dr. Richard Hoover, who stepped in to provide the support I needed to complete this dissertation. My deepest appreciation is also extended to Dr. Ronald Joekel, who shepherded me through the years of my degree completion and ensured my path would get me to the finish line. And to my other committee members, Dr. Donald Uerling and Dr. Kenneth Kiewra, thank you for challenging me to be a better researcher.

This dissertation is dedicated to my family. It is dedicated to my mother, Ruth Erie, who instilled in me the love of reading, writing, and learning; to my sister, Barbara Deiter Drill and her husband, Herbert Drill, who both passed away before I could complete my work but who always knew I would succeed; to my partner, Lynora Underwood, who gave up vacations and weekends together to allow me to pursue this dream; to my son, Jake, who grew up without my realizing it while I was working on my degree. Thank you for your love and support.

I also want to thank my colleague, Matthew Shupp, who was always there to keep me focused on my goal while writing, and finally to my colleague and forever friend, Pamela Jo Coghlan, who often put her life on hold to allow me to do what I needed to do.

Thank you to Penn State for allowing me this opportunity. To the faculty, staff, and students who participated in the research and to my colleagues who continually

encouraged me, lifted me up when I thought I could go no further, and inspired me to reach my goal, I thank you.

## Table of Contents

## List of Tables

## List of Appendices

# Chapter 1

# Introduction

## Context of the Problem

In the early years of higher education, moral and ethical coursework was integrated into the core curriculum. Colleges in the United States were originally founded with some form of moral education as a primary goal. Nucci and Pascarella (1987) reported that the original central goal of the curriculum was to develop student character, to teach ethics, and to develop sensitivity to moral responsibilities. As institutions of higher education curricula evolved from a generalized into more specialized curricula, the core curriculum at many institutions morphed into a general education curriculum that no longer concerned itself with the ethical development of students (Miller, 1988).

General education has been the breadth component of the undergraduate curriculum designed by the institution and usually involved a general or survey study of multiple subject areas. Many institutions have tried to use general education to provide a common experience for students studying at that institution (Levine, 1978). Boyer and Hechinger (1981) gave a historical perspective on general education and its role in the moral development of college students.

> There was a time when colleges and universities . . . had the task of transmitting to the next generation, intact, society's moral, cultural, and political values and traditions. This mission was never truly achieved, and yet it was once so vital that in most 19th century colleges the presidents taught a 'moral philosophy' course as the curricular capstone. Even after the direct influence of the church declined, the conviction that the college represented a bastion of moral order was sustained; the afterglow of higher education's religious loyalty lingered. (Boyer & Hechinger, 1981, p. 56)

According to the Carnegie Foundation for the Advancement of Teaching (1977), general education once constituted 100% of the classical curriculum. In today's curriculum, general education is one-third of the courses a student takes, major courses are one-third, and electives are the last third (Brint, Proctor, Murphy, & Turk-Bicakci, 2009).

There has been a renewed interest in the ethical development of college students. National events such as the Enron scandal and the savings and loan and mortgage debacles have led to a public outcry for more accountability. Debates about the role of the United States in military interventions, and science and technological advances have generated renewed interest in the role of colleges and universities in developing character (Mayhew, Seifert, & Pascarella, 2010). Many institutions have been adding courses in ethics in specific subject areas such as business, natural sciences, engineering, and allied health professions (Sloan, 1980).

The Pennsylvania State University's (Penn State) commitment to ethics education was reflected in the University's most recent strategic plan, *Priorities for Excellence* (http://strategicplan.psu.edu/), which emphasized ethics education as an essential outcome of education at Penn State and a key element of student success.

> Every day brings news coverage of situations that involved professional and personal ethics and ethical dilemmas. Many of these situations are complex, and graduate and undergraduate students should have opportunities to confront the issues while they are enrolled at Penn State. The University should ensure that no student graduates from Penn State without having had the opportunity to confront issues of ethics and ethical dilemmas, both theoretical and applied. (http://rockethics.psu.edu/education/)

Recent events at Penn State ("Sandusky Sex Scandal" – November 2011) brought the importance of ethical reasoning skills to the fore at that institution. "Having learned, first-

hand, at Penn State the urgency of ethics education, President Erickson recently committed to reinforce to the entire Penn State community the *moral imperative* of doing the right thing—the first time, every time" (http://rockethics.psu.edu/education/) .

American higher education has historically been dominated by private colleges and universities. It was at private institutions that the liberal arts tradition flourished and influenced the development of general education (Gaff, 1983). However, an increasing number of students are now attending community colleges, state colleges and universities, technical and proprietary schools, and online degree programs (Gaff, 1983). The institution in this study was a public, land-grant institution. Land-grant institutions were established by the Morrill Act of 1862, whereby the Federal government granted states the funds to create universities that provided a curriculum in practical and applied research and teaching (Thomas, 2000, p. 71).

The role of the faculty member in the ethical development of students has ranged from the idea of the teacher as "neutral chairman" as coined by Lawrence Stenhouse (1971, p. 157) in the 1970s, to a swing of the pendulum in the late 1980's where the educators' values and ethical orientation were seen as having a real influence on their students (Bergem, 1990). Nicgorski (1992) added that faculty and higher educational institutions are not just "transmitters of a society's moral code" (p. 276), but by engaging in the conversation with their students they become "leaders in the moral development of a society and culture" (p. 276). Campbell (2008) postulated that teaching extends far beyond the mastery of curricula and pedagogical techniques and must include morally infused intangibles. These intangibles include how a faculty member addresses the class,

how classwork is evaluated, how a faculty member adjudicates classroom discussions, and how a faculty member displays honesty, respect, honor, diligence, fairness, and compassion (pp. 357-358).

**Statement of the Problem**

Many researchers have looked at the development of both moral and ethical reasoning in students during the college years and the impact of college on moral and ethical decision-making. Gilligan (1982), Kohlberg (1969, 1976, 1981, 1984, 1985), Perry (1981, 1999), Rest (1979, 1986, 1994), Rest and Narvaez (1994), Rest, Narvaez, Bebeau, & Thoma (1999, 2000), Turiel (1983, 2002, 2008), and others have explored the ethical and moral development/reasoning of college students. This research has primarily focused on the student ethical development through specific interventions. Little has been written on the effect of general education courses on students in this arena. In particular, the faculty members' attitude towards their role in the development of ethical reasoning in college students through general education coursework has not been fully explored.

In the Strategic Plan for the Pennsylvania State University (2009-2014), the university listed "Assist Students to Explore Ethical Issues in Their Professional and Personal Lives" as one of its strategies for its goal of Enhancing Student Success. In 2011, Penn State hosted a Colloquium at the university entitled, "General Education's Ideas and Ideals" initiated by Penn State's Office of Undergraduate Education, the University Faculty Senate, and the Penn State University Press. Colleagues from Harvard University, University of Southern California, University of Michigan, and Portland State University described their institution's general education program and commented on the

national general education landscape. The colloquium resulted in four areas of agreement, of which the fourth spoke directly to this research:

> Ethically-based decision making and citizenship are longstanding general education goals. They continue to be primary elements – perhaps the primary elements - of nearly every general education wish list. Yet today, their implementation is submerged beneath the menu-based sprawl of cafeteria-style breadth requirements that most institutions have adopted. Generally, there are few explicit connections in broad menu-based curricular aggregations to either the academic understanding or the practice of citizenship and ethically-based decision making. (retrieved from http://www.senate.psu.edu/gen_ed/genedrpt-aug2012.pdf)

In December 2011, as a follow-up to the Colloquium, Dr. Jeremy Cohen, then Associate Vice President and Senior Associate Dean for Undergraduate Education at Penn State, charged a task force of faculty from various disciplines and locations to explore general education's ideas and ideals at Penn State. The task force report of December 2012 concluded that "Penn State's current General Education curriculum fails to deliver on the promise of a coherent intellectual, civic and scholarly curriculum for all students" (http://www.senate.psu.edu/gen_ed/genedrpt-aug2012.pdf).

This qualitative research study explored the attitudes of faculty who taught general education courses at three Penn State campuses in regard to their role in the development of ethical reasoning skills in their students. In addition, the student perspective was explored as it related to their experiences in the classrooms of the faculty interviewed. The research informed about the intentionality of general education in the curriculum as it related to the development of ethical reasoning in college students. Exploring the processes by which faculty members developed their course content and/or pedagogy to include a commitment to developing ethical reasoning, can also contribute to

our understanding of faculty teaching behaviors. This study revealed ways in which faculty might align the goal of developing ethical reasoning skills with the curricular requirements of their discipline-based general education course and provided information about the faculty's intentionality with regard to general education goals.

**Purpose of the Study**

The purpose of this study had three components: (a) to examine the attitudes of faculty towards the ethical content of their general education courses, (2) to explore the role of general education courses in contributing to the development of ethical reasoning in college students, and (c) to establish the components within general education courses and/or methods used to teach general education courses that aid in the development of ethical reasoning skills of the students taking these courses.

**Research Questions**

The grand tour question was as follows: Was there a shared expectation among faculty members who taught general education courses that their course content and pedagogy would lead to the development of ethical reasoning skills in their students?

The research questions for the faculty study and for the student study were as follows:

1. How did faculty members create their general education course content and did they align the goals of general education with creating opportunities to develop student ethical reasoning skills in the courses that they taught?
    a. What were the students' understandings of the goals of general education and how did these relate to the faculty understandings?

   b. How did students define general education?

2. Did faculty members intentionally create opportunities to provide for ethical decision-making?
   a. In what ways were ethical concepts introduced to students including, but not limited to, academic integrity?
3. Did faculty members create opportunities for reflection on the ethical decisions that students may face?
   a. Were the students presented an opportunity to explore ethical dilemmas in their coursework?
   b. How did this relate to faculty course content and pedagogy?
4. Did faculty members believe that the content of general education courses directly or indirectly influenced the ethical reasoning development of the students they taught?
   a. What courses and assignments did the students believe led to increased reasoning skills? How did this relate to the pedagogy expressed by the faculty and supported by the documents supplied by the faculty?
5. Were there any differences among the four knowledge domains of general education explored at the institution studied?
   a. Were any differences noted in student responses among courses taken in the four knowledge domains?
6. What was the perspective of faculty members who taught general education courses in relation to the development of ethical reasoning in their students?

a. What influence would a specific course in ethics or ethics-focused courses have on the students' selection of general education courses?

The research method employed was a phenomenological qualitative study. The study investigated the attitudes of faculty members who taught general education at three branch campuses of Penn State, and their perceived influence on the ethical reasoning development of college students. The researcher used a qualitative content analysis of general education syllabi at Penn State and a phenomenological qualitative research study of in-depth interviews of fulltime faculty who taught general education courses at three Penn State campuses and interviews with students who had taken classes taught by the interviewed faculty members. The content analysis was used to help formulate questions and to verify or show inconsistencies between the course goals and requirements stated in the syllabus and the faculty member's views on what occurred in the class. Students, who had successfully completed at least one class taught by the faculty participants, were interviewed after the faculty interviews and the results of those interviews were used to verify faculty goals or show inconsistencies between faculty statements and student experiences.

**Definition of Terms**

It is important to have an understanding of key terms used in the study. Below are important definitions.

*Attitude*—Attitude can be defined as a mindset or tendency to act in a particular way based on a set of beliefs (www.dictionary.com). Allport (1935) defined an attitude as "a mental or neural state of readiness, organized through experience, exerting a directive

or dynamic influence on the individual's response to all objects and situations to which it is related" (as cited in Pickens, 2005, p. 44).

*Curriculum*—Boyer (1987) defined the undergraduate college in America as having a unique mission to fulfill - "one that will enrich and, at its best, transform . . . the conviction that something in the undergraduate experience will lead to a more competent, more concerned, more complete human being" (p. 1). Bowen, Cleak, Doud, and Douglass (1977) believed that "education should be directed toward the growth of the whole person through the cultivation not only of the intellect and of practical competence but also of the affective dispositions, including the moral, religious, emotional, social, and esthetic aspects of the personality" (p. 33).

An undergraduate curriculum is the formal academic experience of students pursuing associate or baccalaureate degrees (Ratcliff, 1997, p. 6). The term curriculum can refer to the educational plan of an institution, school, college, or a department, or to a program or course of study (Ratcliff, 1997, p. 7). The most common description of a curriculum is a set of prescribed courses and requirements (Blackburn, Armstrong, Conrad, Didham, & McKune, 1976). Clark (1970) and Chickering (1972) defined curriculum beyond the course. To them, a college curriculum included the total experience – both in and out of the classroom (as cited in Blackburn et al., 1976). Clark (1970) also included the importance of what faculty members believe make up an educated person (as cited in Blackburn et al., 1976). The dilemma that many colleges and universities face today is the tension between the priorities of teaching, research, and

service with an expectation that colleges and universities will be involved to a greater extent in the solving of social problems (Dressel & DeLisle, 1969).

*General education*—General education is the breadth component of a college or university curriculum shared by all students at a particular institution (Levine, 1978, p. 3). Nelson Laird, Niskode-Dossett, & Kuh (2009) saw the role of general education courses as providing a foundation for "further developing the skills, competencies, and dispositions that make up the essential learning outcomes" (p. 66). Ratcliff, Johnson, LaNasa, and Gaff (2001) stated that general education has been the way colleges and universities assured that all students regardless of their major had exposure to history, culture, science, and math and has been used to enhance communication skills, critical thinking, quantitative reasoning, and knowledge integration (p. 5).

There are many different definitions and purposes of general education. In some colleges and universities, general education is also referred to as a core curriculum. General education was a concept born out of the original liberal arts tradition. General education in the United States only became necessary after the German model of specialization began to dominate American higher education (Schwartz, 2005). Prior to the early 1900's, all students read broadly in history, politics, and science (Schwartz, 2005). Colonial colleges offered a four-year, broad-ranging general education curriculum where students acquired both breadth and depth of knowledge (Levine, 1978). "The tradition of liberal education and its attendant concerns with developing the whole individual still hold a prominent place in the ethos of American higher education" (Pascarella & Terenzini, 1991, p. 336).

Historically, the term general education has stood for the "idea of common learning, knowledge of man's achievements and of the processes by which he has achieved greatness in intellectual inquiry, in social institutions, and in the products of the arts" (Toombs, Fairweather, Chen, & Amey, 1989, p. 4). What constitutes general education is as varied as the colleges and universities. Earl J. McGrath (1976) wrote that general education is the "thread that ought to weave a pattern of meaning into the total learning experience" (p. 2). General education is intimately concerned with democratic processes and with the needs of democratic society and always has been (Miller, 1988, p. 188).

The following is a description of general education at Penn State:

> The inclusion of General Education in every degree program reflects Penn State's deep conviction that successful, satisfying lives require a wide range of skills and knowledge. These skills include the ability to reason logically and quantitatively and to communicate effectively; an understanding of the sciences that makes sense of the natural environment; a familiarity with the cultural movements that have shaped societies and their values; and an appreciation for the enduring arts that express, inspire, and continually challenge these values. General Education, in essence, augments and rounds out the specialized training students receive in their majors and aims to cultivate a knowledgeable, informed, literate human being. (http://www.psu.edu/bulletins/bluebook/gened/)

*Ethics*—"Ethics comes from the Greek word ethos, which means customs or usages, especially belonging to one group as distinguished from another. Later, the term ethics came to mean disposition or character, customs, and approved ways of acting" (Shapiro & Stefkovich, 2001, p. 12). The Merriam-Webster online dictionary offers the following definition: "the discipline dealing with what is good and bad and with moral duty and obligation; a set of moral principles; the principles of conduct governing an individual or group" (Retrieved from www.meriam-webster.com/dictionary/ethics).

Ethics is a set of principles taught in the home, through religious practices, or in educational institutions that constitute right and wrong behaviors (Sternberg, 2010). According to John Dewey, "ethics is the science that deals with conduct insofar as this is considered as right or wrong, good or bad" (Shapiro & Stefkovich, 2001, p. 10). The classical meaning of ethics has been broadened by many institutions to mean the rules or principles of organizational conduct, often referred to as an ethical code (Fisch, 1996, p. 48).

*Ethical reasoning*—Ethical reasoning is thinking about right and wrong (AAC & U, 2012; Sternberg, 2010). With ethical reasoning, students assess the social context of problems in relation to their own ethical value and reflect on how different ethical perspectives can be applied to ethical dilemmas (AAC & U, 2012). Ethical reasoning has the same basic structure that underlies all reasoning. Ethical reasoning requires that the individual generates purposes, raises questions, uses information, uses concepts, makes inferences, makes assumptions, generates implications, and embodies a point of view (Paul & Elder, 2009, p. 16).

*Values*—Rokeach (1983) stated that 'values' can be defined as "internalized representations of society's demands for competence and morality. They may be thought of as attitudes or beliefs that an individual holds for commitments made or stances taken on particular moral issues" (as cited in Berkowitz, 1991, p. 108). Many values emerge within a social context. "Values mediate between self and world, any theory of value must necessarily tackle the extremely difficult problems of the growth of the self and the socialization of individuals" (Reed, 1996, p. 1). Moral values are attitudes or beliefs that

deal with issues of right and wrong in terms of justice, fairness, and social responsibility (Berkowitz, 1991). "We consider a value to be a cluster of attitudes organized around a conception of the desirable" (Feldman & Newcomb, 1970, p. 7). "Values are the beliefs we hold about the things we think worthwhile – the things we are willing to work, suffer, pay, and even die for. They define our choices, and our choices reveal our values" (Pellegrino & Achilles, 1983, p. 13). Values are present in all human relationships (Churchill, 1982).

*Syllabus.* A syllabus is a list of subjects to be covered in a course and how participants will be assessed. According to Penn State (the institution being studied) policy, a written syllabus must be distributed to students in each course within the first ten calendar days of a semester or its equivalent. In addition to course content and expectations, the syllabus must include the course examination policy, basis for grades, and academic integrity policy for the course. Changes to the syllabus shall also be given to the student in writing (retrieved from http://www.psu.edu/ufs/policies/43-00.html).

*Qualitative analysis*—Qualitative analysis identifies within their natural context, the characteristics and structure of phenomenon or events in order to form a conceptual model or theory (Jonker & Pennink, 2009).

*Phenomenological study*—A phenomenological study explores the "lived experience of a small number of people" (Rossman & Rallis, 2012, p. 96). The researcher is looking to understand the deepest meaning and the articulation of these meanings of a person's experience (Rossman & Rallis, 2012).

*Content analysis*—Content analysis, according to Krippendorff (2004), is a research technique used to make replicable inferences from texts. "It classifies textual material and reduces it to more relevant, manageable bits of data" (Weber, 1990, p. 5).

**Delimitations**

Delimitations are the boundaries that restrict the study (Hancock & Algozzine, 2011). There are several delimitations that restricted this study:

- Three branch campuses of the large university were used and they may not be representative of the entire university.
- Only faculty members from three branch campuses of a multi-campus university participated in the study.
- Only fulltime faculty members were interviewed, yet many general education courses are taught by adjunct faculty or graduate students at various Penn State campuses.
- Samples of syllabi from the campuses were used for the content analysis and may not be representative of all campuses of the university or of all general education courses.
- A large public institution with multiple campuses may not be representative of other institutions.
- The study looked at faculty attitudes about the students' ethical reasoning development, but did not measure the actual ethical reasoning skill development of the college students.

- Quantitative courses, courses in the arts, and health and physical education courses were excluded from the study.
- Student interviews were limited to those students still enrolled at the campus.

**Limitations**

Limitations are factors that may affect the results of the study and are often beyond the control of the researcher (Hancock & Algozzine, 2011). The limitations of this study were as follows:

- The use of a volunteer sample may limit the generalization to a larger population.
- The topic of study was known to volunteers and may have influenced their decision to participate.
- The study used self-report, so bias may skew data.
- No attempt was made to choose faculty participation with regards to age, gender, ethnicity, years of employment, or educational background.
- No attempt was made to choose student participation with regards to age, gender, ethnicity, major, or semester standing.
- Student interviews were not verified by member checking.
- The researcher's familiarity with the curriculum and requirements may have skewed some questions or emphasis in the interviews.
- The "Sandusky Sex Scandal" (November 2011) at the university may have recently changed faculty perspectives.

- Transfer students were included in the student study and their past educational experiences may have influenced their responses.

**Assumptions**

Assumptions are the preliminary beliefs made about the study prior to the research and from which the research extends (Hancock & Algozzine, 2011). The researcher has made the following assumptions:

- Ethical reasoning skills could be influenced through general education coursework.
- There was consistency in the teaching of general education courses across all the campuses of the university.
- Faculty characteristics such as gender, age, ethnicity, and educational background were not relevant to this particular study.
- Student characteristics such as gender, age, and level in college were not relevant to this particular study.

**Significance of Study**

All colleges and universities that confer a baccalaureate degree have in their curriculum some form of general education, core requirements, or a liberal arts curriculum. The accrediting body for the institution to be studied, The Middle States Commission on Higher Education, stated that institutions should identify and provide a recognizable core of general education that:

- expresses the educational philosophy of the institution for each undergraduate degree program or cluster of degree programs;
- incorporates essential knowledge, cognitive abilities, and an understanding of values and ethics;

- enhances students' intellectual growth; and
- draws students into new areas of intellectual experience, expanding their cultural and global awareness and sensitivity, and preparing them to make enlightened judgments outside as well as within their academic specialty. (Middle States Commission on Higher Education, 2009, p. 47).

This study provided information concerning the intentionality of faculty who taught general education courses in meeting the goals of the accrediting agency in relation to ethical reasoning and ethical judgments. Results of this study may lead to changes in curriculum or faculty preparation for teaching general education courses.

**Summary**

Historically, moral and ethical development and reasoning have been an integral component of a college education. As higher education shifted to a specialization model, the general education component of the curriculum often served as the vehicle for imparting the knowledge and skills needed to promote ethical reasoning. This study explored the attitudes of faculty teaching general education courses in the development of ethical reasoning in their students. The review of the literature in Chapter 2 includes a historical view of general education, models of general education, and ethical development theorists and research on the development of ethical reasoning in college students.

# Chapter 2

## Review of the Literature

### Introduction

The purpose of this study had three components: (a) to examine the attitudes of faculty towards the ethical content of their general education courses, (b) to explore the role of general education courses in contributing to the development of ethical reasoning in college students, and (c) to establish the components within general education courses and/or methods used to teach general education courses that aid in the development of ethical reasoning skills of the students taking these courses. This phenomenological qualitative study, through the faculty and student experience, assisted in understanding the role of general education courses in the development of ethical reasoning in college students at a large public institution in the Middle States region of the United States.

> Higher education has a special responsibility to itself, to its students, to the learned professions, and to the society that provides the economic resources to make our colleges and universities possible. That responsibility is to examine – with care – ways to cultivate responsible judgment. Colleges and universities can take the risks of giving moral leadership to the modern world. We do ourselves, our students, and our society a disservice whenever we leave the impression that education is merely to establish technical competence in a specialized area of knowledge. Education is not, and has never been, a value-neutral activity. (Reynolds, 1996, pp. 65-67)

There has been much research on the ethical and moral development theories, on the results of the teaching of ethics courses, and on the impact of education on students (Astin, 1997; Biggs & Barnett, 1981; Castleberry, 2007; Dalton & Crosby, 2010; Feldman & Newcomb, 1970; Kohlberg, 1969, 1984, 1985; Kohlberg & Hersch,1975; Lawson & Koch, 2004; Nucci & Pascarella, 1987; Pascarella & Terenzini, 1991; Perry,

1999; Rest, 1979, 1986, 1994; Rest, et al., 1999, 2000; Smith, 1988; Turiel, 2008), but there has been little research on the role of general education courses or the curricular structure used to enhance ethical reasoning in general education courses. Colleges and universities have, over time, revised general education curricula and have studied the various components of their general education requirements. However, there has been little research to look at the practice of faculty members who teach general education and to explore their intentionality in providing opportunities to promote the development of ethical reasoning in their students. Pascarella and Terenzini (1991) found that it was unclear whether general education courses changed values. According to Lazerson, Wagener, & Shumanis (2000), there is a lack of research on college students' affective development as it relates to coursework. "This is partially because faculty seem unable, or unwilling, to specify the affective objectives of these courses (Gerretson & Golson, 2005; Stone & Friedman, 2002) and the approaches used to meet these objectives (Kobella, 1989)" (as cited in Anderson, et al., 2007, p. 150).

**Curriculum and Teaching**

Eble (1984) wrote that the aims of American higher education include: (1) the development of a highly educated citizenry; (2) the expansion of knowledge for practical and research ends; (3) the fostering of the arts, sciences and humanities to contribute to our culture; and (4) the formation of a fully developed and realized self (p. 10). In the report, *Higher Learning in the Nation's Service*, Boyer and Hechinger (1981) wrote:

> Education's primary mission is to develop within each student the capacity to judge wisely in matters of life and conduct. This imperative does not replace the need for rigorous study in the disciplines, but neither must specialization become an excuse to suspend judgment or interfere with the search for worthwhile goals. .

> . . As we look to a world whose contours remain obscure, the time has come for higher learning to adjust, once again, its traditional roles of teaching research, and service. In so doing, it should affirm that at the heart of the academic enterprise there is something more than the heating system or the common grievance over parking. . . . The center holds because the search for truth leads to the discovery of larger meanings that can be applied with integrity to life's decisions. This, we conclude, is higher learning's most essential mission in the nation's service. (pp. 63-66)

Levine (1980) added that education should not just be vocational preparedness but should include the teaching of basic skills, concern with world problems, and an emphasis on values and ethics (pp. 131-132). Kazanjian and Laurence (2000) also commented that "We will need people dedicated to living in ways that will ensure a sustainable future, people committed to combining the life of the mind with work for the common good" (p. 2).

The Carnegie Foundation (1977) suggested that colleges should be encouraged to cultivate certain traits and abilities in their students. In scholarship, students should:

- respect facts and know how to get them;
- recognize and practice logical analysis;
- develop an obligation to explore alternative explanations; and
- recognize consequences of facts for the survival and quality of human life. (p. 341)

In relationships with one another, they should:

- be sensitive to the feelings and sensitivities of others;
- be tolerant of other points of view;
- have civil discussion;
- be honest in the presentation of facts, goals, and explanations; and
- be supportive of individual freedom of expression. (Carnegie Foundation, 1977, p. 341)

Students should value:

- merit in the personality and performance of others;
- playing in competition for credits, awards, and honors;

- fairness in debate; and
- the cultural heritage of our civilization. (Carnegie Foundation, 1977, p. 342)

And students should avoid:

- simplification of complicated issues; and
- evaluating individual persons on the basis of stereotypes. (Carnegie Foundation, 1977, p. 342)

Mentkowski and Associates (2000) asked how a curriculum might support sustained learning. They posited that college learning is sometimes naturally self-sustaining. Students in college develop an identity of a learner. As Pascarella and Terenzini (1991) noted, an important part of college's long-term influence is that it builds "an interest in and receptivity to further learning" (p. 107). Research also suggested college fosters reading widely, continuing one's education, and remaining informed about social issues (Pascarella & Terenzini, 1991). Students may develop both intellectually and morally, but what are the causes of this development? Studies of college outcomes have shown that college as a whole changes students (Astin, 1977, 1993; Chickering & Reisser, 1993; Feldman & Newcomb, 1970) but too few studies have demonstrated change linked to a particular curriculum (as cited in Pascarella & Terenzini, 1991, p. 363). During college, several features of the curriculum support this transformative process. "Teachers can be effective by coaching learners through their performances and providing opportunities for students to try out their learning in realistic contexts. . . . Study in the liberal arts and collaborative work with peers is one key to meeting these expectations" (as cited in Mentkowski & Associates, 2000, pp. 195-196).

"College students who perceive more opportunities for exploring diverse perspectives demonstrate more sophisticated intellectual and ethical development

(Belenky, et al., 1986, Perry, 1970), moral development (Mason & Gibbs, 1993), and maturity (Heath, 1991)" (as cited in Mentkowski & Associates, 2000, p. 200). Nicgorski (1992) wrote that a "structured curriculum can assist a student's search for meaning. . . . As the student searched for intellectual grounds for character, the college or university should be striving in every way to support this character by strengthening its affective aspects" (p. 277). Teaching and learning require students to gain competency in solving complex problems and to be not only technically proficient but also to have the ability to generalize from the classroom to the real world. Individuals need skills to relate to individuals with differing values and beliefs, to act upon their environment, and be responsive to change (Frieden & Pawelski, 2003, p. 1).

Different types of collegiate experiences on the effects on the student are instructive. Research by Feldman and Newcomb (1970) found some interesting results that seemed to suggest that there are changes found in student development during college, especially in "declining authoritarianism, dogmatism, and prejudice, together with decreasingly conservative attitudes toward public issues and growing sensitivity to aesthetic experiences" (p. 59). However, the selection of major, the selection of the college type, and the instruction offered by the college or university impacted the changes seen in students. Major choice was found to also impact student change. Individual faculty members were found to have little impact on student beliefs. Small, residential four-year colleges seemed to create the most change in their students. Student characteristics such as their background and personality also influenced student change in

values. A review of the student after college showed little change in most student attitudes (Feldman & Newcomb, 1970, pp. 59-60).

The 2007-2008 HERI Faculty Survey as described in *The American College: National Norms for the 2007-2008 HERI Faculty Survey* is based on 22,500 full-time college and university faculty members at 372 four-year colleges and universities nationwide. Results of the survey showed that faculty indicated that helping students develop critical thinking skills were most important (99.6% of faculty indicated it was important) and 70% of the faculty believed that "developing moral character" was important (DeAngelo et al., 2008, pp. 2-3). Fifty-five percent of the faculty used real-life examples in their classroom (DeAngelo et al., 2008, p. 11). However, according to Hersh and Schneider (2005),

> on most campuses, ethics, values, and social responsibility have become, at best, tacit concerns in the explicit college curriculum. Faculty members receive no preparation to address such issues in their teaching, and they often shy away from helping students connect the values implications of their course topics and themes with students' own lives. (p. 6)

## General Education

**History.** General Education has its roots in the early American college traditions. The early colleges were formed by the established churches so that the "young could be instructed in proper conduct" (Cohen, 1998, p. 17). The curriculum of the first English-American colleges had a central core of classical languages and literature. In addition, subjects such as Aramaic, Hebrew, ethics, politics, physics, mathematics, botany, and divinity were studied (Brubaker & Rudy, 1997, p. 13). As Boyer (1987) stated, "America's first colleges were guided by a vision of coherence. The goal was to train not

only the clergy, but a new civic leadership as well" (p. 60). The typical college student was a young, privileged white man studying for a career in one of a few fields such as the serving the church, practicing law, or becoming a medical doctor (Boyer & Levine, 1981; Rudolph, 1977, 1990). During this time, there was no specialized education (Rudolph, 1977). The curriculum stressed both the intellectual and the moral (Dressel & DeLisle, 1969) and was both "classical and biblical in content" (Laney, 1990, p. 52).

Following the American Revolution, the focus was on the future. Benjamin Rush predicted that the "nation's colleges . . . would be 'nurseries of wise and good men to adapt our modes of teaching to the peculiar form of government'" (as cited in Cremin, 1980, p. 116). During the latter part of the Colonial era, the religious orientation began to fade and colleges began to center on principles of morality and public service away from the church (Cohen, 1998). As communities grew and diversified, college came to be "an institution which was best suited to inculcate virtue and promote social sponsorship among the privileged" (Miller, 1988, p. 9).

American higher education was reformed by the Industrial Revolution (Miller, 1988). The Industrial Revolution and the focus on the 'common man' during Andrew Jackson's presidency brought on a growing need for occupational training (Boyer & Levine, 1981). "Reaction against the fractionated curriculum brought concern about how to sustain a common set of values. The thinking coalesced into the general education ideal that all students should gain a common body of knowledge with shared understandings" (Cohen, 1998, p. 143).

In the late 18th and early 19th centuries, new subjects such as modern languages, science, and technical studies were added to the curriculum. The Yale Report of 1828, a document written by the faculty at Yale College defending the classical curriculum, called for the continued study of Latin and Greek (Miller, 1998). This report was so influential that many curricular changes were delayed for decades at most colleges and universities (Sheridan, 1998). It was at this time that the term 'general education' came to describe a common core curriculum. The President of Bowdoin College, A.S. Packard coined the term 'general education' in an article in the *North American Review* (1829) (Levine, 1978, p. 4). After 1820, attempts were made to diversify the curriculum. The University of Virginia, Amherst College, and the University of the City of New York all tried to establish a dual curriculum (Boning, 2007; Levine, 1978; Miller, 1988; Rudolph, 1990; Sheridan, 1998). This dual curriculum did not survive at any of these institutions (Rudolph, 1990).

The historic Morrill Land Grant Act of 1862 "wedded higher education to the practical arts" (Boyer, 1987, p. 62). The institutions founded as a result of the Morrill Act of 1862 did not compete with the classical colleges because they offered a practical, vocational education (Miller, 1988). The land-grant institutions developed under the 1862 Morrill Act and the later second Morrill Act of 1890 changed the homogenous nature of those attending college. Women, African Americans, the working class, and immigrants were now taking advantage of the educational opportunities available (Dressel & DeLisle, 1969; Fuhrmann, 1997; Miller, 1988).

The second major event that influenced higher education was the introduction of the free elective system at Harvard University (Miller, 1988, p. 15). Despite President Eliot's original intention to provide a more diversified curriculum, Miller (1988) asserted that the elective system created choices that were so varied that students earning the same degree at the same institution may not have taken the same courses (p. 19). The academic community became fragmented over the emphasis on an individualized education (Boyer & Levine, 1981). As the 19th century progressed, the college curriculum continued to expand. The elective system allowed the research movement to flourish because it allowed faculty more freedom to pursue their own interests (Miller, 1988). Faculty embraced the specialization this new freedom brought and as a result, individual departments became more powerful on campus (Gaff, 1983). The number of prescribed courses shrunk at most colleges (Boyer & Levine, 1981) and along with that, interest in general education faded at many institutions (Chance, 1980).

By the end of the 19th century, the primary purpose of American higher education shifted from preparing future leaders to the advancement of knowledge (Gaff, 1983). Two new forms of general education developed. In 1909, A. Lawrence Lowell, President of Harvard University, created the general education 'distribution' requirements (Miller, 1988). Yale and Cornell followed suit in abandoning free electives and adopting distribution requirements (Miller, 1988). The other invention was the survey course which gave a broad overview of an academic field (Levine, 1978, p. 5).

During the 1920's and 1930's, a number of well-known general education programs were created such as those at the University of Chicago and St. John's College

(Levine, 1978). These curricula "reinstituted the core curriculum in the spirit of the colonial colleges" (Levine, 1978, p. 6). These efforts resulted in most institutions structuring their distribution across the following subject areas: humanities, science, social sciences, mathematics, and fine arts (Brint et al., 2009; Cohen, 1988). The Great Depression ended the interest in general education reform as students demanded that their education improve their employment opportunities (Boyer & Levine, 1981). However, interest in general education reform experienced a renewal with the 1945 release of the report, *General Education in Free Society*, commonly referred to as the *Harvard Redbook* (Bowen, 2004; Boyer & Levine, 1981). The *Redbook* called for a shared, coherent, and purposeful general education for every student (Ratcliff, 1997). The *Redbook* also emphasized that both general and specialized education were vital in a free society (Boning, 2007). Although the suggestions in the *Redbook* for instituting a core curriculum at Harvard were not approved, it helped to shape undergraduate degree programs over the years (Boning, 2007; Boyer & Levine, 1981; Ratcliff, 1997; Rudolph, 1977, 1990).

In the 1940's, general education gained still wider acceptance (Levine, 1978). The 1950s brought widespread experimentation. Courses were specifically designed for general education and most were broad survey courses. There continued to be a concern among educators about a balance between breadth and depth (Dressel & DeLisle, 1969). From 1945 to 1975, students were generally dividing their academic studies almost equally between their major field, electives, and college-mandated distribution requirements (Cohen, 1998).

The second half of the 20th century saw greater specialization among the faculty and specialization and vocationalism came to the fore (Sloan, 1980, p. 11). In addition, major student-related changes also affected general education during the 1960's and 1970's. Students began to question the rationale for including certain courses in the distribution requirements that they considered irrelevant to contemporary society and students (Boning, 2007; Gaff, 1983; Magnell, 1998). The increased diversity brought about by the Higher Education Act of 1965 and its reauthorization in 1972 led to complaints by students that the traditional general education failed to incorporate the perspectives of women and minorities, was not pertinent to the growing adult education movement, and did not serve an increasingly large proportion of students who were attending college for vocational reasons (Boning, 2007, p. 10). In response to these objections, almost 75% of colleges and universities reduced their general education requirements (Boning, 2007, p. 10).

In the late 1970's and early 1980's, general education saw another restructuring (Gaff, 1983). This reform movement is considered to have originated with the 1977 release of *Mission of the College Curriculum* by the Carnegie Foundation for the Advancement of Teaching (Gaff, 1980; Mariana, Varjravelu, & Young, 2004, as cited in Boning, 2007). This report described general education as a "disaster area" (Carnegie Foundation for the Advancement of Teaching, 1977, p. 11). By the early 1990's, efforts to reform the curriculum resulted in raised standards, increased requirements, the creation of learning communities, changed learning modalities like active learning, and the spread of general education across all four years (Boning, 2007; Gaff, 1991; Stark & Lattuca,

1997). Boning (2007) cautioned that many of these changes were not a result of careful program review processes, curricular assessment, or institutional strategic planning (p. 12). There has been an increase in the number of 'skill' requirements and a redefinition of traditional fields of literature, mathematics, and classical languages to emphasize skill over subject matter such as speech/writing, mathematics/quantitative, foreign language proficiency, and critical thinking/reasoning skills (Toombs, Amey, & Chen, 1991). In a 1997 study, the Association of American Colleges and Universities' (AAC & U) Debra Humphreys reviewed revised general education programs at nearly 100 two- and four-year institutions. Her findings showed that college students in the United States were beginning to study a new set of general education topics and issues. These revised general education courses "confront students with issues of multiple and intersecting cultures, identity and community, equity and marginalization, power and social stratification and with collective struggles both to reduce bias and to expand opportunity and social justice" (Schneider, 2000, p.117).

By the new millennium, undergraduate education had become a higher priority for colleges and universities and a greater emphasis was placed on the development of the personal, intellectual, and social abilities of the students (Ratcliff, 1997). Institutions began to develop and articulate their philosophies of general education to their students. Pascarella, Wolniak, Seifert, Cruce, and Blaich (2005) observed that

> although the higher education community has recognized the need for a synthesis of liberal arts and vocationally oriented education, economic considerations remain prominent in the minds of prospective college students and their families. The parents of today's traditional-age college students were of traditional college age during the 1970's and often carry the perception that a liberal arts education does not provide marketable career skills. (p. 9)

In 2000, a national study was conducted by means of two electronic surveys – one to chief academic officers (CAO 2000 survey) asking for their perceptions on goals, practices, priorities, external influences, and future challenges and the other to the administrator most responsible for day-to-day administration of general education programs (GE 2000 survey) asking for information on the aims, organization, structure, pedagogy, and assessment practices for general education courses provided a portrait of general education as we entered the 21st century (Ratcliff et al., 2001, p. 6). Results from the survey showed that general education remains a high priority on most college campuses. Seventy-eight percent of the institutions made revisions to their general education programs during the last decade of the 20th century (Ratcliff et al., 2001, p. 9). The average general education requirement is 37.6% of the baccalaureate degree (45 credit hours) (Ratcliff et al., 2001, p. 12).

**Purpose of general education.** Although the delivery of general education may have changed, the purpose has not. "It could be said that the aim of all general education throughout history has been to form character and produce good citizens" (Arthur, 2005, p. 240). General education, a core curriculum, or a liberal arts education is still maintained in the curriculum. The aspiration to build good citizens, professionals, producers, and consumers has remained throughout the history of higher education in America. Aper (1996) wrote:

> If students are to be ethical and moral citizens, they must have the tools with which to engage fully in their roles beyond the university setting. . . . An essential mission of undergraduate education, then, is the fostering in students of ability and a willingness to engage in 'reflective morality.' (n.p.)

Boyer and Levine (1981) asserted that colleges and universities should not seek to impose a single set of values. The aim of general education is to help students to think about what shapes their values. Boyer and Hechinger (1981) reminded us that general education offers students the opportunity to explore how their own society's values have been shaped and enforced and how society has reacted to unpopular ideas. As part of this exploration, students identify their own beliefs and engage in a discussion of their personal moral and values.

A survey of students was undertaken by Gaff and Davis (1981) (as cited in Gaff, 1983) to discover student attitudes toward general education. The results indicated that most students believed that most of their courses failed to realize each of the following objectives:

- introduce them to significant ideas, concepts, or intellectual perspectives;
- engage and challenge their own ideas, assumptions, or attitudes;
- contribute to a broad intellectual foundation for the study of their majors;
- stimulate their curiosity and desire to learn about more fields; and
- help master new methods of intellectual inquiry. (Gaff, 1983, p. 53)

It is apparent from these results that perhaps, general education is not achieving its intended purpose. According to Miller (1988),

> many educators ask if the curriculum has become irrelevant for a generation of students facing a rapidly changing, increasingly dangerous and complex world. . . . For many, general education is the conscience of higher education, the part of a university that is concerned most directly with the individual student's responsibility to society at large. (pp. 2-3)

**Models of general education.** According to the Carnegie Foundation (1977), general education has gone from being 100% of the classical curriculum during the 18th and 19th centuries of higher education to one third of the curriculum (p. 7). General

education has developed differently at different types of institutions. Private colleges and universities born of the liberal arts tradition dominated American higher education for many years. In these institutions, general education has a long-standing history. However, increasing numbers of students are now served by community colleges, state colleges and universities, professional and technical schools, proprietary schools, and online degree programs. These institutions do not have the tradition of general education and were formed to provide a different educational experience (Gaff, 1983). American education has never been forced to conform to any standard or uniformity in organization, administration, or financial support (Brubaker & Rudy, 1997). Occupational fields account for approximately 60% of bachelor's degrees in recent years and many institutions award more than 80% of their degrees in these fields (Brint, Riddle, Turk-Bicakci, & Levy, 2005, p. 151). Newton (2000) postulated that faculty is a key determinant of the model of general education used by the institution.

There is still no common agreement about what constitutes a general education curriculum, but accrediting agencies have provided some guidance. The Middle States Commission on Higher Education (2009), which accredits the institution studied, stated that the fundamentals of a general education program should be:

- a program of general education of sufficient scope to enhance students' intellectual growth, and equivalent to at least 15 semester hours for associate degree programs and 30 semester hours for baccalaureate programs;
- a program of general education where the skills and abilities developed in general education are applied in the major or concentration;
- consistent with institutional mission, a program of general education that incorporates study of values, ethics, and diverse perspectives;
- institutional requirements assuring that, upon degree completion, students are proficient in oral and written communication, scientific and quantitative reasoning, and technological competency appropriate to the discipline;

- general education requirements clearly and accurately described in official publications of the institution; and
- assessment of general education outcomes within the institution's overall plan for assessing student learning, and evidence that such assessment results are used for curricular improvement. (p. 48)

In 1994, the Association of American Colleges' report, *Strong Foundations: Twelve Principles for Effective General Education Programs,* 12 principles were laid out for general education programs:

1. The task of general education programs is to prepare students to: understand and deal constructively with the diversity of the contemporary world, a diversity manifested not only in ideas and ways of knowing but also in populations and cultures; construct a coherent framework for ongoing intellectual, ethical, and aesthetic growth in the presence of such diversity; and develop lifelong competencies such as critical and creative thinking, written and oral communication, quantitative reasoning, and problem solving. (p. 4)
2. Strong general education programs embody institutional mission. (p. 7)
3. Strong general education programs continuously strive for educational coherence. (p. 12)
4. Strong general education programs are self-consciously value-based and teach social responsibility. (p. 18)
5, Strong general education programs attend carefully to student experience. (p. 22)
6. Strong general education programs are consciously designed so that they will continue to evolve. (p. 27)
7. Strong general education programs require and foster academic community. (p. 31)
8. Strong general education programs have strong faculty and administrative leadership. (p. 36)
9. Strong general education programs cultivate substantial and enduring support from multiple constituencies. (p. 40)
10. Strong general education programs ensure continuing support for faculty, especially as they engage in dialogues across academic specialties. (p. 44)
11. Strong general education programs reach beyond the classroom to the broad range of student co-curricular experiences. (p. 48)
12. Strong general education programs assess and monitor progress toward an evolving vision through ongoing self-reflection. (p. 52)

There are many different ways that colleges and universities choose to present their general education curriculum to their students. The Distribution Model is the most common one, typical of over 90% of colleges and universities in the United States (Boyer, 1987). The Distribution Model has its roots in the general education program developed by Princeton University in the 1880's, which used discipline-based courses and a menu from which students could select classes to meet each set of requirements (Wehlburg, 2010). There are different types of distribution requirements. A prescribed distribution dictates exactly what is to be taken. A smorgasbord requirement is less structured and allows a student to choose from various course offerings that they college/university determines meets the requirements. Recommended distributions are courses that are recommended but not required. Self-paced distribution allows the student to determine how requirements are met and the contract approach requires that the student and advisor work together to determine how to meet the distribution requirements (Boyer & Levine, 1981, pp. 26-27). Kovac and Coppola (1997) pointed out that the distribution model does not guarantee that students will make the necessary connections between courses without proper guidance. Also, it is often the case that students are taking their general education courses in their freshmen and sophomore years, when they are least likely to be expert learners. Schwartz (2005) criticized the Distribution Model arguing that "'tyranny of choice' can lead to scattered, unfocused development; poor choices by learners who are not yet aware of what they need" (as cited in Allen, 2006, p. 9). Boyer (1987) also criticized this model by stating that students move from one narrow department requirement to another without making connections or seeing the

whole picture. Latzer (2004) saw the distribution model with virtually unlimited student choices leading to students choosing courses based on "superficialities, convenience and mere whim. The result is a trivialization of general education." (p. B20).

The second most common form of general education is the Core Curriculum: a configuration of courses required of all students (Gaff, 1983). The core curriculum was the most typical form of general education prior to the 1960s (Bourke, Bray, & Horton, 2009). The core curriculum is usually more interdisciplinary in nature and organized around a theme or issue. According to the Carnegie Foundation, about 10% of American higher education institutions use the core curriculum to meet their general education requirements (Gaff, 1983, p. 10). Columbia University is best known for this approach to general education (Allen, 2006). The core curriculum is most commonly found in small colleges with relatively homogenous student bodies. (Gaff, 1983).

The third form of organization of general education is the concept of Free Electives. This is employed by few institutions. With free electives, students create individualized curricular contracts based on their interests and future plans. Some of the newer adult and non-traditional education programs use this type of general education requirement (Gaff, 1983). This Individual Student Development model promoted by John Dewey at Columbia University and Arthur O. Lovejoy at Johns Hopkins University emphasized individual development where students focus more on process than content (Allen, 2006). General education at each institution is a reflection of the underlying educational philosophies of the institution and of the faculty who teach there.

**Penn State model of general education.** General education classes became part of the Penn State curriculum in 1954 with the adoption of a 37-credit program. Penn State was a latecomer to the concept of a general education curriculum. The Penn State program was initiated by a University Senate sub-committee consisting of faculty representatives from each of the colleges, or academic units. Under the chairmanship of Professor Ernest W. Callenbach, then head of the Poultry Husbandry Department, the committee prepared a policy on general education that was accepted in December 1954 by the full University Faculty Senate. The Board of Trustees approved a statement of educational policy which broadly defined general education as "that part of the education designed to develop a man's knowledge and capacities, rather than to train him for the particular purpose of following an occupation" (Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm ). In May 1957, the General Education Committee was established to evaluate and modify the programs and was directed by Dr. Howard Cutler (Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm).

General education at Penn State is included in every undergraduate degree program that the institution offers on all campuses.

> The inclusion of General Education in every degree program reflects Penn State's deep conviction that successful, satisfying lives require a wide range of skills and knowledge which include the ability to reason logically and quantitatively; to communicate effectively; to understand the sciences and make sense of the natural environment; to be familiar with the cultural movements that have shaped societies and their values; to have an appreciation for the enduring arts that express, inspire, and continually challenge these values (Retrieved from http://bulletins.psu.edu/undergrad/generaleducation/)

"General Education, in essence, augments and rounds out the specialized training students receive in their majors and aims to cultivate a knowledgeable, informed, literate human being" (Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm). The components of General Education at all campuses at Penn State include skills courses in quantitative and communication areas and courses in the knowledge domains of Arts, Humanities, Health Sciences, Natural Sciences and Social and Behavioral Sciences. In addition, students take a first year seminar or have a first year experience at the university, writing intensive courses, and United States and International Cultures courses. (See Appendix A for more details on these requirements).

In December, 1997, the Faculty Senate adopted the following principles to guide the General Education program. An effective General Education program enables students to:

1. acquire knowledge through critical information gathering - including reading and listening, computer-assisted searching, and scientific experimentation and observation;
2. analyze and evaluate, where appropriate in a quantitative manner, the acquired knowledge;
3. integrate knowledge from a variety of sources and fields;
4. make critical judgments in a logical and rational manner;
5. develop the skills to maintain health, and understand the factors that impinge upon it;
6. communicate effectively, both in writing and orally, and using the accepted methods for presentation, organization and debate particular to their disciplines;
7. seek and share knowledge, independently and in collaboration with others;
8. gain understanding of international interdependence and cultural diversity, and develop consideration for values, lifestyles, and traditions that may differ from their own;
9. comprehend the role of aesthetic and creative activities expressing both imagination and experience (retrieved from http://senate.psu.edu/guide/sec1.html #General Education Component)

In 2010, the university included the use of general education to assist students in exploring ethical issues in its most recent strategic plan, *Priorities for Excellence: The Penn State Strategic Plan 2009-10 --2013-14.*

> *Strategy 1.6: Assist Students to Explore Ethical Issues in Their Professional and Personal Lives*
>
> **Actions:** Every day brings news coverage of situations that involved professional and personal ethics and ethical dilemmas. Many of these situations are complex, and graduate and undergraduate students should have opportunities to confront the issues while they are enrolled at Penn State. The University should ensure that no student graduates from Penn State without having had the opportunity to confront issues of ethics and ethical dilemmas, both theoretical and applied, that can be incorporated into General Education courses, courses specific to a student's major, or the co-curriculum (Retrieved from http://strategicplan.psu.edu/exploreethical)

**Differentiation between Ethics and Morals**

There is still no established distinction between the moral and the ethical, and the two are frequently regarded as synonymous. Jarrett (1991) posited that moral is considered as conventional norms and codes of conduct, whereas ethical has more to do with reflective judgments.

The difference between ethics and morality can be seen as a difference between teleological and deontological. "Ethics is understood as dealing with the aims of human life, and is therefore thought of as teleological, whereas morality is seen as dealing with the obligation to respect the norms, and is therefore view as deontological" (Van der Ven, 1998, p. 3). For others, morality is the practice of moral actions whereas ethics is the reflection on this morality (Van der Ven, 1998). Others have conceived morality as concerned with norms of correct conduct and ethics as the thinking about these moral norms (Alexander, 2003).

## Cognitive Development Theories Related to Ethical Reasoning

The psychology of ethical reasoning draws from the field of cognitive development and research on moral reasoning and moral development (Ponemon, 1992). Some theorists have related moral reasoning as a back-drop to ethical reasoning. Theorists such as Kohlberg and Candee (1984) and Rest (1979) have argued that moral reasoning influences individuals' decisions and behavior (as cited in Eisenberg, Carlo, Murphey, & vanCourt, 1995). Rholes and Bailey (1983) hypothesized that the relation between moral reasoning and behavior increases with age because higher level reasoning is associated with the "progressive stripping away of bases for justifying behavior that are extrinsic to principle" (p. 104). Having an understanding of why and how individuals make moral decisions is directly related to an individual's ethical decision making process.

**Jean Piaget.** Jean Piaget was the first to conceptualize moral development in a stage theory context. (Gilligan,1981). Piaget and other stage theorists asserted that different types of moral thinking appear in an invariant stage sequence (Bandura, 1991).

In stage theories, cognitive conflict has been cited as the major motivator of cognitive change. Piaget (1965) believed that the discrepancy between a child's current cognitive schema and perceived events causes the cognitive conflict that leads to exploration of alternatives and change (as cited in Ashmore & Starr, 1991).

One of the central concepts in Piaget's theory is that behavior and thought are functions of a regulatory system that facilitates an individual's adaptation to his or her environment (Reed, Turiel, & Brown, 1996). "Because our human environment is largely

organized through interaction with other people, many – but not all – values emerge within a social context" (Reed et al., 1996, p. 1).

**Lawrence Kohlberg.** Kohlberg extended the research by Piaget with his doctoral dissertation in 1958. Kohlberg extended Piaget's thinking as it related to moral and ethical development in the following ways:

1. Kohlberg focused on cognition – how people construct reality and meaning;
2. Kohlberg assumed that there would be stages of moral development;
3. Kohlberg collected data by posing problems to subjects and exploring how the subjects went about solving the problems;
4. Kohlberg presented the moral dilemmas to children of different ages in order to look for age differences. (Rest, 1994, p. 3)

"Using this methodology of presenting hypothetical moral dilemmas, Kohlberg (Kohlberg, 1968, 1984; Rest 1979; Rest & Narvaez, 1994) differentiated between three levels, which included six stages of moral decision making" (as cited in Dufrene & Glosoff, 2004, p. 2). By analyzing the responses of subjects of varying ages over time to hypothetical moral dilemmas, Kohlberg concluded that moral reasoning develops over time through a series of six stages (Elliott, 2007; Kohlberg, 1968, 1984).

Kohlberg's stages of cognitive development are based on the following assumptions:

1. Stages are 'structured wholes,' or organized systems of thought. This means individuals are consistent in their level of moral judgment.
2. Stages form an invariant sequence. Under all conditions except extreme trauma, movement is always forward, never backward. Individuals never skip stages, and movement is always to the next stage up. This is true in all cultures.
3. Stages are 'hierarchical integrations.' Thinking at a higher stage includes or comprehends within it lower stage thinking. There is a tendency to function at or prefer the highest stage available. (Kohlberg & Hersh, 1977, p. 54)

Kohlberg, like other stage theorists believed that moral development could be facilitated by providing an individual with "experiences of conflict or disequilibrium and then exposing him or her to the type of reasoning common to the next higher stage of development" (Aron, 1977, p. 210).

Kohlberg's description of his six stages of moral judgment was centered on the "concept of conventional morality, the equation of justice with the preservation of existing social systems through the maintenance of respect for their norms and values" (Gilligan, 1981, p. 142). Kohlberg grouped his stages into three general levels, precoventional, conventional, and postconventional. The post-conventional level of moral cognition is "where an individual commits to a 'principled' level of ethics" (Abdolmohammadi, Read, & Scarbrough, 2003, p. 73).

Kohlberg (1976) viewed the six stages as being an invariant developmental sequence. Each stage was dependent on the attainment of previous stages. Thinking at a higher stage includes lower stage thinking and individuals will have a tendency to function at the highest stage available (Kohlberg & Hersh, 1977; Rest, 1979). The stages of moral development are defined by the following characteristics:

I. Preconventional Level. At this level, the child is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels either in terms of the physical or the pleasurable consequences of action (punishment/reward). This level is divided into the following two stages: The punishment-and-obedience orientation and the instrumental-relativist orientation.

II. Conventional Level. At this level, the expectations of the individual's family, group, or nation is perceived as valuable in its own right. At this level, there are the following two stages: The interpersonal concordance or "good boy - nice girl" orientation and the "law and order" orientation.

III. Postconventional, Autonomous, or Principled Level. At this level, moral values and principles are defined separate from the authority of the groups or persons holding these principles and apart from the individual's own identification with these groups. This level also has two stages: The social-contract, legalistic orientation, generally with utilitarian overtones and the universal-ethical-principle orientation. (Aron, 1977, p. 199; Kohlberg & Hersh, 1977, p. 55; Whitely, 1982, pp. 17-19) (See Appendix B for a more detailed description of Kohlberg's stages).

**James Rest.** Rest (1979) continued Kohlberg's (1969, 1984) research by developing the Defining Issues Test (DIT). Using Kohlberg's (1969, 1984) method of presenting an individual with a hypothetical moral dilemma through a written paragraph, the DIT measures an individual's moral decision-making stage (Dufrene & Glosoff, 2004). The DIT was developed in response to the need for a practical, validated method for assessing moral judgment and moral reasoning. Rest believed that individuals used different decision-making processes at different stages in their development. He assigned points (P Score of 0-95) for each stage and the higher the score, the higher the ethical reasoning of the individual (Rest, 1994).

Rest's Four Component Model of Moral Behavior included:

1. Moral Sensitivity – awareness of how our actions affect other people. (Rest, 1994, p. 23)
2. Moral Judgment – judges which line of action is more morally justifiable (which alternative is just or right). (Rest, 1994, p. 24)
3. Moral Motivation – the importance given to moral values in competition with other values. (Rest, 1994, p. 24)
4. Moral Character – this component involves ego strength, perseverance, backbone, toughness, strength of conviction, and courage (Rest, 1994, p. 24) (see Appendix C for a more detailed description of Rest's model).

**William Perry.** William Perry (1999) further extended the moral development theories to look at ethical reasoning. He asserted that

> people tend to 'make sense' that is, to interpret experience meaningfully. The 'meaning' of experience consists of some sort of orderliness found in it, and the nature of this orderliness in a given person's experience can often be deduced by others from the forms of his behavior, including, especially, what he himself has to say on the matter. (Perry, 1999, p. 46)

The theory he generated was that college students go through nine positions located within four stages with regard to their intellectual and ethical development. The four stages are:

1. Dualism. Division of meaning into two realms – Good versus Bad, Right versus Wrong, We versus They, All that is not Success is Failure, and the like. Right answers exist *somewhere* for every problem, and authorities know them. (Perry, 1981, p. 79).

2. Multiplicity. Diversity of opinion and values is recognized as legitimate in areas where right answers are not yet known. Opinions remain atomistic without pattern or system. No judgments can be made among them so 'everyone has a right to his own opinion; none can be called wrong'. (Perry, 1981, pp. 79-80)
3. Relativism. Diversity of opinion, values, and judgment derived from coherent sources, evidence, logics, systems, and patterns allowing for analysis and comparison. Some opinions may be found worthless, while there will remain matters about which reasonable people will reasonably disagree. Knowledge is qualitative, dependent on contexts. (Perry, 1981, p. 80)
4. Commitment (uppercase C). An affirmation, choice, or decision (career, values, politics, or personal relationship) made in the awareness of Relativism (distinct from lower case c of commitments never questioned). Agency is experienced as within the individual. (Perry, 1981, p. 81)

Perry also spoke to alternatives to Growth – Temporizing, Retreat, or Escape. (See Appendix D for a more detailed description of Perry's theory).

**Other theorists.** Gilligan (1982) contended that Kohlberg's model reflected a male orientation. For Gilligan, ethics and morality is contextually based and tied to relationships. Gilligan believed that for women, morality centered not on rights and rules, but on interpersonal relationships and the ethics of compassion and care (Crain, 2000).

For Damon and Hart (1988), during the development of self-understanding, the self chooses important philosophical or moral belief systems, ideological choices, and personal goals (as cited in Derryberry & Thoma, 2005, pp. 67-69).

Cortese (1990) asserted "ethics is a product of human interaction and knowledge is socially constructed (p. 61)" (as cited in Thomas, 1997, p. 9). Ethics and systems of morality are a product of our environment, our cultural settings, and the nature of society related to social, cultural, ethnic, and racial characteristics (Thomas, 1997).

Van Hoose and Paradise (1979) were influenced by Piaget and Kohlberg, theorized that "'developmentalism' provides a framework and structure that support an 'approach to the study of ethics'" (as cited in Dufrene & Glosoff, 2004, p. 3). They postulated that ethical reasoning progresses along a "continuum of five qualitatively hierarchical levels of ethical orientation: (a) punishment, (b) institutional, (c) societal, (d) individual, and (e) principle" (Dufrene & Glosoff, 2004, p. 3).

**Ethical Reasoning Theories**

There are three categories of reasoning theory: consequentialism, deontology, and human nature or virtue ethics (Brink, 2007; Donaldson & Werhane, 1983). Frequently labeled teleological, consequentialist theory concentrates on the consequences of human behavior (Donaldson & Werhane, 1983). Two types of consequentialist theory are ethical egoism, or Machiavellianism , where the individual reasons that right action is action that benefits the individual the most (Granitz & Loewy, 2007) and utilitarianism where ethical behavior will result in the greatest good for the most number of individuals (Donaldson & Werhane, 1983; Granitz & Loewy, 2007). Within utilitarianism, there are two groups: act

utilitarians and rule utilitarians, those who look at individual acts for decision-making and those who look at general rules for decision making (Donaldson & Werhane, 1983).

Deontologists argue that ethical judgments should not be on consequences but on rules, norms, and principles (Brink, 2007; Donaldson & Werhane, 1983). "Right action" is the primary role for deontologists (Brink, 2007, p. 381). Immanuel Kant believed that ethical reasoning should concern activities that are rationally motivated and can be applied universally to all actions (Donaldson & Werhane, 1983, p. 7). John Locke and John Rawls through their social contract theory provided a contractarian alternative where the focus was less on individual actions and more on the principles that governed society (Donaldson & Werhane, 1983).

The human nature approach, or virtue ethics, assumes that all individuals are born with inherent potential and are naturally oriented to actualize this potential (Brink, 2007). This potential includes mental, moral, ethical, and social potential (Donaldson & Werhane, 1983).

**Curricular Content and Ethical Reasoning**

There are many reasons why almost every college and university recognizes that they must engage the ethical and civic learning of their students. High-profile academic cheating, sports scandals, racial intolerance, and other social issues are part of the modern day landscape of higher education. Colleges and universities "cannot avoid responsibility for the cultivating students' ethical and moral values and behaviors" (Dalton & Crosby, 2011, p. 2). The Association of American Colleges and Universities (AAC & U, 2012) indicated that of the 78% member institutions that have already defined learning outcomes applicable to all students, 75% have listed ethical reasoning among their

expected outcomes (AAC & U, 2012, as cited in Dey & Associates, 2010, p. xii). Sixty‐eight percent include civic engagement and 79% view intercultural learning as essential outcomes (as cited in Dey & Associates, 2010, p. xii).

Researchers have investigated various ways to improve the ethical reasoning skills of students. A large number of researchers have chosen to use the Defining Issues Test (DIT), making the DIT the single most widely used instrument in research on moral and ethical reasoning among college students (Mayhew & King, 2008, pp. 18-19). Bebeau (2002) reviewed 33 studies from five professions (Medicine, Veterinary Science, Law, Dentistry, and Nursing) using the DIT, SRM (Sociomoral Reflection Measure) or MJT (Moral Judgment Test) to answer four questions: 1) does professional education promote moral judgment development; 2) does the addition of ethics instruction promote ethical reasoning development; 3) are there difference among sub-groups in the professions; and 4) is moral judgment linked to professional performance (p. 273). Results of her review of the research indicated that professional school curricula do not seem to promote reasoning development unless there is an ethics component. In addition, student-centered moral discourse seems to have the largest effect (Bebeau, 2002, p. 289). Schlaefli, Rest, and Thoma (1985) reviewed 55 studies of educational interventions to stimulate moral judgment development. Their meta-analysis of these 55 studies which used the DIT showed the following:

1) moral education courses using dilemma discussions were most effective;
2) academic courses in the humanities and social studies do not seem to have any influence on moral judgment development;
3) programs with adults (over 24) have greater effects; and

4) interventions shorter than 3 weeks have little effects but interventions longer than 12 weeks have no greater influence than those lasting 4-12 weeks. (pp. 346-347)

The academic fields of business, healthcare, engineering, and law have been the forerunners of advocating either courses in ethics or courses that promote ethical reasoning (Barry & Ohland, 2009). The professional accrediting agencies for these fields have required some form of instruction in ethics or professional ethics. There have been many studies related to the business field of study. Ford & Richardson (1994) reviewed empirical studies concerning ethical decision-making in business. The results found that current research centered on individual characteristics such as religion, nationality, gender, age, education, employment background and situational factors such as referent group influences, codes of conduct, and organizational factors. One conclusion the authors made was to look more closely at what influenced the ethical decision making of students (Ford & Richardson, 1994). Buelow, Mahan, and Garrity (2010) and Burks and Sellani (2008) have shown that the use of ethical dilemmas in business have enhanced student ethical reasoning. Weber (1993) found that the teaching of ethical awareness and reasoning to business students can be improved through the provision of courses specifically focused on addressing these topics (as cited in Sternberg, 2010, p. 35). Thorne (2001), however, found that accounting students did not improve their moral reasoning abilities through the use of accounting-specific moral case studies. Dellaportas (2006); Fraedrich, Cherry, King, and Guo (2005); Jones (2009); and Ritter (2006) all explored the effects of either short-term or semester-long business ethics instruction. Results were mixed as to the efficacy of these efforts (Jones, 2009). Willey, Mansfield,

and Sherman (2012) reviewed ethics instruction in the Georgia State University Business curriculum and made suggestions for providing functional ethical reasoning activities among many business courses. Drover, Franczak, and Beltramini (2012) surveyed 2009 students at 23 universities to continue the research of Beltramini, Peterson, and Kozmetsky (1984) and Peterson, Beltramini, and Kozmetsky (1991), and found a shift from the baseline studies of Beltramini et al. (1984) and Peterson et al. (1991). Their study found that the overall level of ethical concern was at its highest, but there was an increasing concern with the self and worry about meeting stockholder needs and behaving ethically. Warnell (2010) studied the outcomes of a business ethics curriculum at a large, Catholic university. Her research used Rest's Four Component model through a pre-test and post-test following enrollment in a 1 credit business ethics course. Warnell's (2010) conclusions were that "providing the theoretical concepts, exploring frameworks and tools of decision-making, and providing practical examples of application are necessary precursors to ethical behavior" (p. 77). Beauvais, Desplaces, Melchar, and Bosco (2007) explored business faculty's perceptions about the teaching of ethics in the curriculum. They found that between 30-50% of faculty believe their colleagues engage in unethical behavior, ethical content in courses did not increase over time; fewer than 40% of faculty received training in teaching ethics on a yearly basis and 22% felt they were not prepared to teach ethics in the curriculum. The researchers concluded that faculty are moving away from a formal approach to teaching ethics as a discipline and unsuccessfully integrating ethics across the curriculum. Interestingly, they also noted that faculty are not taking advantage of formal mechanisms to reinforce ethical

standards such as signed ethical statements in class, honor codes, etc. (p. 134). Wilhelm (2008) explored the use of case-based moral decision-making and found that with correct pedagogical techniques, there were changes in the Defining Issues Test (DIT-2) results of business students over time.

Research regarding ethics in the curriculum has also been explored in the health sciences, especially in the field of nursing.

> Current ethics education in nursing has focused mainly on teaching knowledge and skills to analyze and to resolve ethical dilemmas faced by nurses in their daily practice; it has been based on deontological approaches such as a code of ethics, ethical principles, and professional obligations. (Park, Kjervik, Crandell, & Oermann, 2012, p. 569)

Callister, Luthy, Thompson, and Memmott (2009) explored ethical reasoning in nursing students through a qualitative descriptive study. They found that nursing students were 'becoming' professionals, lacked the confidence to take an ethical stand and were exploring issues of the ethics of care, justice, spirituality and commitment (pp. 505-506). Other studies regarding the effects of ethics education on the ethical reasoning and development of nursing students include Gaul (1987), Krawczyk (1997), and Woods (2005).

Undergraduate programs in engineering are required to have an ethics component for ABET (Accreditation Board for Engineering and Technology) accreditation. There have been three main approaches taken by institutions for ethics education in engineering:

1) stand-alone course in ethics that may or may not have an engineering component;
2) the incorporation of ethics modules into existing courses within the curriculum; and

3) a combination of both a stand-alone course and introducing ethical issues and topics into existing engineering courses. (Borenstein, Drake, Kirkman, & Swann, 2010)

Borenstein et al. (2010) developed a tool modeled after the DIT-2 for Science and Engineering students. After finding in a previous study that there was little change as measured by P-scores on the DIT, this new instrument seemed to suggest that instruction in ethics does change a student's moral/ethical reasoning. The researchers believed that more validity testing needed to be done on the instrument before confirming these results. Finelli et al. (2012) collected survey data from 4,000 engineering undergraduates at 18 institutions to look at the effect of curricular and co-curricular opportunities on the ethical development of undergraduate engineering students. Their research showed that there are multiple ways to provide students with opportunities to develop their ethical reasoning. Interestingly, they found that engineering students were at the lower end of ethical reasoning scores, but could not determine if the students come into the curriculum with lower ethical reasoning abilities or if the curriculum is not providing appropriate opportunities. More research is needed in this area. Self and Ellison (1998) used the DIT to see the effect of a professional ethics course on students using a pre and post-test. Their results showed that the course did have a significant effect on the students tested. Harding, Carpenter, and Finelli (2012) explored ethical behavior of engineering students as it related to five variables: behavioral, demographic, academic, moral reasoning and decision-making. The DIT-2 was used to measure moral reasoning. They found that students with lower P and N-2 scores had significantly more self-reported cheating behaviors. The research on ethics and law students is not included since this study deals

with undergraduate students. Lynch (2000) also explored the teaching of engineering ethics in the United States by looking at top engineering schools in the United States and describing the various ways they chose to infuse ethics into their curriculum.

Other researchers have looked at the role of critical thinking and the development of ethical reasoning skills. Bebeau, Pimple, Muskavitch, Borden, and Smith (1995) wrote

> When people are given an opportunity to reflect on decisions and choices, they can and do change their minds about what they ought to do and how they wish to conduct their personal and professional lives. This is not to say that any instruction will be effective, or that all manner of ethical behavior can be remedied with well-developed ethics instruction. But it is to say — and there is considerable evidence to show it — that ethics instruction can influence the thinking processes that relate to behavior. (p. 2)

Elder (1999) believed that for students to become skilled at ethical reasoning, they have to understand what is intellectually required when reasoning through ethical questions. “Students must be able to identify the ethical principles relevant to any particular ethical situation and acquire the intellectual skills which enable them to reasonably apply those principles to any particular ethical case” (Elder, 1999, p. 30). Paul and Elder (2009) also emphasized that teaching critical thinking and reasoning skills is not enough. “It is essential that students learn to use shared ethical concepts and principles as guides in reasoning through common ethical issues” (Paul & Elder, 2009, p. 38).

**Summary**

The role of higher education on the ethical development of college students has been explored from a number of different perspectives: the student, the curriculum, and the faculty. Cognitive developmental theory (influenced by Piaget, Kohlberg, Rest, Perry,

and Gilligan) has been the most prevalent scheme of thought. Research on college student development shows gains in ethical reasoning (Nucci & Pascarella, 1987; Pascarella & Terenzini, 1991). General education has historically been the mechanism to promote ethical thinking. However, changes in curriculum, in the purpose of higher education, in the nature of colleges and universities have resulted in changes in the role of general education. Most of the research has either centered on the student gains or on the impact of specific, intentional courses in ethics. Although there has been much research on the ethical development of college students, there has been almost no research on the role of general education in developing ethical reasoning skills in students or on the faculty attitude towards their role in developing their students' ethical reasoning skills.

Nelson Laird et al. (2009) compared general education courses and major courses as to the role they play in promoting individual and social outcomes as well as other essential learning outcomes. By using the Faculty Survey of Student Engagement (FSSE), Nelson Laird et al. (2009) determined that general education courses were more likely to be structured to promote intellectual skills than individual and social responsibility. Faculty who taught general education courses were chosen for this study because of the historic goal of general education to provide a common body of knowledge for all students and to help students "think clearly about how values are shaped, and how each one of us must build, and periodically review, an authentic, satisfying value structure of our own" (Boyer & Levine, 1981, p. 45).

This qualitative research study outlined in Chapter 3 explored the attitude of faculty who taught general education courses towards their role in the intentional

development of ethical reasoning skills in their students. The student voice was also explored in relation to the faculty responses.

# Chapter 3

# Methods

## Purpose of Study

The purpose of this study had three components: (a) to examine the attitudes of faculty towards the ethical content of their general education courses, (b) to explore the role of general education courses in contributing to the development of ethical reasoning in college students, and (c) to establish the components within general education courses and/or methods used to teach general education courses that aid in the development of ethical reasoning skills of the students taking these courses.

Historically, general education has been one mechanism that colleges and universities have used to encourage ethical reasoning development in their students. Based on a renewed interest at Penn State in the ethical reasoning development of their students, the researcher wanted to explore the role of general education at Penn State in this area. The overarching grand tour question that the researcher wanted to explore was: Was there a shared expectation among faculty members who taught general education courses that their course content and pedagogy would lead to the development of ethical reasoning skills in their students?

The research questions included questions for the faculty perspective and questions that addressed the student view related to the faculty perspective. The research questions for the faculty study and for the student study were as follows:

1. How did faculty members create their general education course content and did they align the goals of general education with creating opportunities to develop student ethical reasoning skills in the courses that they taught?
    a. What were the students' understandings of the goals of general education and how did these relate to the faculty understandings?
    b. How did students define general education?
2. Did faculty members intentionally create opportunities to provide for ethical decision-making?
    a. In what ways were ethical concepts introduced to students including, but not limited to, academic integrity?
3. Did faculty members create opportunities for reflection on the ethical decisions that students may face?
    a. Were the students presented an opportunity to explore ethical dilemmas in their coursework?
    b. How did this relate to faculty course content and pedagogy?
4. Did faculty members believe that the content of general education courses directly or indirectly influenced the ethical reasoning development of the students they taught?
    a. What courses and assignments did the students believe led to increased reasoning skills? How did this relate to the pedagogy expressed by the faculty and supported by the documents supplied by the faculty?

5. Were there any differences among the four knowledge domains of general education explored at the institution studied?
    a. Were any differences noted in student responses among courses taken in the four knowledge domains?
6. What was the perspective of faculty members who taught general education courses in relation to the development of ethical reasoning in their students?
    a. What influence would a specific course in ethics or ethics-focused courses have on the students' selection of general education courses?

**Institutional Context**

The research was conducted on three branch campuses of the Pennsylvania State University (Penn State), a large, land-grant public university accredited by the Middle States Commission on Higher Education. This institution has 20 undergraduate campuses ranging in size from 800 to 39,000 undergraduate students. All campuses are governed by one Board of Trustees, one President, and one Provost. Faculty members have one tenure and promotion process. There is one university catalogue and general education requirements are identical across all campuses. Although individual faculty members approach their courses differently, all courses have the same catalogue course description and designation. Student transcripts do not indicate the location where courses were taken.

In 2009, *Priorities for Excellence,* the strategic plan for Penn State (2009 – 2014), the strategy to *Assist Students to Explore Ethical Issues in Their Professional and Personal Lives* was included under Goal 1 – Enhance Student Success. The commentary

below this strategy suggested that general education might be one way to reach this goal. In November, 2011, the "Sandusky Sex Scandal" rocked the university and ethical behavior and the role of ethics in the university came to the forefront, making this research even timelier.

**Qualitative Research**

Qualitative research has become a form of acceptable research in many academic and professional fields (Yin, 2011). Bogdan and Biklen (2007) defined qualitative research through five characteristics:

1. Naturalistic. Qualitative researchers go to a particular setting for the direct source of data because they are also concerned with context (p. 4);
2. Descriptive Data. Qualitative research is descriptive and the data usually takes the form of words or pictures rather than numbers (p. 5);
3. Concern with Process. Qualitative research is concerned with process rather than simply outcomes. How do people negotiate meaning, how are things known? (p. 6);
4. Inductive. Qualitative researchers analyze their data inductively rather than deductively (p. 6); and
5. Meaning. Researchers using a qualitative method are interested in how people make sense of their lives (p. 7).

Hatch (2002) added five more characteristics to this list:

1. Participant Perspectives. In qualitative research, the voices of the participants predominate (p. 7).

2. Researcher as Data Gathering Instrument. Field notes, observations, interview translations and other principal data are collected by the investigator (p. 7).
3. Extended First Hand Engagement. Qualitative researchers spend adequate time in the field to understand participant perspective (pp. 7-8).
4. Wholeness and Complexity. Qualitative methods allow the researcher to systematically look at social contexts in a holistic approach. In addition, qualitative reports are complex and detailed (p. 9).
5. Reflexivity. Qualitative researchers understand that the act of studying something qualitatively influences the phenomenon. It is important that the researchers continually examine how they are influencing their environment and the people being studied (p. 10).

There are many different kinds of qualitative research studies (Creswell, 2007). In qualitative research, the "researcher is the instrument*"* (Patton, 1990, p. 14). Phenomenological research "describes the meaning for several individuals of their lived experiences of a concept or a phenomenon" (Creswell, 2007, p. 57). A phenomenological qualitative study seeks to explore what an experience means for the persons experiencing it and to provide a comprehensive description. "From the individual descriptions, general or universal meanings are derived, in other words the essences or structures of the experience" (Moustakas, 1994, p. 13). Qualitative analyses rooted in phenomenology use reflection, attending to lived experiences in order to focus on their processes and meanings (Wertz & Charmaz, 2011, p. 91). A phenomenological qualitative interview study was used for this research in a constructivist tradition. Constructivist interviewers

work with participants to "co-construct understandings that are reported as interpretations or narratives" (Hatch, 2002, p. 23).

**Research Design**

Research design requires looking at a research topic, formulating research question(s), determining the sampling and data collection procedures, and analyzing the data (Gibson, 2010). The research design for this study was a qualitative, phenomenological study that looked at the attitudes of the faculty who taught general education at three branch campuses of a land grant university and their role in the development of ethical reasoning skills in their students. A qualitative approach was taken in order to allow the faculty voices to reflect both their attitudes and their educational practices. There were multiple stages to this qualitative research: a content analysis of a sample of general education syllabi to help inform the interview process; a panel of experts to review the research and interview questions; in-depth interviews of faculty who taught general education courses at three branch campuses of Penn State; and interviews of students who had successfully completed at least one course taught by the faculty participants. In order to more fully understand the content and pedagogy employed by the faculty, the researcher also reviewed syllabi and class assignments provided by the faculty, observed two classes, and reviewed class activity for three classes in ANGEL (A New Global Environment for Learning), the course management system used by some faculty. These additional artifacts as well as the results of the student interviews were used to triangulate against the findings of the faculty interviews. The student interview questions were formulated after the interviews with the faculty and

the results of the interviews were used to look for both consistencies and inconsistencies in the faculty results.

**Content Analysis**

The researcher used a qualitative content analysis of general education syllabi at Penn State University to help formulate interview questions and probes, and to verify or show inconsistencies between the 'contract' in the syllabi with the student and the faculty members' views on what actually occurs.

According to Franzosi (2004), content analysis is any research technique used for making replicable and valid inferences from data to explain their context (p. 33). Content analysis is a research tool used to quantify and analyze the presence, meanings, and relationship of words and concepts (Hesse-Biber & Leavy, 2006). Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Stemler, 2001, n.p.). Researchers can "analyze pre-existing data in order to expose and unravel macro processes (Hesse-Biber & Leavy, 2006, p. 287). Content analysis can be either quantitative (deductive) or qualitative (inductive). According to Krippendorff (1980), there are six questions that should be addressed in every content analysis. These questions and the way they were addressed in this study are as follows:

1. What is the data to be analyzed?
2. How will the data be defined?
3. What population will the data be drawn from?
4. What is the context of the data?
5. What are the boundaries of the analysis?
6. What is the target of the inferences? (pp. 37-38)

These questions were answered by the researcher as follows. In this research study, syllabi representing five knowledge domains from Penn State general education courses (Arts, Communication/Writing, Humanities, Natural Sciences, and Social and Behavioral Sciences) were analyzed. The data were defined through emergent coding. With emergent coding, categories are established after a preliminary review of the data (Stemler, 2001). An initial list of terms was developed and more were added as the coding progressed (see Appendix E for list of words and codes and Appendix F for a sample coded syllabus). A sample of syllabi from fulltime faculty who taught general education at four Penn State campuses (the campus for the pilot study and the three campuses where the research took place) was used. One hundred eleven syllabi were reviewed. Table 1 shows the distribution of the syllabi used in the content analysis.

Table 1

*Distribution of General Education Courses Used for Content Analysis*

| General Education Category | Frequency | Percent |
|---|---|---|
| Arts (GA) | 17 | 15.3 |
| Humanities (GH) | 30 | 27.0 |
| Natural Sciences (GN) | 27 | 24.3 |
| Social & Behavioral Sciences (GS) | 30 | 27.0 |
| Writing/ Speaking (GWS) | 7 | 6.0 |
| TOTAL | 111 | 100.0 |

The syllabi represent the goals of the courses as defined by the faculty. In this content analysis, the researcher was looking specifically for direct and indirect references to

ethical reasoning and possible pedagogical strategies. The target was the interaction that occurred in the classroom and in the assignments that lead to ethical reasoning development in the students.

According to Boudah (2011) documents can also be used to round out the view given in observations and interviews. Records and artifacts can be an important information source to "reveal what people will not or cannot say . . . they can provide an operational definition of what teachers value" (Eisner, 1998, p. 184). In this study, the syllabi for general education courses from five general education knowledge domains were evaluated for themes. The results of the content analysis was used to guide the interview process and used to compare with the results of the in-depth interviews (see Appendix E for listing of content analysis terms and codes).

**Panel of Experts**

Yin (2011) suggested conducting a pilot study or the use of a panel of experts to improve the design, fieldwork procedures, and the quality of the interview protocol and to assist in refining the data collection. The research questions, the interview questions, and the interview protocol were presented individually to seven experts for advice and guidance. Three of the individuals were administrators at a Penn State campus with faculty rank who had responsibility for the hiring and oversight of the faculty members who taught general education courses. Four of the experts were full-time faculty members who taught general education courses at Penn State. The faculty were not from campuses where they study took place, but were from the researcher's home Penn State campus. The researcher's home campus was used only for the pilot study reported in this

study. The data from the pilot study were confidential and excluded from the data reported in the rest of the study. The feedback was used to further refine the survey instrument and the research questions. Changes were made to the interview protocol as a result of this pilot. In particular, more time was spent speaking generally about general education expectations and pedagogy than originally anticipated. The participants in the pilot study believed that more information about 'unintentional' ethical learning would be uncovered through these interview questions (see Appendix G for panel of experts' recommendations).

**In-depth interviews**

Qualitative interviewing begins with the "assumption that the perspectives of others is meaningful, knowable, and able to be made explicit" (Patton, 1990, p. 278). Interviewing allows a researcher to get information about beliefs, perspectives, and views from the participant. The researcher, however, must understand the filter he/she is using while obtaining this information (Boudah, 2011). The goal of understanding how the interviewee thinks is at the center of the interview (Bogdan & Biklen, 2007). The in-depth interview, also known as the intensive interview, is a "meaning-making endeavor embarked on as a partnership between the interviewer and his or her respondent" (Hesse-Biber & Leavy, 2006, p. 119).

There are several types of interviews that can be used:

- informal, conversational interview;
- interview guide approach;
- standardized, open-ended interview; and
- closed, fixed response interview. (Patton, 1990, p. 280)

The degree of structure imposed during the interview will impact the researcher's role. The more structure, the more control the researcher imposes on the research (Hesse-Biber & Leavy, 2006, p. 126). Hesse-Biber and Leavy (2006) suggested that researchers consider using an interview guide. The researcher should write down topics (domain of inquiry) in a list. From this list, questions can be constructed. A pilot study enables researchers to first test the effectiveness of their questions (Hesse-Biber & Leavy, 2006, pp. 126-127). Because of the impact that a researcher can have on the data gathered, there are questions that researchers should ask themselves:

- "How do my values and attitudes and beliefs enter into the research process? Do I only ask questions from my perspective?
- How does my own agenda shape what I ask and what I find?
- How does my positionality impact how I gather, analyze, and interpret my data?" (Hesse-Biber & Leavy, 2006, p. 133)

The researcher was unknown to the faculty and students interviewed. However, the researcher's high degree of familiarity with the academic requirements of the university was of value to the interview process. It also, however, lent to discussions that digressed off-topic as the researcher was often questioned about activities on her home campus. The researcher believed that ethical reasoning development could occur through general education coursework. The knowledge of this bias was carefully attended to during the evaluation phase of the research.

It is important for the researcher to create an interview guide that lists the questions or issues that are to be explored during the interview. The interview protocol should allow the researcher the freedom to explore, probe, and ask questions to bring more depth to a particular subject but still maintain a conversational style (Patton, 1990).

Patton (1990, 2002) suggested that there are differing types of questions that can be asked:

- Experience/Behavior Questions – eliciting descriptions of experiences, behaviors, actions and activities that the researcher would have observed if he/she had been an observer;
- Opinions/Values Questions – understanding the cognitive and interpretive views of people telling us what people think about issues;
- Feeling Questions – understanding the emotional responses of people to their experiences or thoughts. It is important to not confuse feeling with opinions;
- Knowledge Questions – asking for factual information;
- Sensory Questions – describing the stimuli to which the interviewee is subject, asking about what is seen, heard, touched or tasted;
- Background/Demographic Questions – asking questions that provide identifying characteristics of the person being interviewed. (pp. 291-219)

The researcher determined that a semi-structured interview guide would work best for this phenomenological research. The researcher asked questions of the faculty regarding both general education and ethical reasoning in order to better understand the planning and pedagogy that faculty use in creating and teaching general education courses. The faculty interview protocol was reviewed by the panel of experts and revised as recommended. The student interview protocol was developed after the faculty interviews. The researcher was interested in the student's perception of his/her classroom experience in general education courses and in the specific courses taught by the faculty interviewed. The student interviews were used to help triangulate the perspective of the faculty member with the remembered experience of the student (see Appendix H for the faculty interview guide and Appendix I for the student interview guide).

**Data Collection Procedures**

The Pennsylvania State University was chosen because of its land grant mission, its continued commitment to the general education tradition, and recent language in its

strategic plan to encourage the ethical reasoning development of its students. for the content analysis, syllabi were obtained both online and from the four campuses of the University that participated in the. The four campuses included the campus used for the pilot study and the three campuses where the research took place. Copies of syllabi within the five general education knowledge domains (Arts, Communications/Writing, Humanities, Natural Sciences, and Social and Behavioral Sciences) from the most recent available years were used (currently 2011-2013). The knowledge domain of Health Sciences was excluded because the limited number of courses and fulltime faculty made it impossible to guarantee anonymity. The Quantification knowledge domain was also excluded because courses in quantification tended toward a skill emphasis rather than a content emphasis. Over one hundred syllabi were coded. The syllabi were obtained from all three Penn State locations being studied as well from the Penn State campus used for the pilot study. Since identical courses were often taught at multiple campuses, duplicates of courses were not included in the content analysis and efforts were made to ensure that syllabi came from multiple campus sources (see Appendix J for catalog listing of General Education courses at Penn State used for content analysis).

For the in-depth interviews with faculty, a convenience sample was used. Participants were selected from fulltime faculty members who taught general education in four general education knowledge domain areas: Communications/Writing (GWS), Humanities (GH), Natural Sciences (GN), and Social and Behavioral Sciences (GS) at one of three identified Penn State campuses. Although the original intent was to include the Arts (GA), it was eliminated along with Health and Physical Activity (GHA) domains

when it became apparent that the majority of the courses in these areas were taught at the campuses by adjunct faculty and anonymity could not be guaranteed for fulltime faculty teaching courses. Lists of fulltime faculty from the three selected campuses who taught at least one general education course were generated through the university Registrars at each campus. The faculty members were chosen based on the following criteria:

- Fulltime status at the university
- Taught at least one general education course that fell within one of the four knowledge domains of Communications/Writing (GWS), Humanities (GH), Natural Sciences (GN), and Social and Behavioral Sciences (GS) during the Fall 2011, Spring 2012, Fall 2012, or Spring 2013 semesters
- Taught at one of the three selected branch campuses
- Willingness to participate in study
- Did not participate in the panel of experts or pilot study

Participation was solicited through an email sent by the campus Registrar at each of the three Penn State campuses. Participation was voluntary (see Appendix K for sample email). Eighteen faculty members volunteered to participate and 16 were actually interviewed. The two faculty members who were not interviewed did not respond to the researcher's subsequent requests to arrange the interview. The numbers of eligible faculty were as follows: Campus A: 46 potential faculty members; Campus B: 51 potential faculty members; and Campus C: 31 potential faculty members, for a total of 128 eligible faculty members. Table 2 shows the distribution of these general education courses across the knowledge domains.

Table 2

*Distribution of General Education Courses Taught by Fulltime Faculty by Campus and Knowledge Domain*

| | Knowledge Domains | | | | |
|---|---|---|---|---|---|
| CAMPUS | Communication/ Writing (GWS) | Humanities(GH) | Natural Sciences(GN) | Social & Behavioral Sciences (GS) | ALL |
| A | 9 | 13 | 11 | 13 | 46 |
| B | 14 | 8 | 15 | 14 | 51 |
| C | 6 | 5 | 10 | 10 | 31 |
| TOTALS | 29 | 26 | 36 | 37 | 128 |

Interviews with faculty members were purposively distributed across the three campuses. Faculty members were chosen so that each of the four general education knowledge domain areas had representation from at least two different campuses. Table 3 shows the selected distribution of faculty members interviewed among campuses and knowledge domains.

Table 3

*Distribution of Interviews among Campus Faculty and Knowledge Domains*

| | Knowledge Domains | | | | |
|---|---|---|---|---|---|
| Campus | GWS | GH | GN | GS | ALL |
| A | 1 | 1 | 1 | 3 | 6 |
| B | 2 | 1 | 2 | 1 | 6 |
| C | 0 | 2 | 1 | 1 | 4 |
| TOTAL | 3 | 4 | 4 | 5 | 16 |

Interviews took place on campus at a private location recommended by the faculty member. The interviews lasted between 45 and 90 minutes each. All faculty participants were given a copy of the abstract and an Informed Consent Form to read and sign (a copy of the Informed Consent Form is in Appendix L). All interviews were digitally recorded and then transcribed verbatim by the researcher or an independent transcriptionist who signed a confidentiality agreement (see Appendix M for the Confidentiality Agreement). An alias was assigned to each participant so that the transcriptionist did not know the real name unless he or she stated his/her name during the interview. The transcripts were used for the purposes of comparison and conceptualization of ideas, codes, and themes. According to Stern and Porr (2011), the results of preceding interviews may cause the researcher to change the interview protocol. In this study, the interview protocol was changed after the Pilot Study (see Appendix G for recommendations) and during the course of the interviews as new questions and ideas emerged; clarification or additional questions were sometimes asked.

The researcher reviewed all transcriptions for accuracy. After the interviews were transcribed, the researcher used member checking by sending a copy to each faculty participant to review the interviews for accuracy and to provide faculty the opportunity to add comments for additional clarification. Respondents were also be given the option for a follow-up interview. Participants were asked to return a transcript verification form (see Appendix N for the transcript verification form). Two faculty members requested revisions to the interview transcriptions by email and those changes were made. One faculty member requested a follow-up phone call to clarify the purpose of the research

and to make revisions to the transcript. The requested changes were made. One faculty member requested a follow-up interview to go over the transcript and recommended changes and clarifications were noted. Once the transcripts were confirmed to be accurate, the audio files containing the actual interviews were destroyed. In addition, the researcher took field notes during the interview process which were then transcribed and added to the data. The interviewed faculty members were also asked to provide any information that they believed would add to the research. Faculty provided syllabi, assignments, and assessments, and three faculty provided access to their course on ANGEL (A New Global Environment for Learning), an online course management tool used by the university. The researcher was invited by two faculty members to attend their classes to observe the actual classroom environment. A demographic analysis of the faculty participants along with their assigned pseudonyms can be found in Table 4.

After the faculty interviews were completed, a list of students who had enrolled in at least one of the interviewed faculty member's general education classes was constructed by the campus Registrar. Since the student interviews took place during the spring 2013 semester, students were excluded if they were currently enrolled in a course taught by one of the faculty members interviewed to prevent any possibility that grades could be influenced by the student's participation in the study and to prevent any possible conflicts between faculty member and student. The students were contacted by the researcher by email and invited to participate in an interview with the researcher (see Appendix O for email to students). The interview was a semi-structured interview but the questions were created after the faculty interviews and designed to triangulate against the

faculty results. The interviews lasted from 10 to 20 minutes and were much more structured than the faculty interviews, but did allow the students to go beyond answering the questions if the opportunity arose. Participation was voluntary on the part of the students and took place at a campus-specified location that provided a quiet, private place for the interview to take place. The offices of Student Affairs at the campuses arranged for locations that were easily accessible to the students. Due to a death in the family, the researcher had to reschedule the student interviews and a second email was sent requesting participation. Ten students were interviewed in person. Difficulty in getting a sufficient number of student participants led the researcher to contact the students via email two more times and to conduct 11interviews over the phone rather than in person for a total of 21 student interviews. Students were told about the study and asked to read and sign an Informed Consent Form (see Appendix P for copy of Student Informed Consent Form). For those students completing the interview by phone, they were emailed a copy of the Informed Consent Form prior to the interview. The form was sent as an attachment as well as in the body of the email. The students were asked to return the form to the researcher prior to the start of the phone interviews either by email or by campus mail. All but one student returned the Informed Consent Form by email. One student returned the completed form by campus mail. Those students using email were asked to use their PSU ID and PSU Access ID as their signature. By requesting both forms of identification, the researcher believed that there was adequate assurance that the student participating had read and returned the form. Students were also asked at the start of the interview if they had any questions about the informed consent form they had signed.

None of the students expressed any questions. After the interview, students were given the opportunity to review the transcripts. However, only one student agreed to member checking. That student, however, never returned the transcript or the transcript verification form even after multiple attempts to contact the student. Because member checking was not available and the researcher had digitally recorded all of the interviews, the researcher decided to have all of the interviews transcribed by an independent transcriptionist. As with the faculty interviews, a confidentiality statement was signed by the transcriptionist (see Appendix M for a sample of the confidentiality agreement) and no identifying information was given. The researcher then reviewed each recording against the transcript to assure accuracy. Once the transcripts were verified as accurate, the recordings were erased. The student interviews were used to triangulate against the data from the syllabi and the faculty interviews. Fourteen students (67%) had taken one class with one of the faculty interviewees. Six students (29%) had taken classes with two of the interviewed faculty and one student experienced classes with three faculty members. As a result, there were 29 opportunities to confirm, compare, and contrast student feedback with faculty responses.

**Data Analysis**

Analysis is an ongoing process that begins with the collection of the first piece of data and is the process of generating, developing, and verifying concepts (Corbin and Strauss, 2008; Creswell, 2009). Data analysis involves collecting open-ended data through questioning and then developing an analysis through a process of systematic steps (Creswell, 2009).

**Field notes.** There are three types of field notes that were used during this study as is typical of qualitative research. Observational notes are a description of what is occurring in the field (Stern & Porr, 2011). Methodological notes were kept to keep a running log of the research activities in order to evaluate the effectiveness of certain questions and procedures (Stern & Porr, 2011). Theoretical notes recorded ideas related to the topic as new ideas/constructs emerged (Stern & Porr, 2011). The researcher took field notes during the interview process and added comments to the transcripts. Notes related to coding were constantly being updated and reviewed by the researcher.

**Coding procedures.** There are different stages of coding. Open coding is the "process of breaking down, examining, comparing, conceptualizing, and categorizing data" (Strauss & Corbin, 1990, p. 61). Open coding requires the researcher to look at inherent biases, to continually question the data, to open up the data, to think of potential categories, their properties and their dimensions, and making comparisons (Strauss & Corbin, 1990). The researcher transcribed or reviewed all transcribed interviews and began the process of coding by highlighting and noting emerging codes. The transcripts and codes were reviewed and validated by an independent auditor (see Appendix Q for Coded Interview Sample and Appendix R for Faculty Interview Coding Book).

The next coding process is axial coding, "a set of procedures whereby data are put back together in new ways after open coding, by making a connection between categories" (Strauss & Corbin, 1990, p. 96). This is accomplished by utilizing a "coding paradigm involving conditions, context, action/interactional strategies and consequences" (Strauss & Corbin, 1990, p. 96). In axial coding, subcategories will be linked to a

category through relationships (causal conditions, context, intervening conditions, consequences, and strategies) (Strauss & Corbin, 1990, p. 98). The researcher grouped the codes into similar categories in order to reduce the number of distinct codes.

The final procedure is selective coding. Selective coding is "the process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development" (Strauss & Corbin, 1990, p. 116). The researcher used the processes in the previous paragraphs and the rich data obtained not only from the interviews, but also from the supporting documentation to review and develop themes related to the research questions. These results are reported in Chapter 4.

These three processes of coding are not used in a lock-step sequence. The researcher often moves back and forth between these three processes. During all three coding processes, the researcher engaged in noting and constant comparison of the data (Stern & Porr, 2011). In this research, the coder built upon each additional interview when creating the open coding code book (See Appendix R). In addition, an independent auditor reviewed all methods, and compared his open coding and axial coding results with the researcher's results. It was determined that the researcher's coding was reliable. The independent auditor also concurred with the final selective coding.

**Methods of verification.** Creswell (2009) posited that "qualitative validity means that the researcher checks for accuracy of the findings by employing certain procedures while qualitative reliability indicates that the researcher's approach is consistent across

different researchers and different projects" (p. 190). This research incorporated the following validity strategies:

1. Triangulation (Creswell, 2009, p. 190). Different data sources (syllabi, interviews of both faculty and students) were used as different sources of information while developing themes.
2. Member Checking (Creswell, 2009, p. 191). In order to determine the accuracy of the qualitative findings, the faculty participants in the interviews were asked to review the transcripts of the interviews as well as the themes and descriptions. A follow-up interview was scheduled if needed. During the interview process, students were asked if they would like to verify the transcripts. Only one student indicated an interest in doing this and that student did not ultimately respond to repeated requests to return and verify the transcript. Since member checking was not available for the student interviews, an independent transcriptionist was used and the researcher carefully reviewed the transcripts against the taped interviews.
3. Rich Description (Creswell, 2009, p. 191). A detailed description of the research was provided.
4. Clarify the Bias of the Researcher (Creswell, 2009, p. 191).The researcher reflected on how the interpretations may be influenced by the researcher's background and knowledge of the institution.

5. Present Negative or Discrepant Information (Creswell, 2009, p. 191). The researcher included data/evidence that contradicted the themes if it was present.
6. Spend Prolonged Time in the Field (Creswell, 2009, p. 192). The researcher visited two of the classes of the faculty interviewed to have a more in-depth understanding of the learning environment. The researcher also weekly reviewed ANGEL (A New Global Environment for Learning), the course management site for three courses. (See Appendix S for Classroom Observation protocol).
7. Use Peer Debriefing or an External Auditor (Creswell, 2009, p. 192). The researcher used an outside auditor, an administrator at Penn State and a recently hired assistant professor at Shippensburg University in the Counseling and College Student Personnel program. The researcher and the auditor met frequently during all stages of coding the faculty and student research. The independent researcher reviewed the researcher's methods and all transcripts of the faculty and student interviews. The independent auditor and the researcher each reviewed both the faculty and the student transcripts and compared codes. There was consistency in the coding by both the researcher and the auditor. The resulting codes and themes were reviewed and discussed at each stage of coding. The results of the external audit were used to validate and inform the researcher's interpretation of the data (see

Appendix T for external auditor report and Appendix U for sample independent auditor confidentiality agreement).

The following reliability procedures were used as suggested by Gibbs (2007, cited in Creswell, 2009):

1. Faculty transcripts were checked both by the researcher and through member checking with the respondents to make sure there are no obvious mistakes made during the transcription process. Field notes were integrated into the transcriptions.
2. Student transcripts were checked by the researcher against the digital recordings and the transcription by an independent transcriber. Member checking did not occur with the student interviews. Students were given the option to review the transcripts. Only one student requested they be sent and this student did not respond to multiple requests to return the transcript verification page.
3. The process of coding was consistent and detailed memos were maintained about the codes and themes and these are shared in the appendices (see Appendix E for Content Analysis Codes and Themes, Appendix F for Coded Syllabus Sample, Appendix R for Faculty Interview Codes and Themes, Appendix Q Coded Faculty Interview Sample, Appendix V for Student Interview Codes).

**Ethical Considerations**

All of the participants were treated in accordance with the ethical guidelines of the University of Nebraska-Lincoln and The Pennsylvania State University Institutional Review Boards (IRB). All participants signed Informed Consent Forms (see Appendices K & P for Informed Consent Form samples). There were no identifiable risks for participating in this study, but all study materials were kept confidential and locked. Participants were not identified by name or campus and every attempt was made to keep identifying characteristics out of the final reporting. Students currently enrolled in classes taught by interviewees were excluded to prevent any possible harm or benefit from their participation.

**Role of the Researcher**

The researcher was a member of the university community but was not known to any of the faculty interviewed. The researcher was neither a faculty member nor a member of the Academic Affairs staff. The researcher ensured confidentiality and allowed that past interactions with the faculty may have impacted the interview process. In addition, the researcher had a background in student development which could have influenced expectations from the faculty and student responses.

**Approvals**

Study approval was requested from the University of Nebraska, Lincoln and The Pennsylvania State University Institutional Review Boards (IRB). Informed consent was obtained for all participants. Written permission was sought and received from the Chancellors and the Director of Academic Affairs or Associate Deans at the three branch

campuses prior to approaching the faculty members and students. Participants were fully informed about the intent of the study, the data collection procedures, and their right to refuse to participate (see Appendix L and Appendix P for Informed Consent Forms). All faculty participants received an email from the campus Registrar requesting their participation. All faculty interviews took place in the individual faculty offices or, if desired by the faculty, in a nearby conference room. Students were contacted by the researcher. Student interviews took place at a pre-designated campus location suggested by campus Registrars or Student Affairs staff or they were held by phone. The researcher conducted all phone interviews in a private office.

**Summary**

This qualitative research study was conducted to explore the phenomenon of ethical reasoning development in college students through the teaching of general education courses. Faculty members who taught general education courses in four of the seven general education knowledge domains at Penn State were interviewed to ascertain their perspective on the role they play in developing ethical reasoning skills in their students. By gaining an understanding how faculty members chose to adopt particular educational purpose(s) such as ethical reasoning, how they translated this into educational outcomes, how they planned educational activities that reflected these purposes and outcomes and how they integrated this into their syllabi and teaching, had practical implications for the institution's future planning for general education, and for faculty professional development activities. The results of the research are presented in Chapter 4.

# Chapter 4

# Results of the Study

## Purpose of the Study

This chapter presents an in-depth look at the outcomes of the study. The purpose of this study had three components: (a) to examine the attitudes of faculty towards the ethical content of their general education courses, (b) to explore the role of general education courses in contributing to the development of ethical reasoning in college students, and (c) to establish the components within general education courses and/or methods used to teach general education courses that aid in the development of ethical reasoning skills of the students taking these courses.

## Research Questions

Historically, general education has been one mechanism that colleges and universities have used to encourage ethical reasoning development in their students. Based on a renewed interest at Penn State in the ethical reasoning development of their students, the researcher wanted to explore the role of general education at Penn State in this area. The overarching grand tour question that the researcher wanted to explore was: Was there a shared expectation among faculty members who taught general education courses that their course content and pedagogy would lead to the development of ethical reasoning skills in their students?

Research questions that were explored were:

1. How did faculty members create their general education course content and did they align the goals of general education with creating opportunities to develop student ethical reasoning skills in the courses that they taught?
    a. What were the students' understandings of the goals of general education and how did these relate to the faculty understandings?
    b. How did students define general education?
2. Did faculty members intentionally create opportunities to provide for ethical decision-making?
    a. In what ways were ethical concepts introduced to students, including but not limited to, academic integrity?
3. Did faculty members create opportunities for reflection on the ethical decisions that students may face?
    a. Were the students presented an opportunity to explore ethical dilemmas in their coursework?
    b. How did this relate to faculty course content and pedagogy?
4. Did faculty members believe that the content of general education courses directly or indirectly influenced the ethical reasoning development of the students they taught?
    a. What courses and assignments did the students believe led to increased reasoning skills?
    b. How did this relate to the pedagogy expressed by the faculty and supported by the documents supplied by the faculty?

5. Were there any differences among the four knowledge domains of general education explored at the institution studied?
    a. Were any differences noted in student responses among courses taken in the four knowledge domains?
6. What was the perspective of faculty members who taught general education courses in relation to the development of ethical reasoning in their students?
    a. What influence would a specific course in ethics or ethics-focused courses have on the students' selection of general education courses?

This chapter will present the themes that emerged from research data in relation to the research questions.

**Research Participants**

A convenience sample of faculty members was selected from three Penn State campuses. The 16 faculty members interviewed were all fulltime faculty teaching general education at one of the three Penn State campuses. The years of teaching experience ranged three years to 42 years, with an average of 19 years of teaching. The years of working at Penn State ranged from two years to 36 years, with an average of 15 years of teaching at Penn State. Eight women (50%) and 8 men (50%) were interviewed. The knowledge domains of communication (writing/speech) (GWS), natural sciences (GN), social and behavioral sciences (GS), and humanities (GH) were represented. Some of the faculty also taught a First Year Seminar (FYS) but that is no longer a requirement at the university. Table 4 shows the faculty participants with pseudonyms, the general

education area taught, the number of students taught during the two year period in general education courses and demographic information.

Table 4

*Demographic Analysis of Faculty Participants with Pseudonyms*

| Pseudonym | Gen Ed Area | Gender | Years Teaching | Years at PSU | Degree | Number of Students Eligible for Interviews |
|---|---|---|---|---|---|---|
| Adam | FYS, GS | M | 38 | 36 | PhD | 56 |
| Barb | GH, FYS | F | 29 | 29 | EdD | 34 |
| Betty | GWS, GH | F | 4 | 2 | MA | 47 |
| Bill | GS | M | 3 | 3 | PhD | 13 |
| Brian | GWS, GH | M | 18 | 14 | PhD | 103 |
| Cathy | GN, FYS | F | 42 | 12 | PhD | 104 |
| Dan | GN | M | 5 | 5 | PhD | 89 |
| Eva | GN, FYS | F | 35 | 34 | PhD | 73 |
| Jason | GH, GS, GN | M | 13 | 13 | MS | 36 |
| Josh | GN, GH | M | 15 | 12 | PhD | 28 |
| Kay | GH, GS | F | 5 | 3 | PhD | 84 |
| Nan | GS | F | 15 | 12 | PhD | 108 |
| Rick | GS | M | 8 | 2 | MA | 106 |
| Sara | GS | F | 35 | 35 | PhD | 91 |
| Sheila | GWS, GH | F | 23 | 20 | MA | 41 |
| Todd | GH | M | 19 | 11 | PhD | 16 |

Twenty-one students were also interviewed. The students selected had taken at least one course from one of the interviewed professors. The students ranged in age from 18 to 48 years of age. There were 9 female (43%) and 12 (57%) male students interviewed. There were one freshman (5%), seven sophomores (33%), four juniors (19%), and nine seniors (42%) who agreed to be interviewed. Nine (43%) of these students were transfer students who had taken general education courses both at Penn

State and at least one other institution. A demographic analysis of the student participants is presented in Table 5.

Table 5

*Demographic Analysis of Student Participants with Pseudonyms*

| Student Pseudonyms | Gender | Age | Semester Standing | Transfer Student | Faculty Class Taken |
|---|---|---|---|---|---|
| Alan | M | 41 | Senior | Yes | Todd |
| Amos | M | 42 | Senior | Yes | Josh |
| Anna | F | 44 | Senior | Yes | Kay |
| Barry | M | 19 | Sophomore | No | Sheila |
| Carl | M | 22 | Junior | No | Jason, Betty |
| Craig | M | 20 | Sophomore | No | Dan, Sheila |
| Dennis | M | 20 | Sophomore | No | Rick, Dan |
| Diane | F | 23 | Senior | No | Nan |
| Jarod | M | 19 | Sophomore | No | Adam |
| Jenn | F | 19 | Sophomore | No | Dan |
| Jess | F | 19 | Sophomore | No | Rick |
| Jordan | M | 18 | Freshman | No | Cathy |
| Justin | M | 42 | Senior | Yes | Jason |
| Karen | F | 48 | Junior | Yes | Sara, Bill |
| Kevin | M | 23 | Senior | Yes | Betty |
| Larry | M | 20 | Sophomore | No | Cathy, Jason |
| Lisa | F | 33 | Senior | Yes | Barb |
| Matt | M | 23 | Senior | Yes | Eva |
| Pam | F | 25 | Senior | Yes | Brian, Cathy, Todd |
| Robin | F | 20 | Junior | No | Todd |
| Sally | F | 21 | Junior | No | Bill |

The research questions for this study focused on faculty attitude and pedagogy. Therefore, the student interviews were intended to be used to triangulate against the results from the faculty interviews. The interviews and the interview questions were established after the faculty interviews. Students were asked questions in relation to the

research questions and the faculty responses. (See Appendix I for Student Interview Questions).

The results of the student interviews were interwoven with the faculty results. In some instances, there was much agreement among the students and the faculty, and in others, there were marked differences in perception.

**Themes**

Based on the in-depth interviews with 16 faculty members from 3 campuses among the 4 knowledge domains, a content analysis of syllabi, classroom observation, and student interviews, 5 themes emerged:

1. The content and pedagogy employed by faculty to enhance ethical reasoning (CONTENT/PEDAGOGY);
2. The intentional and unintentional influence of general education courses on the ethical reasoning development of the students (INTENTIONALITY);
3. The attitudes and beliefs of faculty towards facilitating ethical reasoning through general education courses (ATTITUDES/BELIEFS);
4. The goals of general education and the relationship of these goals to ethical reasoning (GENED);
5. The similarities and differences among the four knowledge domains (communication, humanities, natural science, and social and behavioral science) as it relates to ethical reasoning (KNOWLEDGE DOMAINS).

Table 6 shows the relationship of these themes to the research questions.

Table 6

*Relationship of Research Questions to Themes*

| Research Questions | Themes |
|---|---|
| GT: Was there a shared expectation among faculty members who taught general education courses that their course content and pedagogy would lead to the development of ethical reasoning skills in their students? | KNOWLEDGE DOMAINS, ATTITUDES/BELIEFS, CONTENT/PEDAGOGY |
| 1. How did faculty members create their general education course content and did they align the goals of general education with creating opportunities to develop student ethical reasoning skills in the courses that they taught? | GENED, CONTENT/PEDAGOGY |
| 1a. What were the students' understanding of the goals of general education and how did these relate to the faculty understandings? | GENED |
| 1b. How did students define general education? | GENED |
| 2. Did faculty members intentionally create opportunities to provide for ethical decision-making? | CONTENT/PEDAGOGY, INFLUENCE |
| 2a. In what ways were ethical concepts introduced to students including, but not limited to, academic integrity? | CONTENT/PEDAGOGY |
| 3. Did faculty members create opportunities for reflection on the ethical decisions that students may face? | CONTENT/PEDAGOGY |
| 3a. Were the students presented an opportunity to explore ethical dilemmas in their coursework? | CONTENT/PEDAGOGY |
| 3b. How did this relate to faculty course content and pedagogy? | CONTENT/PEDAGOGY |
| 4. Did faculty members believe that the content of general education courses directly or indirectly influenced the ethical reasoning development of the students they taught? | INFLUENCE, ATTITUDES/BELIEFS |

Table 6 continues

| Research Questions | Themes |
|---|---|
| 4a. What courses and assignments did the students believe led to increased reasoning skills? How did this relate to the pedagogy expressed by the faculty and supported by the documents supplied by the faculty? | CONTENT/PEDAGOGY |
| 5. Were there any differences among the four knowledge domains of general education explored at the institution studied? | KNOWLEDGE DOMAINS, GENED |
| 5a. Were any differences noted in student responses among courses taken in the four knowledge domains? | KNOWLEDGE DOMAINS, GENED |
| 6. What was the perspective of faculty members who taught general education courses in relation to the development of ethical reasoning in their students? | GENED, CONTENT/PEDAGOGY |
| 6a. What influence would a specific course in ethics or ethics-focused courses have on the students' selection of general education courses? | GENED, CONTENT/PEDAGOGY |

**Overview of Findings**

The content analysis of the 111 syllabi showed that across the Knowledge Domains, there were differences in pedagogical approaches, but that courses in all of the knowledge domains exposed students to academic integrity issues, utilized pedagogy that would encourage reasoning skills, and presented the subject area within social, political or cultural contexts. The content analysis also revealed that direct ethical content was only present in 17 (15%) of the syllabi reviewed. A description of the analysis by knowledge domain is listed in Table 7.

Table 7

*Descriptive Words and Codes for Content Analysis by Knowledge Domain*

| CODE: | WORDS/PHRASES | USED IN GA COURSES | USED IN GH COURSES | USED IN GN COURSES | USED IN GS COURSES | USED IN GWS COURSES | ALL SYLLABI REVIEWED |
|---|---|---|---|---|---|---|---|
| **ACADEMIC INTEGRITY** | Academic dishonesty | 6 (35%) | 11 (37%) | 0 | 9 (30%) | 2 (29%) | 28 (25%) |
| **ACADEMIC INTEGRITY** | Academic honesty | 1 (6%) | 2 (7%) | 0 | 0 | 1 (14%) | 4 (4%) |
| **ACADEMIC INTEGRITY** | Academic integrity | 10 (59%) | 28 (93%) | 26 (96%) | 29 (97%) | 6 (86%) | 99 (90%) |
| **ACADEMIC INTEGRITY** | Academically ethical | 2 (12%) | 0 | 3 (11%) | 1 (3%) | 1 (14%) | 7 (6%) |
| **ACADEMIC INTEGRITY** | Plagiarism, copying | 2 (12%) | 13 (43%) | 2 (7%) | 6 (20%) | 5 (71%) | 28 (25%) |
| | | | | | | | |
| **CONTEXT** | Cultural, social, political context | 13 (76%) | 24 (80%) | 22 (81%) | 27 (90%) | 6 (86%) | 92 (83%) |
| **CONTEXT** | Principles, principled | 0 | 2 (7%) | 1 (4%) | 7 (23%) | 0 | 10 (9%) |
| **CONTEXT** | Universal | 1 (6%) | 0 | 0 | 0 | 0 | 1 (1%) |
| | | | | | | | |
| **ETHIC** | Core beliefs | 0 | 5 (17%) | 0 | 8 (27%) | 2 (29%) | 15 (14%) |
| **ETHIC** | Ethic(s) | 0 | 3 (10%) | 0 | 4 (13%) | 1 (14%) | 8 (7%) |
| **ETHIC** | Ethical awareness | 1 (6%) | 1 (3%) | 0 | 5 (17%) | 0 | 7 (6%) |
| **ETHIC** | Ethical learning | 0 | 2 (7%) | 0 | 0 | 0 | 2 (2%) |
| **ETHIC** | Ethical reasoning | 0 | 2 (7%) | 0 | 3 (10%) | 0 | 5 (5%) |
| **ETHIC** | Justice | 0 | 1 (3%) | 0 | 4 (13%) | 0 | 5 (5%) |
| **ETHIC** | Moral development | 0 | 1 (3%) | 0 | 2 (7%) | 0 | 3 (3%) |
| **ETHIC** | Moral reasoning | 0 | 1 (3%) | 0 | 0 | 0 | 1 (1%) |
| **ETHIC** | Right and wrong | 0 | 0 | 1 (4%) | 2 (7%) | 0 | 3 (3%) |
| **ETHIC** | Rights | 0 | 1 (3%) | 0 | 3 (10%) | 0 | 4 (4%) |
| **ETHIC** | Values | 1 (6%) | 9 (30%) | 1 (4%) | 7 (23%) | 0 | 18 (16%) |
| **ETHIC** | Virtue | 0 | 1 (3%) | 0 | 0 | 0 | 1 (1%) |
| | | | | | | | |
| **PEDAGOGY** | Analyze, analytical | 13 (76%) | 22 (73%) | 17 (63%) | 18 (60%) | 4 (57%) | 74 (67%) |
| **PEDAGOGY** | Argument | 0 | 6 (20%) | 0 | 7 (23%) | 3 (43%) | 16 (14%) |
| **PEDAGOGY** | Critical thinking | 6 (35%) | 16 (53%) | 11 (41%) | 11 (37%) | 5 (71%) | 49 (44%) |
| **PEDAGOGY** | Decision-making | 0 | 3 (10%) | 3 (11%) | 12 (40%) | 0 | 18 (16%) |
| **PEDAGOGY** | Draw parallels | 1 (6%) | 9 (30%) | 5 (19%) | 6 (20%) | 0 | 21 (19%) |
| **PEDAGOGY** | Engage | 3 (18%) | 6 (20%) | 5 (19%_ | 7 (23%) | 2 (29%) | 23 (20%) |
| **PEDAGOGY** | Infer, inferential | 1 (6%) | 2 (7%) | 6 (22%) | 1 (3%) | 1 (14%) | 11 (10%) |
| **PEDAGOGY** | Interpret, Interpretation skills | 9 (53%) | 5 (17%) | 1 (4%) | 3 (10%) | 3 (43%) | 21 (19%) |
| **PEDAGOGY** | Journal writing | 4 (24%) | 4 (13%) | 0 | 8 (27%) | 1 (14%) | 17 (15%) |
| **PEDAGOGY** | Logic, logical reasoning | 0 | 1 (3%) | 0 | 1 (3%) | 1 (14%) | 3 (3%) |
| **PEDAGOGY** | Persuasion | 0 | 0 | 0 | 0 | 3 (43%) | 3 (3%) |
| **PEDAGOGY** | Problem-solving | 1 (6%) | 1 (3%) | 15 (56%) | 5 (17%) | 0 | 22 (20%) |
| **PEDAGOGY** | Reasoning | 1 (6%) | 2 (7%) | 6 (22%) | 8 (27%) | 2 (29%) | 19 (17%) |
| **PEDAGOGY** | Reflection | 7 (41 %) | 9 (30%) | 6 (22%) | 9 (30%) | 1 (14%) | 32 (29%) |
| | | | | | | | |
| **TOTAL REVIEWED** | | 17 | 30 | 27 | 30 | 7 | 111 |

In the interviews with the faculty from three campuses, there were no obvious differences in the responses from faculty at a particular campus. Therefore, the data were presented as an aggregate. An overview summary of the faculty interviews is presented in Table 8. Across campuses and disciplines, the faculty members interviewed believed that the general education coursework contributed to the ethical reasoning development of their students. And, all but one case, the faculty believed that the general education course(s) that they taught supported student ethical reasoning development. The pedagogical approaches were similar across campuses and disciplines. There were no differences noted between campuses and disciplines in the faculty member's approach to academic integrity.

Table 8

*Summary of Findings from Faculty Interviews*

| Name | Academic Area | Campus | Intentionality | Attitude | Academic Integrity | Knowledge of GenEd Goals | Where Ethical Content Found | Pedagogy |
|---|---|---|---|---|---|---|---|---|
| Kay | GH | A | Unintentional | Impt | Discuss | No | Examples | Discussion, Reflection, Writing, Analysis |
| Jason | GH | B | Intentional | Impt | Syllabus | No | Examples, Assignments | Discussion, Analyze, Writing |
| Todd | GH | C | Intentional | Impt | Syllabus | No | Examples, Texts | Discussion, Reflection, Writing, Analysis |
| Barb | GH | C | Intentional | Impt | Discuss | No | Assignments | Discussion, Reflection, Writing, Analysis |

Table 8 continues

| Name | Academic Area | Campus | Intentionality | Attitude | Academic Integrity | Knowledge of GenEd Goals | Where Ethical Content Found | Pedagogy |
|---|---|---|---|---|---|---|---|---|
| Kay | GH | A | Unintentional | Impt | Discuss | No | Examples | Discussion, Reflection, Writing, Analysis |
| Jason | GH | B | Intentional | Impt | Syllabus | No | Examples, Assignments | Discussion, Analyze, Writing |
| Todd | GH | C | Intentional | Impt | Syllabus | No | Examples, Texts | Discussion, Reflection, Writing, Analysis |
| Barb | GH | C | Intentional | Impt | Discuss | No | Assignments | Discussion, Reflection, Writing, Analysis |
| Nan | GS | A | Intentional | Impt | Syllabus | No | Assignments, Discussions, Texts | Discussion, Writing, Analyze |
| Adam | GS | B | Intentional | Impt | Discuss | Yes | Assignments, Discussions, Texts | Discussion, Reflection, Writing, Analysis |
| Rick | GS | C | Intentional | Impt | Discuss | No | Discussions, Examples | Discussion, Reflection, Writing, Analysis |
| Sheila | GWS | A | Not Present | Impt | Syllabus | No | Not present | Writing, Analysis |
| Brian | GWS | B | Intentional | Impt | Discuss | No | Assignments, Discussions, Texts | Discussion, Reflection, Writing, Analysis |
| Betty | GWS | B | Intentional | Impt | Discuss | No | Assignments, Discussions, Texts | Discussion, Writing, Analyze |
| Dan | GN | A | Unintentional | Impt | Discuss | No | None | Analysis, Writing |
| Eva | GN | B | Intentional | Impt | Discuss | Yes | Assignments | Discussion, Reflection, Writing, Analysis |
| Josh | GN | B | Unintentional | Impt | Syllabus | No | Texts | Discussion, Reflection, Writing, Analysis |
| | | | | | | | | |

## Findings

**Grand tour question.** Was there a shared expectation among faculty members who taught general education courses that their course content and pedagogy would lead to the development of ethical reasoning skills in their students?

The findings in this research showed that the interviewed faculty members who taught general education courses at Penn State believed that their students were exposed to pedagogy and course content that led to ethical reasoning development. The faculty interviewed unanimously believed that general education courses could enhance the ethical reasoning of their students. However, only 4 (25%) of those faculty members explicitly mentioned anything related to ethics or ethical reasoning in their course description and/or syllabus.

The research questions for the faculty study and for the student study were explored as follows:

**Research question 1: How did faculty members create their general education course content and did they align the goals of general education with creating opportunities to develop student ethical reasoning skills in the courses that they taught?** This particular research question resulted in some results that were not originally considered in the study. When asked about the goals of general education, only three of the 16 faculty members (19%) actually knew Penn State's intent for general education. It was interesting that these three faculty participants all had more than 15 years of experience at Penn State. Adam was one of the faculty members who knew the goals of general education at Penn State. As he was quick to point out, he believed that

asking faculty about general education goals was an assumption that they knew those goals. “You’re assuming that faculty knows the goals of general education. I think that a lot of gen ed are lecture courses taught by part-time faculty and I don’t think even fulltime faculty are made aware of the goals.” Sara, who taught social and behavioral science general education classes (GS) was insistent on staying true to the official university description of the course.

> So I am always true to a description and since I don’t like a student who needs to take more of my courses than just one, to have a lot of overlap, I try to be true to description but at the same time I try to keep my courses distinct from one another.

Sara was aware of the goals of general education at Penn State but had difficulty articulating all of them. She specifically pointed out that diversity was an important component as well as critical thinking and communication skills. Jason’s syllabus specifically indicated how the course objectives met Penn State’s general education requirements:

> This course contributes to the following general education program outcomes:
> - Acquire knowledge through critical information gathering, including reading and listening, computer-assisted searching, and scientific experimentation and observation;
> - Analyze and evaluate, where appropriate in a quantitative manner, the acquired knowledge;
> - Integrate knowledge from a variety of sources and fields;
> - Make critical judgments in a logical and rational manner;
> - Communicate effectively, both in writing and orally, and using the accepted methods for presentation, organization, and debate particular to their disciplines;
> - Seek and share knowledge, independently and in collaboration with others;
> - gain understanding of international interdependence and cultural diversity and develop consideration for values, lifestyles, and traditions that may differ from their own.

> This course contributes to the social science (GS) knowledge domain: Social and Behavioral Sciences courses develop students' understanding of the diverse personal, interpersonal, and societal forces that shape people's lives and teach them how to approach these subjects through the concepts, principles, and methods of scientific inquiry. The general goal is a theoretical understanding of the interrelationships of the determinants of the organization of human behavior. Through the application of the methodologies of the Social and Behavioral Sciences, students should develop an understanding of the multiple nature of causality in social settings. The Social and Behavioral Sciences require a comprehensive, integrative, empirical, and theoretical view of the social world.

This was the only syllabus reviewed both in the content analysis and those submitted by the faculty interviewed that explicitly listed these objectives.

Josh taught in a discipline that had no upper-division coursework at the campuses. He spoke of the interdisciplinary aspect of general education requirements.

> All of the courses I teach are non-major courses, so I know that I will always have non-majors in my class. I think the goals of general education fit in so well with my course – analysis, appreciation for differences, critical thinking, learning the scientific method, good communication, and writing skills are all critical to my discipline. It's really interdisciplinary in many ways.

Only two of the faculty (13%) indicated that they were given any specific instruction about teaching a general education course and what to include in the course content related to the fact that a course was designated as general education. The guidance for these courses came from the department responsible for the courses across all campuses. The College of Science and College of Liberal Arts (English Division) have issued clear guidelines for courses taught as general education. Brian, an English faculty member stated:

> I have read those goals and I have read those guidelines and my sense is that the ideas, the goals associated with English 15 are being addressed in my courses, that students develop a sense of audience and purpose in their writing, that they learn different approaches to exposition, that they understand some of the important fundamentals of grammar, and so when I say that they learn about

> different formats and organizing such as compare and contrast, exposition, learning how to use quotations, how to do some primary research. So I don't think that my English 15 course conforms to all of the goals that have been laid out because there are a heck of a lot of goals if I am remembering correctly. But I'd say quite a few of them I am trying to keep.

Eva also specifically knew about the goals of general education.

> The College of Science has in the Senate record a course description – a brief one and an extended one and I actually was on a committee that met probably back in 1999 to talk about gen ed assessment and to talk about the course objectives for gen ed science courses. So, I'm aware of those, so I try to incorporate those objectives or sort of overlay those with the objectives for the course and I put those in my syllabus.

Betty indicated that her local department determined goals for the course taught, but they were not specifically related to general education goals and the faculty still had a lot of latitude. "We all used the same rubric and instrument to ensure that we're assessing in a fair and similar manner. . . . We all have our students do [pause] one outcome is that they all have to do four speeches."

Other faculty interviewees reflected on the question about the goals of general education in relation to the development of course content. Barb replied to the researcher's question about thinking about the goals of general education while creating her course content.

> I think, you think of your course as a course that you're teaching. I don't think you are thinking it's a larger piece of what we want to do within the university. I don't think I do . . . For me, its micro managed. I'm focused on the goals of this course and then every class is a sub goal of that, so I'm focused on students across that continuum.

Bill saw general education courses as a "springboard to their upper division classes." For ten of the faculty members (63%) interviewed, the general education designation meant that the majority of their students in general education classes were

freshmen and sophomores. This was most likely an artifact of the campus system at Penn State where students take the majority of their general education courses in the first two years and their major courses in the last two years of study.

Two faculty members (13%) referred to Bloom's Taxonomy and indicated that they created their course content based on the belief that most students enrolled in general education courses were not prepared for the higher level thinking and the role of general education was to move the student up to the higher level of thinking. Bill spoke about this:

> You've got Bloom's taxonomy of education. I think of these 100 and 200 levels gen eds as like, we are trying to get you up to that third or fourth platform so that you can really start learning. We are trying to throw as many vocabulary words at you as we can. We are trying to give you enough to be dangerous but not knowledgeable. So that when you get to your 400 level and your 300 level courses, your capstones, your seminars, that now you're . . . at least fluid in the language and you can start figuring out the way we think. That's often how I kind of conceptualize them.

Kay reinforced this thought, "Students are not really used to hard thinking, tough questions. They stay very much on the surface, you know?" Related to the concept of preparedness, Cathy stated:

> I know by the end of the semester I'd like to get them ready to go forward, they're not ready for the course, they're not ready for the thinking, they're not ready for the expectations, so I'm kind of trying to be as gentle as possible but I'm always talking about skills, you know, taking notes. . . . I'm constantly talking about skills in the first semester of general chemistry.

Five faculty members (31%) saw general education as defined by survey or foundational courses. As Nan expressed it "[general education] serves as providing that foundation for them in their education." The other ten (63%) faculty interviewed based their definition of general education in the liberal arts tradition. All but one of the faculty

members interviewed (94%) believed that much of their definition of general education was based on their undergraduate experiences. The one faculty member who did not base his definition on his undergraduate experiences was educated outside of the United States for his undergraduate studies.

None of the faculty interviewed were aware of the mention of ethical reasoning development in the strategic plan. There was very little variation among the faculty in terms of the role of general education and ethical reasoning. The role of general education in the development of ethical reasoning skills was important to 15 of the 16 faculty (94%) interviewed. Four faculty members (25%) expressed intentionality in the development of ethical reasoning skills. Ten faculty members (63%) believed that the course itself led to ethical reasoning development, but being designated a general education course did not influence how they taught their course. One faculty member (6%) had not thought about ethical reasoning and his course, but thought there might be some transferability of reasoning skills to ethical reasoning. There was one faculty member who did not think that her general education course led to ethical reasoning. Sheila stated "I think students get exposure [to ethical reasoning] in other courses, but in my course there really isn't any opportunity."

Betty believed that general education was important to stretch a student's way of thinking.

> I feel like the goals of general education should be for students to engage in subject matters or ideas that aren't necessarily, how do I say this . . . comforting in the sense that they are being stretched to think about how they are participants in their world and how the world is bigger than them. So, I want to introduce my students to ideas that they don't think about on a daily basis but that I feel are meaningful and I also want to provide my students with a skill set that they can

> transfer to a lot of different areas in their education and in their life. So I think that those are the goals of general education. I take that from a liberal arts tradition. So, that's sort of where I pull from about becoming a good citizen. That's what a good liberal arts education is about.

Brian reflected on the meaning of general education and what it means to be an educated person.

> I feel that it [general education] means a body of knowledge that people who consider themselves to be educated, ought to have some familiarity with. And, not just facts and dates and important personages, but again, the essential values that people have been wrestling with for a long time. I think of not just a body of knowledge, but a way of discussing that body of knowledge, the history, the facts, the dates, the objective information, to be able to evaluate why they are important and why they matter to us.

Eva reaffirmed this concept of what it means to be an educated person, but she also reflected on the responsibility that comes along with education.

> I just read something about Noblesse Oblige, which was the idea of a liberal arts education back in the Middle Ages. In other words, you were privileged and the idea of having a liberal arts education as a privileged person was that there were a lot of people who had no education and it was your job to know enough about a lot of things that you could help take care of that society. And, I often think about that because I think the purpose of general education and the purpose of being educated broadly . . . is that as you go through life, it's not just about your occupation, it's about avocation and living a good life. And I think that it's hard to live a good life if you're too focused on just one thing.

Kay believed that the skill set acquired through her general education courses would lead to ethical reasoning development.

> I hope that at the end of this course, they are better prepared to think critically, to understand issues, to really consider different views on issues, and draw conclusions that reflect that. Ethically . . . well, I mean, I am assuming that if you are a critical, rational creature, you make good decisions, then you are acting ethically, you know what I mean? Big assumption, though, right?

Adam saw the goals of general education as giving students a greater sense of self-awareness through the requirements of general education – written and oral

communication, group work and collaboration, an examination of major societal issues, and being able to understand multiple sides of an issue.

It was clear from the responses of the faculty that faculty members have varying definitions for general education and that there was little intentionality on the part of faculty to adhere to University established goals for general education and their specific general education domain. However, it also became apparent that, in spite of their lack of knowledge concerning specific requirements, the faculty were meeting the goals set forth by the University through their course content and pedagogy without a specific awareness of those goals as outlined in Chapter 1 (also see Appendix A for Penn State general education goals by content domain). An example of this would be the syllabus from the course taught by Barb in which she lists the following goals:

- Students will show a critical understanding of the core concepts . . . through a variety of discussion forums, activities, and assignments.
- Students will participate in an international, national, or local community . . . experience and will have an opportunity to reflect on this experience by designing and developing a reflective research project.
- Students will conduct research about a public issue and present a reflective research project about this issue to the community at the end of the course.

Another example of some learning objectives can be found in Betty's syllabus:

> At the completion of the course [the student] will be able to . . .
> - Understand the implications of context . . .
> - Locate, synthesize, and assimilate new information from text libraries, electronic data courses, and experts; and correct citations of sources materials.
> - Develop critical and creative thinking skills.
> - Analyze and constructively critique . . .
> - Understand the importance of listening and mindfulness, including how people perceive and process information and strategies that focus attention and motivate attentive listening.

Dan in his interview stated:

> Well, there are, of course, some knowledge requirements, some bunch of facts. But normally what we, or at least what I want my students to take home, is not just a bunch of facts/a body of knowledge, but a way of thinking. They should develop the skill of scientific thinking. They need to support their arguments, develop tools for doing so and another important aspect is that there is no authority in science. Anyone can come and if he/she has reasoning supported by facts and mathematically consistent, they will be heard.

The content analysis of the general education syllabi as well as the conversations with the faculty members clearly showed that faculty members were creating opportunities through course content and pedagogy for their students to experience courses that fulfill these institutional goals.

**Research question 1a: What was the student's understanding of the goals of general education and how do these relate to the faculty understandings?** The student perspective for this question completely reflected the faculty perspective. Only one of the students (5%) interviewed could actually speak specifically to the goals of general education at Penn State. Anna was one of 19 students (90%) who indicated that they had no idea what the goals of general education at Penn State were: "I have no idea what the goals for general education are. I was never introduced to them. Just 'shut up and do it' is more the attitude of the advisers." Barry followed his degree audit, but was not clear as to what the goals were "I don't know about those goals. I know we are required to take courses from different categories. I just follow my degree audit." Amos, an older student, most clearly articulated the goals by stating "general education provides us with the critical thinking and analysis skills we need as well as communications skills, appreciation for different cultures and exposure to different points of view."

**Research question 1b: How did students define general education?** Student definitions of general education were centered on being a 'well-rounded' person. Carl stated "It shows us other ways of thinking." Justin, another older student, opined "general education redirects their focus, can give them a sense of world cultures; increases their insights. Penn State's goals are to 'build a more, well-rounded student.'" Robin also spoke to the theme of being well rounded: "I think they want us to graduate as well rounded and well educated. It's important to learn different ideas and viewpoints." Fifteen students (71%) saw general education courses as something they were required to take, but were not clear on the reason why. They understood that they were required to take courses in different areas but could not articulate why the university believed it was important for them to do so. Four students (19%) seemed to enjoy the diversity that general education provided for them within the curriculum. Pam stated "So you can take a vast variety of everything, not just courses for your major. It's nice to take different courses." Jess seconded this idea by stating "If I was only concentrating on my major, it wouldn't be good. I need social skills. I need to be able to apply things to the real world and couldn't do that if I didn't know what's going on." Two students (10%) indicated that they considered general education courses to be a way to get an 'A' and help their grade point average (GPA). For example, Craig stated, "I don't know the purpose, but I like to take them because they help my GPA usually" and Jarod seconded the notion of an 'easy' course with "[The purpose of general education is] probably to make sure we're well-rounded people. I also like being able to take some easy courses along with my major courses." Only one student (5%) indicated that she saw no purpose for taking general

education courses at all. Anna succinctly stated, “I just think it’s a bunch of classes to take our money.”

***Summary of research question 1.*** The goals of general education at Penn State are not well known by both the faculty and students. However, it appears that the lived experiences of faculty have led to definitions of general education that reflected the goals set forth by the university. For nine of the faculty members (56%), general education represented the opportunity to provide the students with the skills needed to “live a good life” and to expose students to a wide range of learning experiences and to stretch their learning skills beyond which they entered college.

**Research question 2: Did faculty members intentionally create opportunities to provide for ethical decision-making?** The concept of ethical decision-making spanned from academic integrity issues to actual course content. There was no consistency among faculty. Twelve of the faculty members interviewed (75%) raised issues of ethical concern. Four faculty members (25%) shied away from issues that might have raised controversy. Four faculty members (25%) specifically encouraged controversy as a component of their course content.

Brian was passionate about providing students with the opportunity for ethical decision-making. He described himself as a professor who used his profession as a “as a front or a camouflage for one of the important things that I am doing, one of my most important undertakings, which is encouraging moral discourse.”

> My feeling is they often do not have any other classes where they are talking about core human values. Sometimes they do like in some of the Communications classes, history classes, and so forth. They’re going to address issues in classes like that. But I also often feel like they’re not getting a chance to do this. But in

> my classes, they do. Some of them are bored with it, some of them don't know how to react to it, but I also find, I feel, I sense that there's a fairly receptive audience in all of my courses to talk about values, and talk about right and wrong and so forth. And so, in all of this, my students get a chance to reflect on what they think is right and wrong and hear what other students are saying they think are right and wrong about really loaded ethical issues. So you ask, how do I get them to talk about ethical choices and so forth and one of the ways is to see what the author is presenting and then to hone in on some of the most controversial topics that get raised.

Nan also wanted to bring social issues to the forefront and to provide her students with the tools to make good ethical decisions. She was concerned that all too often, students made judgments about other human beings without a full understanding of the elements surrounding someone's life experiences and decisions that they make.

> My main goal in the class being for students to understand kind of how broader social forces affect individuals, I want them to have a more compassionate perspective on people who are experiencing social problems and I guess, a more ethical perspective. When I think about the social problems that we talk about in the course, we talk about poverty, that's the one that we spend the most time on, we talk about race and ethnic inequality, we talk about the environment and we talk about issues of world population and over population, . . . those are just some of them. But I think they all have an ethical component to them and that it's about understanding from the point of view of the people who are experiencing these problems.

Bill believed that teaching students to make ethical decisions should not be a dogmatic right or wrong. He pointed to a class where he and Sara both taught about research ethics. Sara's stance was an absolute there is never a reason to lie and he talked to the students about research that might require lies in order to learn more about a situation. He expressed the following:

> It's a good thing for them to have one professor who is telling them it's never okay to lie and then another one to be like, we lie all the time. It's not even full review [IRB]. Because it then forces them to think about which is right and this is very different from this consistent kind of dogmatic message because if they don't

> agree with that consistent dogmatic message then they're not necessarily thinking about why they don't agree with it.

Four faculty members (25%) spoke about wanting to be careful to not give their opinions but to allow students to develop their own views. Eva expressed that view based on a scientist's perspective:

> It's not a philosophy course, but I sometimes get philosophical, but I try not to give my opinions. I tell them that scientists formulate opinions based on fact and gathering data, so that's kind of the way that I deal with it, but I'll throw it out there. You know, we talk about stem cells because stem cells are now being used to treat a lot of different things and in immunology stem cells are extremely . . . , understanding what they are and how they work, is extremely important. And we don't have a lot of time to spend on that when you're doing an overview of the whole human body, but um, you know, just getting the facts on stem cell and at what cost should we get stem cells, and this is where we are with stem cell research and here are the ethics, here are the issues. Do you know enough to make a decision or do you hope and pray that science will move fast enough that the existing constraints to find a better system that is not as ethically contentious.

Todd told the researcher that he

> steered away from the contentious sort of debates because in my experience students at the end of the debates, they came away from those debates with the impression that it really doesn't matter what side you are on. They just threw up their hands at the end of the debates that it really doesn't matter.

And there were faculty who did not want to talk about ethics. Sheila stated that "I am sure there are ethical issues that might arise, but I don't focus on that in my teaching." Cathy believed that some faculty members are uncomfortable with the idea of talking about ethics.

> I think sometime, I think people are afraid to talk about ethics. I think they're afraid to talk about an honor code and being honest and being ethical. I mean, I've always thought that and it's been very obvious during the time I've been teaching. They don't, they don't want to bring it out in the open. I don't know if it's because they don't feel it's their position. I don't know if they don't think if it's their position to do that, or they don't feel comfortable, or some may just not feel comfortable themselves and then to feel that they could or should talk about that,

> they may not feel comfortable about that and then to go even further do you even do it .

The approach to academic integrity was also varied among the faculty and it was here that the student voice was really interesting. The university has a requirement that all faculty members place a statement about academic integrity in their syllabus. There are standard statements developed by each academic unit within the university which can be found on the following website: http://advising.psu.edu/integrit.htm. Faculty members must have a minimum required statement but could choose to elaborate on this. The researcher found that all syllabi reviewed in the content analysis had strong academic integrity statements. In speaking with the faculty interviewed, the subject of academic integrity was dealt with differently according to the view of the faculty member.

Bill believed that academic integrity needed to be explained to students in the context of ethical decision making. He believed that students wanted to do the right thing and that he wanted to 'normalize' the behavior of not cheating.

> Academic integrity is a fun concept. [Laughter] Yeah, so I try to, I generally treat very, kind of not laissez faire, but I have things in my syllabus both mandated and additional things to help steer away from other things that have happened. But often times, I tell them at the beginning of the semester. Like, look you guys are adults and the entire system is based upon you guys doing your work, me evaluating your work accurately, and then making a judgment, a grade, on who knows it, based on this work and who doesn't And cheating undermines that entire system. If I can't accurately assess what you know or what you don't know, I can't accurately assign grades and the rest of the world can't accurately know who to hire and who not to hire. This might sound great for you in the short term but if they stop trusting us, it doesn't help anyone including you. So I talk about this a little bit just at the beginning, so you're adults so do this. … I just tell them you guys are adults. I expect integrity. I know you guys would like to do better on the exam, but that's not the way to do it. Just keep your eyes on your paper and keep other eyes off of your paper. … I try to help them understand that I'm not expecting them to be cheating. So again, going back to this normative – when we treat them all like they're cheaters, the few students who are cheating, assume that

> this a normal behavior and it's their job now to beat the system as opposed to you guys are all adults, you aren't going to do anything wrong, so take your exam and pass it up. It's then weird for the person who was planning to do something wrong.

Sheila clearly stated her views to the students on academic integrity. She spent time before each writing assignment to clearly articulate to her students the importance of producing their own work and to differentiate between seeking assistance to improve your writing and having someone write the paper for you.

> Students quickly realize that I can tell from their in-class writing style when they hand in a paper that they have not produced on their own. In writing, it is sometimes difficult because we encourage our writers to seek outside help and to do rewrites. But they have to understand that the work must ultimately be their words and their voices and . . . their mistakes.

Todd took the concept of academic integrity and put it in a broader context within the Penn State Principles. The Penn State Principles were "developed to embody the values that we hope our students, faculty, staff, administration, and alumni possess." (http://www.psu.edu/ur/pdf/principles.pdf).

> On the first day we go over the syllabus and academic integrity is a part of that. The next week, we [spoke] about the Penn State principles. We came out of this with some ethical terminology; how do we use rules and principles to help shape our actions and behaviors, our decisions. So I asked the Director of Student Affairs to come talk to us about that and lead us on a discussion of Penn State Principles. Why were they created, what do they really mean? How do they help us? How do we negotiate between, in some cases, a loss of individual freedom versus this corporate responsibility? And where do those principles help us and get us towards, how are we a stronger community as a result of that. So, we pull out academic integrity piece as part of the Penn State Principles, to put it in a broader kind of context.

In my interview with Sara, the concept of academic integrity did not come up until the researcher mentioned it. Here was her reply:

> There is a large section on academic integrity [in my syllabus]. I think the word is out that I am pretty serious about this. But that didn't even come up in our discussion so far, because for me that's, like a given. Do you know what I mean? That's not the content of the course, that's the substrate of the course. I assume that they're going to take it honestly and do the work on their own. But that certainly is a piece of this, . . . but it didn't even come up in our discussion. And yet that's not because I ignore it.

One interesting element that the researcher discovered was that although Sara believed that she more than adequately covered the idea of academic integrity on her syllabus, her academic integrity statement was one of the briefest and least explicit seen. As she indicated to the researcher in the interview, her syllabus was 12 pages long. However, her academic integrity policy was only one short paragraph embedded under "Other Important Information."

In interviews with three of the faculty members (19%), the concept of academic integrity was not touched upon but it was sufficiently evident on all syllabi. Similar to Sara's thought processes, these faculty members did not automatically equate academic integrity with ethical decision-making.

Adam concluded his discussion of academic integrity with the observation that he believed "we don't have a strong culture of academic integrity among the students. I mean, there is no honor system."

**Research question 2a: In what ways were ethical concepts introduced to students including, but not limited to, academic integrity?** It was apparent that students all had heard about academic integrity. Students indicated that it was on all of their syllabi. They also saw that faculty approached the topic in different ways from total disregard to a clear emphasis. "It's on all syllabus but some faculty talk about it too. My

chemistry prof always mentions it before each exam and I've had her two times. Other profs don't talk about it other than to point it out on their syllabus." stated Larry. Karen reflected, "Yeah, it's mentioned at the beginning of all classes. Some teachers take it more seriously than others. Some younger students don't know how to not plagiarize. They think if they read it, it's their thoughts." Four students (19%) stated that the repetition of the policy became like "white noise" for some of their fellow students. They heard it so often, they stopped listening. Justin said, "It's always mentioned but I think it's just something they feel they have to say." Jarod expressed this opinion,

> It's covered in some way in all the classes we have. I think it's required or something. It's sort of meaningless because you hear it all the time but we know not to cheat so if you're going to cheat, having it on the syllabus really doesn't make it not happen, you know?

Jess also indicated that having the statement on the syllabus doesn't serve as a deterrent. "It is mentioned in every class but students still cheat." Pam agreed, "It's mentioned in every class. Sometimes you get tired of hearing it. I think it's important to know as a freshman." Only two students (10%) actually saw academic integrity as a component of ethical behavior. When asked about academic integrity, Carl answered, "I guess that is related to ethics – not cheating or copying." Sally said, " It's important for students to understand that living ethically includes not cheating. The majority of faculty just put it in their syllabi and expects us to understand what they mean."

Students gave examples of ethical decision-making in those courses that had specific ethical content. Amos, who took a course taught by Brian, confirmed that Brian provided opportunities for ethical decision-making. "In my Literature course with [Brian] we discussed African literature and we often compared the decisions we have to make

with the decisions that the characters in the book had to make." Barry confirmed what Bill spoke about ethical decision-making and research, "In my psychology course, we talked about ethics related to research." Jarod spoke about his education course [taught by Adam] and that he was required to think about how as a teacher he would make fair decisions. The syllabus for the course showed that Adam had multiple requirements that provided the opportunity for ethical decision-making. One example of an assignment was to write about how schools addressed differences among students and as a teacher, what would you do? And Matt [who took a course with Eva] spoke about the issues related to stem cell research and the ethical decisions that might have to be made. "In my biology course we sometimes talked about ethics related to biology like stem cell research. I never thought about the science of ethics before."

***Summary of research question 2.*** Ethical decision-making opportunities in the courses taught by the faculty interviewed ranged from no explicit opportunities to some very intentional opportunities. Five faculty members (31%) believed that they had a "moral imperative" to provide that opportunity for students while four (25%) believed that was not an element of their course content. Academic integrity, a de facto form of ethical decision-making was also handled differently by faculty. Ten faculty members (63%) believed it important to spend time on the topic. On the flip side, three faculty members (19%) never mentioned the topic in the interviews. Two faculty members (13%) gave their students a broader view of academic integrity beyond the concept of cheating. Both faculty members put it in context against the principles that governed the greater University community and beyond. One faculty member (6%) did that in relation

to the Penn State principles and another spoke about the being able to honestly assess a student's ability so that future employers can trust us when we confer a degree. That same faculty member also spoke about the importance of making honesty the norm rather than focusing on cheating.

**Research question 3: Did faculty members create opportunities for reflection on the ethical decisions that students may face?** Reflection was a key component of the content of 13 (81%) of the courses taught by faculty. Faculty often spoke about the need for reflection and the use of writing and reflection was a common assignment. Students were asked to write reflection papers, to keep journals, to reflect on course content, and to respond to questions in class. However, reflection on ethical decisions was only present in 6 (38%) of the courses discussed during the interviews. In the content analysis of the 111 syllabi, the numbers were even lower. Seventeen syllabi (15%) explicitly spoke about reflecting on ethical decisions. Another 20 of the syllabi (18%) had 'reflection' explicitly stated in the goals for the course.

Bill required seven homework assignments and students kept a diary for a week of their stereotypes, prejudices that they were doing or seeing, when they broke the social norm or did some activity that involved that. "They write about their experience and then reflect back on, so how does this relate to, so if they're doing something on social norms, how does this relate back to conformity, obedience, normative behavior?" Bill also has his students reflect on various research studies. "One of the things they reflect upon, is, is it okay for you to use this knowledge to take advantage of your friends and your family and they really kind of struggle with these things. Some students don't. Some say

absolutely." Todd encouraged his students to think about ethical topics within the context of journal writing. He believed that "reflection is key to ethical thinking, not only individually but also corporately or societally."

Betty indicated that:

> I take the stance that if you are going to talk in public, you need to believe in what you talk about, and you need to know what you want to talk about and you need to figure out what you want to talk about and you need to figure out these things and think about them reflectively.

She required her students to create a persuasive speech on a local issue that was important to them. "They have to talk about something that is happening in their community and is important to them. . . . They have to do meaningful research and reflection." Betty also used the book, *This I Believe*, to direct her students in their final speech. This assignment required her students to reflect on their belief system while completing the requirements for her class.

Eva asked her students to apply the scientific method in order to reflect and make decisions related to biology.

> We talk about whether you should make judgments before you have all the facts and then we talk about how we gather those facts as scientists and for that particular system. For example with the nervous system you can talk about a variety of different diseases and what government policies might be . . . whether you get reimbursement for certain diseases. I often just leave it open ended, but I want them to think about it. Because I say to them, you know, if we do a survey of this room and I ask right now, you know, who has or somebody in your family has this disease or that disease and whether insurance should cover payments for that and quality of life and um, you know, what's your stance on that is often determined by how much you know about it and how many people actually have it, right?

Josh also spoke about offering students the opportunity to think outside of their normal mode of thinking and to reflect on their ethical postures. "There are definitely

opportunities for students to explore ethical dilemmas in my course. I believe this course makes them think about their predisposition to one way of thought and opens them up to new ideas and concepts." Nan agreed with this theme as well.

> I do want them to think more critically about the world and about. . . . I guess the main outcome is to understand the difference between system blamed theories versus person blamed theories. Sociologists are looking at how social structure affects interaction and how it affects behavior and I want them to understand that people don't just act as individuals with, you know, no external forces, that there's a lot of things going on beyond what we can control that affect our behavior.

Kay created her classroom experience to allow for reflection. She posted classroom discussion questions in ANGEL (A New Global Environment for Learning classroom management tool) for students to prepare for the class and guide their textbook reading.

> I try to give them a few important points to focus on. So the idea is that they come to class ready to talk. That's the idea, anyway, right? And then, I start introducing a topic, I talk and use the PowerPoint, but throughout the class I involve them and it's interactive . . . like, you are an indentured service in the 1600 in Jamestown, writing a letter home to his parents, what would he be describing, what would you tell your parents if you were a servant?

Jason also used ANGEL to provide students the opportunity for reflection. Students were required to write 200 words about a posted topic and then respond to classmate postings. In his course, students had an opportunity each week to reflect on an ethical issue related to energy and technology.

Rick helped students make ethical decisions by giving them both sides of an argument.

> I never will state that this is good government policy and this is bad government policy. I always present both sides of the argument on government policy and ask the students to tell me whether it is good or bad. And the students quickly learn

> that the answer almost always is, 'it depends.' It depends on whether you're the consumer or the producer, the renter or the landlord, whether you are wealthy or not wealthy, whether you're a laborer in a protected labor group or the consumer. And it usually does depend on who you are and what your particular interests are. So the students become very good at thinking on both sides of an issue and I like that because I think that will make them better voters.

**Research question 3a: Were the students presented an opportunity to explore ethical dilemmas in their coursework?** Fifteen (71%) of the students interviewed could point to at least one general education course that they had taken where ethical dilemmas were discussed. Seven of the 13 upper division (juniors and seniors) students (54%) had ethics courses or ethics-related coursework in their major courses. Students had trouble articulating specific assignments but remembered talking or writing about issues. Discussion and reflection were the pedagogical devices that the students most remembered if not the specific assignment.

Jess remembered ethical discussion in her two sociology classes. "This really opened my eyes. It brought clarity to my ability to see." Karen spoke about two courses that she remembered but were not taught by the faculty interviewed. "I took a professional ethics class – the professor was really tough, but she made me look at research differently. In my environmental sociology course, we studied global warming and we learned to consider the source – don't trust everything you read."

Five students (24%) spoke about their experiences in a First Year Seminar (FYS). First year seminars were not included in the research study because a separate FYS course is no longer a requirement at the university. However, the seminars still remained an option for freshmen students, if not a requirement, at all of the campuses where the students were interviewed. Pam stated:

> In my first year seminar – every group had a topic like LGBT rights and we had to present on those topics. Everyone had a different topic – it was really interesting to see different points of views. I love the diversity aspect at Penn State.

Jordan also spoke about his FYS experience. “In my freshman seminar we talked about different social issues. We also talked about Penn State principles. That’s the only class that I can think of.”

**Research question 3b: How did this relate to faculty course content and pedagogy?** There were some direct correlations between what faculty indicated they did in their classroom and what the students remembered. Carl remembered that “ethics was a topic in my STS course [taught by Jason]. That course had topics on ethics in technology and global power. We would have online discussions related to topics.” Diane spoke about having a course in business ethics as well as experiencing the discussion of ethics in other courses as well.

> Actually, as I said, I had the ethics course in business. I honestly can't remember exactly what we did in that class. I did like the class discussions. This semester my SOC [Nan] course is on social problems and we discuss a lot of the social problems in society and there's definitely times we discuss ethical dilemmas. And in my HDFS class [Sara], we talked about the ethics of research. So I've had a lot on ethics.

Dennis took a course with Rick and indicated that “in my economics class we discussed different ethical issues related to the economy. Like how one rule might help some and hurt others and how do you decide?”

***Summary of research question 3.*** Reflection was an important element found both in course syllabi and faculty descriptions of course content as it related to ethical reasoning. Faculty provided multiple opportunities for students to reflect on ethical issues

and learning. Students spoke about the use of writing prompts and journal writing in the class assignments as a means of reflecting on course content.

**Research question 4: Did faculty members believe that the content of general education courses directly or indirectly influenced the ethical reasoning development of the students they taught?** All of the faculty members created opportunities for the development of reasoning skills which faculty members believed could also be applicable to ethical decision-making. The pedagogical elements that faculty members used included critical thinking skills, analyzing skills, argumentation skills, decision-making skills, active engagement in the materials, inferential and interpretive skills, logic and persuasion, problem solving, reasoning and reflection. It was in this area that the content of the course really influenced the answer to this question. Those courses that had an ethical component built into the course, the professor clearly believed that their course content contributed to the ethical reasoning development of their students. Of the 16 faculty members interviewed, 4 (25%) of the courses had an ethics component built into the course. Barb described her course objectives and pedagogical approach:

> We do have course objectives, that they understand what it means to be, what civic engagement is, the larger issues that underlie what it means to be a citizen, and invested in one's community recognition. . . . You know, what can I do as a member of this community, as a citizen of this world and this country, to change the things that is seen, that I might not . . . I want to see things differently . . . very noble, very noble stuff that I hope for. . . . So I want them to, you know, again explore both sides of an issue, but I also want them to think about the consequences of acting and not acting.

Barb accomplished this by requiring a combination of journal writing, research and analysis, a community service project, and evaluation and presentation.

Betty also included ethical responsibilities in her course objectives. Her objectives included managing speech anxiety, understanding context and audience, talking about finding research, critical and creative thinking, creating argument, using visual aids, being able to critique speeches using peer evaluations, and identifying and fulfilling ethical responsibilities for the purpose of speaking, and a democratic citizenship. Betty expounded on this idea of ethical responsibility as follows:

> The idea about identifying and fulfilling ethical responsibilities, we talk a lot about that and I really feel that through the completion of the class and through talking a lot about what it means to speak in public and be a citizen and that you are taking on some type of ethical onus or responsibility through what you say. I feel that it is a little bit hard to measure because it is something hopefully happening as they move forward in life, but I at least try to plant the seed in the learning process and hopefully that grows as they grow.

Todd hoped that his course affected his students through a combination of journal writing, papers, tests, and class participation.

> And I think that the sense that I've got, I can't say that their moral reasoning has changed, but maybe I've gotten the sense that their appreciation for moral thought, in particular, has deepened in the sense of thinking that maybe this is a moral problem and maybe this is important for us to think about, so I think that that reflects, I see a deepening appreciation for the topic and hopefully a deepening and understanding but also just by virtue of spending more time thinking about it, their ears perk up and they are more aware of. Which is good.

Two additional courses explored ethical issues within the context of research required for the course. Bill used a mix of writing, discussion, and lecture. He often started classes with a writing prompt, a research study, or a short video to help students reflect and make connections to the topic being discussed that day. Sara brought ethical issues related to her course topic to the forefront of her teaching. She asked students to think about the ethical issues involved in working with children. She required that her

students understand and follow research protocol for an assignment she gave the students to observe a child.

Of the remaining 12 courses, all but one faculty member believed that the content of the course indirectly influenced the ethical reasoning development of their students. Dan believed that he indirectly influenced the ethical reasoning of his students by the way he conducted his class, the expectations he had of his students, and the reasoning tools students acquired through his coursework:

> [I teach students to] be honest in your reasoning. Only use the facts or data you obtain. Don't make assumptions when you are not sure that they are valid or cannot support or reasonably explain these assumptions. Be honest if your final outcome, be it your lab experiment or your homework problems contradict to what you expected, be honest and analyze why these discrepancies occurred.

Josh also believed that students should be able to transfer skills from his assignments that required reasoning skills to apply them to ethical reasoning:

> I can't think of situations where my assignments have a specific ethical component, but if we are talking about making reasoned decisions, then isn't that the same for ethical reasoning? I mean, science is all about logic and facts and using that for decision-making.

Cathy spoke of the giving students transferrable skills:

> My focus is getting them to start to think. Skills that are intangible. Skills they may not associate with me, but sometimes I tell them this is a gift I am giving to you. I want you to learn to think so when you get in a new situation, you don't assume that you don't understand it, you stop and say, can I figure that out?"

Later in the interview, Cathy spoke about how she hoped these tools she gave her students would help them in their ethical decision-making as well.

**Research question 4a: What courses and assignments did the students remember believe led to increased reasoning skills? How did this relate to the**

**pedagogy expressed by the faculty and supported by the documents supplied by the faculty?** The students had no difficulty answering this question, although when asked for specific assignments, they were less likely to be able to provide specific information. Karen believed that all of her courses improved her reasoning skills, but she preferred those courses that were not primarily lecture courses. "Everything contributes to reasoning – anything that make me think of things in a different way . . . I think that classes that have less lecture and more opportunity for questions helps – I enjoy the diversity and getting to know other's viewpoints." Anna found that in her history course [taught by Kay] that she learned how to "use sources to validate your own interpretation of things – to use primary sources." Barry remembered writing "papers and journals and stuff like that" as ways that he developed his reasoning skills. Diane found that her science courses and the labs helped her reasoning skills: "Having to figure out the problems and such made me learn better logic and reasoning." Jarod agreed with Diane that his science and math courses helped develop his reasoning skills: "Well, all of my math courses require reasoning and logic. Solving problems and looking for solutions. My chemistry professor also gave us problems and questions in which we had to analyze the information." Jenn supported Dan's assumption that students developed reasoning skills in his courses. "In Physics with [Dan] we have to use a lot of reasoning. For the majority of his questions, you have to think." Jordan also pointed to his science courses for improving his reasoning skills.

***Summary of research question 4.*** All of the faculty members interviewed believed that general education courses had the potential to influence the ethical

reasoning of their students. For six faculty members (38%), it was intentional and integral to their course content. For 9 others (56%), it was a by-product of their pedagogy. Critical thinking, problem solving, analyzing, interpreting, writing and speaking were pedagogical techniques that faculty used to promote student learning. Oftentimes, it was a choice of subject, topic, or theme that made the difference between a student developing and using reasoning skills or ethical reasoning skills.

**Research question 5: Are there any differences among the four knowledge domains of general education explored at the institution studied?** This was an interesting research question because even the faculty anticipated that the social sciences and the humanities would be the areas where ethical reasoning might occur. Brian wondered whether "gen ed in humanities, arts and social sciences may be a different kettle of fish than gen ed in other disciplines." In actuality, in all of the knowledge domains, the faculty interviewed believed that their course content either directly or indirectly contributed to the ethical reasoning development of their students. Cathy posited that in order for the university to have any long term impact on our students in ethics, it has to be bought into by people across disciplines.

**Research question 5a: Were any differences noted in student responses among courses taken in the four knowledge domains?** There were no noted differences among the students taking courses in the four knowledge domains. It did appear that students were more likely to talk about reasoning skills obtained in courses in the natural sciences and students were more likely to draw on ethical issues from courses in social and behavioral sciences and the humanities. There was a noted difference that

students who were upper division (junior/senior) were more likely to have had a course in ethics related to their major.

***Summary of research question 5.*** There were no differences found among the different knowledge domains in their ability to influence the ethical reasoning skills of their students. Students were exposed to different topics, but opportunities for ethical thinking were apparent across the knowledge domains.

**Research question 6: What was the perspective of faculty members who taught general education courses in relation to the development of ethical reasoning in their students?** Although the faculty interviewed believed that general education courses could aid in the development of ethical reasoning, there was a difference of opinion as to whether that currently happened or could happen and what would be needed in order for that to occur. There was some resistance from some faculty about 'mandating' an ethics component. Six faculty members (38%) did not support that concept. Nine others (56%) believed that it was extremely important to add this component to the general education curriculum. Concern was expressed in terms of how to determine the content of the course. There was varying opinions about whether there should be a required "stand alone" course or whether there should be courses where ethics was infused within the course content.

Nan spoke globally of the importance of college when she stated:

> I feel like what distinguishes somebody who's been to college and who hasn't been to college is that ability to think beyond their own experience. I think college, in general, encourages students to do that and that in of itself fosters ethical development.

Brian believed that "a lot of the time a lot of these issues are already there and maybe just emphasizing that they are there and why you think they are significant would meet that criterion. . . . To sort of underline what's already there." Barb wanted to see ethics as a requirement in the general education curriculum as well as a capstone course. However, she also believed that there was no real coherent plan for general education at the university right now:

> I feel personally, that our Gen Ed is too . . . it's a shot gun, when we need a laser. . . I think [ethics] needs to be a thread through everything but if we rely on the gen ed program solely to do that, with the current structure, I don't think that's going to happen.

Adam also believed that ethical reasoning should be added to the general education requirements. When asked what would impede this, Adam believed that there would need to be a "change in culture, professional development, more emphasis on encouraging faculty to look at their goals in that light. . . . And then also the issue of professional development not only for fulltime faculty but also for part-time faculty." Adam also believed that perhaps it needed to be incorporated into only certain courses:

> I can see it more easily incorporated into English 15, 202 and CAS 100. Otherwise, there's no way to know what courses might be incorporating it that at student takes. Although I have a sense of the sciences, I know some of the faculty who teach ethics as part of the sciences. And certainly it would be in a philosophy course, I would think. I would go with a content-based, that it be woven into a number of courses.

Bill believes that "intentional ethical learning" is valuable and that "intentional" is the key. Bill questioned how best to achieve this. Bill presented the following concerns. He worried what gets taken out of the curriculum to make room for this. He was unsure how to incorporate it and to roll it out? How do you avoid the 'check the box' mentality

by designating certain courses as ethics-based and requiring students to take one course? How do we make it intentional without taking away the natural infusion that many faculty members already do in their classes? Does having a one week topic on ethics marginalize the ethical learning that the student might get otherwise?

> So, when it comes to 'hitting students over the head' with this direct shot, I think sometimes it's valuable but I think sometimes when we do these right things right, when we create a rule and we have this check list it becomes, it's no longer about ethics, it's no longer about teaching integrity, it's about following the rules.

Eva supported the notion of including ethical reasoning as a general education goal:

> You know, I think that's probably good because, well, as we all go through life, our philosophy about what's right and wrong doesn't just come from one discipline. It comes from everywhere. You either are a person who tries to do the right thing or you're a person who says that doesn't apply to me. I do think that it's not hard in any course, to, from that discipline's standpoint to talk about what's right and what's wrong. And I don't think it's so much coming to a conclusion and telling students what you think, I think it's raising the question and asking them what they think and if it's appropriate for that course to have that discussion.

Jason was in favor of having a specific required course in ethics and having ethics infused among courses. He believed one should offer a course early in the curriculum to lay the groundwork and then had subsequent courses infused with ethical topics when appropriate. Kay also supported the two- tier approach of having a specific course as well as infusion in more general education courses:

> In that class you can ask the question rather than the more subtle approach. So it's important that we should continue to do what we are doing, but having something in the core curriculum like one requirement, I think would be a great idea." Because ethics is broad questions, broad issues that affect human life. Not just business, not just engineering. So, I think having a very specialized course is helpful for the discipline and I wouldn't say necessarily get rid of it, but it also might leave the impression that there are certain issues that are relevant within the profession. When really, we are dealing with human nature and human questions.

Rick thinks that students should be "forced to think about what is ethical and what is not." He further stated:

> I think the role of the university is to expose students to two situations, which one is ethical and which one is not and tell me why. When you show an example to the student, it is extremely powerful. Which one is fair and which one is not fair. Which one is ethical and which one is not ethical. Which one is moral and which one is just fundamentally immoral.

Sara believed that now more than ever it was time to make a change at the university. She was one of three faculty members who brought up the Sandusky scandal in the interviews.

> But I do think that post-Sandusky, if there was ever a time to get this point across to the university, there has to be now . . .we should be at the top of the heap, in terms of ethical issues being front and center and it shouldn't have taken this. . . . But we almost have to now. Do you know what I mean? We almost have to be better than most schools.

And, she believed that "there's got to be in every field; there's got to be something relevant you can talk to students about." Sara believed that issues of justice, issues of honesty, issues of doing the right thing, have a place in every course.

Brian summarized the purpose of education with an impassioned voice about the values inherent in a college education.

> Look, I feel like education is, should be, it's only purpose should be cultivating a better, more noble society. And, I define such a society as one that is oriented toward providing the greatest opportunity for self-fulfillment to the greatest number of people. And I don't think you get there without promoting, without encouraging a sense of togetherness and mutual obligation and a sense of community and camaraderie with others. I think that is the spirit of human relationships that is most conducive to the good of the most people and I feel that there are many forces in our society that tend to discourage or blunt or ignore that value. We live in a capitalist society, which to some extent emphasizes each man for himself, competition. We live in a very materialistic society which places things above people in many cases. And we live in a society that is just fundamentally, unjust when you look at the wide disparity between the haves and

> the have nots in our society and I think that ethical choices ultimately involve what is my proper relationship with my fellow beings. I feel that a lot of students, once they get to college and beyond, if not earlier, are impoverished when it comes to analyzing and really thinking about, and really to say nothing about committing themselves to those values. And so therefore, the more these are foregrounded into their consciousness, the better for the society. And, what I was going to say is, for me, what I was just saying, that is the role of education. And, if Penn State's creed and values is more than just hot air; that is what Penn State is committed to. I mean it's all about we're here for the good of all Pennsylvanians.

**Research question 6a: Would a specific course in ethics or an ethics-focused course influence the student's selection of general education courses?** The student opinion on this was mixed. Seven students (33%) thought that the major should offer a course in ethics. Seven students (33%) believed that ethics should be in the general education curriculum. Four students (19%) agreed that it would have to be a requirement in order for the student to choose to take either a stand-alone ethics course or an 'E' designated course. For these students, the attitude was that if it was required, they would take it. It was a similar attitude that they had about other general education requirements. Three students (14%) had no opinion about taking ethics-related courses in their curriculum. Below are the responses of the students when asked "Do you think that coursework in ethics should be included in the curriculum? Would having an "E" designation similar to a W or US designation influence your decision to take a course?"

Those students who were in favor of an ethics course in their major answered that questions as follows:

> Carl: "My major requires a course in ethics, so I don't see why you need to add another general education course. I probably wouldn't take it unless I had to."

Jess: "I think ethics should be in major courses because you are ready to discuss the issues later. General education might be a way to bring it in a broader view. I am neutral about the 'E' designation."

Jordan: "I really don't have an opinion on that. I think my major requires a course in ethics. It's probably a good thing".

Kevin: "As a senior, I think that having the course in the major makes more sense. I do think it's important to have the chance to talk about ethics especially with events that we hear about all the time."

Larry: "I do think that it is an important topic and should be part of a college education. I liked it in my engineering courses because I could relate it to my future profession."

Lisa: "I like that we had an ethics course in our major. I think everyone should have it in their major."

Sally: "I think it should be a major requirement – a course that students have to take in their major. I link it in my mind to what's right and wrong."

Those students who were in favor of general coursework in ethics replied:

Anna: "I think there should be specific classes in ethics, but I don't think it should be a requirement."

Barry: "I think it's important for us."

Diane: "I liked discussing ethical issues, so yeah. I think everyone should have it."

Justin: "I have mixed feelings. I think it's important for students to have some uncomfortable moments, those feelings of discomfort in order to figure things out. Should it be a specific course? I'm not sure."

Karen: "It should definitely be a goal of general education. I think at least there should be a course in professional ethics. Every major should have a course in ethics. Ethics is 'core values'".

Matt: Well, in the news we always hear about unethical people, so everyone should be exposed to this. I think that might be a good idea. I'm not sure if it would have influenced the courses I chose to take. I usually took courses that fit my schedule or that my adviser said I needed.

Robin: "I took a philosophy course on ethics. I liked that. It will help me in my class next year."

These students would take a course in ethics if it was required:

Amos: "I think it's important for the younger students, but I would only take it if it was required [laughter]"

Alan: "I would take a course [in ethics] if it was required. But not because it was a course in ethics."

Dennis: "I really only take classes because they are required."

Pam: "I think an E designation would encourage students to take a course. I think it is important but I probably wouldn't take it unless it was required to graduate. I have too many other required courses."

These students had no opinion on the topic:

Craig: "I don't know. I have no idea. I don't think it would change anything"

Jarod: "I don't know. I guess I really haven't thought about that."

Jenn: "I really don't have an opinion on that. I don't know"

***Summary of research question 6.*** Faculty and students believed that ethical reasoning development is an important component to a college education. There was no consensus whether a change to curricular requirements would be necessary to ensure the inclusion of ethical reasoning in the curriculum. Five faculty members (31%) worried that to have a special 'ethics designation' would take away the organic nature of infusing ethical reasoning in courses that now occur. Six faculty members (38%) believed that by "underlining" what we was already done, a difference could be made in the students' understanding of ethical issues. Three faculty members (19%) believed that there should be a stand-alone ethics course or an ethics-related course in the major. Two faculty members (13%) believed we should place ethics courses in as many places as possible including general education courses, a stand-alone ethics course and a course in the major. The students had similarly mixed responses. Seven students (33%) thought there

should be a course in ethics in the major; 7 students (33%) thought that ethics should be included in the general education curriculum; and 7 students (33%) indicated they would only take a course if it was required or they had no opinion about the topic at all.

**Summary**

The findings in this research study showed that 13 (81%) of the faculty members who taught general education courses at Penn State had little to no familiarity with the explicit goals for general education at that institution. The review of syllabi and the results of the faculty interviews, however, showed that the faculty members were teaching courses that aligned with the goals of general education at Penn State. For 12 (75%) of the faculty interviewed, the designation of a course as general education did not influence how they determined the content of the course or the pedagogy used. In addition, none of the faculty members were aware of Penn State's goal in the most recent strategic plan to increase the ethical reasoning development of the students. However, in spite of this, fifteen of the sixteen faculty (94%) interviewed believed that the courses they taught in the general education curriculum either directly or indirectly influenced the ethical reasoning development of their students. All of the faculty members interviewed believed that ethical reasoning should be a goal of the University. Eleven faculty members (69%) supported either a stand-alone ethics course or an ethics designation that might "underline" for the students the importance of ethics. Three of the faculty members (19%) expressed concern that requiring courses to have an ethics component might destroy the current "organic nature" of ethical discussions, projects and assignments that currently take place. The student interviews supported much of the faculty member

responses. However, students were less able to point to opportunities for ethical reasoning except in those cases where they course content specifically dealt with ethical issues. Fourteen students (67%) interviewed believed that a course in ethics was important. Of those fourteen students, four students (29%) preferred that a required course in ethics be in their major.

Chapter 5 will have a summary of findings, a discussion of implications, and recommendations for further research.

# Chapter 5

## Discussion, Implications, and Conclusions

The purpose of this study was to: (a) examine the attitudes of faculty towards the ethical content of their general education courses, (b) explore the role of general education courses in contributing to the development of ethical reasoning in college students, and (c) establish the components within general education courses and/or methods used to teach general education courses that aid in the development of ethical reasoning skills of the students taking these courses. This study's grand tour question sought to ascertain if there was a shared expectation among faculty members who taught general education courses that their course content and pedagogy would lead to the development of ethical reasoning skills in their students. A summary of the research findings, a discussion of the major themes, implications for further study, and a conclusion follows in this chapter.

### Summary of Findings

The 16 faculty participants and 21 student participants gave voice to the classroom experience of the four knowledge domains of general education at Penn State – writing and communications (GWS), humanities (GH), natural sciences (GN), and social and behavioral sciences (GS). The rich and detailed descriptive data obtained from the interviews, combined with the content analysis of syllabi, class assignments, and classroom observation provided the researcher with an inside view of the general education course experience in these knowledge domains from both the faculty and

student perspective and the role these courses played in the ethical reasoning development of the students at Penn State.

The development of themes emerged from the content analysis and the faculty interviews and was supported by the student interviews. The five themes that emerged were:

1. faculty provided students with content and pedagogy that should enhance ethical reasoning;
2. faculty believed that general education courses influenced the ethical reasoning development of their students but it was not always deliberate or intentional;
3. faculty had varying opinions on how best to ensure that students taking general education courses would be exposed to opportunities for ethical reasoning development. These ranged from a stand-alone course to ethics-infused coursework;
4. faculty were not aware of Penn State's goals for general education so an inclusion of ethics in the goals would require more direction to faculty teaching general education courses;
5. The faculty in the four knowledge domains (communication, humanities, natural science, and social and behavioral science) all provided opportunities for students to extend their ethical reasoning development.

**Grand tour question**. Was there a shared expectation among faculty members who taught general education courses that their course content and pedagogy would lead to the development of ethical reasoning skills in their students?

The findings in this research showed that the interviewed faculty members who taught general education courses at Penn State believed that their students were exposed to pedagogy and course content that led to ethical reasoning development. The faculty interviewed unanimously believed that general education courses could enhance the ethical reasoning of their students. However, only four of those faculty members (25%) explicitly mentioned anything related to ethics or ethical reasoning in their course description and/or syllabus.

**Research question 1**. How did faculty members create their general education course content and did they align the goals of general education with creating opportunities to develop student ethical reasoning skills in the courses that they taught? What were the students' understandings of the goals of general education and how did these relate to the faculty understandings? How did students define general education?

The goals of general education at Penn State are not well known by either the faculty or students. However, it appears that the lived experiences of faculty have led to definitions of general education that reflected the goals set forth by the university. For nine faculty members (56%), general education represented the opportunity to provide the students with the skills needed to "live a good life" and to expose students to a wide range of learning experiences and to stretch their learning skills beyond which they entered college.

**Research question 2**. Did faculty members intentionally create opportunities to provide for ethical decision-making? In what ways were ethical concepts introduced to students including, but not limited to, academic integrity?

Ethical decision-making opportunities in the courses taught by the faculty members interviewed ranged from no explicit opportunities to some very intentional opportunities. Five faculty members (31%) believed that they had a 'moral imperative' to provide that opportunity for students, while four faculty members (25%) believed that was not an element of their course content. Academic integrity, a de facto form of ethical decision-making was also handled differently by faculty. Ten faculty members (63%) believed it important to spend time on the topic while 3 faculty members (19%) never mentioned the topic in the interviews. Two faculty members (13%) gave their students a broader view of academic integrity beyond the concept of cheating. Both faculty members put it in context against the principles that govern the greater university community and beyond. One faculty member did that in relation to the Penn State principles and another spoke about the being able to honestly assess a student's ability so that future employers can trust us when we confer a degree. The same faculty also spoke about the importance of making honesty the norm rather than focusing on cheating.

**Research question 3**. Did faculty members create opportunities for reflection on the ethical decisions that students may face? Were the students presented an opportunity to explore ethical dilemmas in their coursework? How did this relate to faculty course content and pedagogy?

Reflection was an important element found both in course syllabi and faculty descriptions of course content as it related to ethical reasoning. Faculty provided multiple opportunities for students to reflect on ethical issues and learning. Students spoke about the use of writing prompts and journal writing in the class assignments.

**Research question 4**. Did faculty members believe that the content of general education courses directly or indirectly influence the ethical reasoning development of the students they taught? What courses and assignments did the students believe led to increased reasoning skills? How did this relate to the pedagogy expressed by the faculty and supported by the documents supplied by the faculty?

All of the faculty members interviewed believed that general education courses had the potential to influence the ethical reasoning of their students. For 6 faculty members (38%), it was intentional and integral to their course content. For nine faculty members (56%), it was a by-product of their pedagogy. Critical thinking, problem solving, analyzing, interpreting, writing, and speaking were pedagogical techniques that faculty used to promote student learning. Oftentimes, it was a choice of subject, topic, or theme that made the difference between a student developing and using reasoning skills or ethical reasoning skills.

**Research question 5**. Were there any differences among the four knowledge domains of general education explored at the institution studied? Were any differences noted in student responses among courses taken in the four knowledge domains?

There were no differences found among the different knowledge domains in their ability to influence the ethical reasoning skills of their students. Students were exposed to

different topics, but opportunities for ethical thinking were apparent across the knowledge domains.

**Research question 6**. What was the perspective of faculty members who taught general education courses in relation to the development of ethical reasoning in their students? What influence would a specific course in ethics or ethics-focused courses have on the students' selection of general education courses?

Faculty and students believed that ethical reasoning development is an important component to a college education. There was no consensus whether a change to curricular requirements would be necessary to ensure the inclusion of ethical reasoning in the curriculum. Five faculty members (31%) worried that to have a special 'ethics designation' would take away the organic nature of infusing ethical reasoning in courses that now occur. Six faculty members (38%) believed that by "underlining" what we was already done, a difference could be made in the students' understanding of ethical issues. Three faculty members (19%) believed that there should be a stand-alone ethics course or an ethics-related course in the major. Two faculty members (13%) believed we should place ethics courses in as many places as possible including general education courses, a stand-alone ethics course and a course in the major. The students had similarly mixed responses. Seven students (33%) thought there should be a course in ethics in the major; seven students (33%) thought that ethics should be included in the general education curriculum; and seven students (33%) indicated they would only take a course if it was required or they had no opinion about the topic at all.

**Summary of research findings.** The findings in this research study showed that 13 of the faculty members (81% ) who taught general education courses at Penn State had little to no familiarity with the explicit goals for general education at that institution. The review of syllabi and the results of the faculty interviews, however, showed that the faculty members were teaching courses that aligned with the goals of general education at Penn State. For 12 (75%) of the faculty members interviewed, the designation of a course as general education did not influence how they determined the content of the course or the pedagogy used. In addition, none of the faculty members were aware of Penn State's goal in the most recent strategic plan to increase the ethical reasoning development of the students. However, in spite of this, 15 (94%) of the faculty interviewed believed that the courses they taught in the general education curriculum either directly or indirectly influenced the ethical reasoning development of their students. All of the faculty members interviewed believed that ethical reasoning should be a goal of the University. Eleven faculty members (69%) interviewed, supported either a stand-alone ethics course or an ethics designation that might "underline" for the students the importance of ethics. Four (25%) of the faculty members expressed concern that requiring courses to have an ethics component might destroy the current "organic nature" of ethical discussions, projects, and assignments that are currently in place. The student interviews supported much of the faculty member responses. However, students were less able to point to opportunities for ethical reasoning, except in those cases where they course content specifically dealt with ethical issues. Fourteen (67%) of the students interviewed believed

that a course in ethics was important. Seven (33%) of the students desired that a required course in ethics be in their major.

**Discussion of Findings**

Etzioni (1989) opined that there "is no ethically neutral teaching. Everything that happens in the classroom communicates an ethical position. Ethics courses state explicitly when value positions are communicated; the regular curriculum embodies hidden assumptions of which even the professor may be unaware" (p. 18). The results of this research supported Etzioni's statement. When asked, the faculty interviewed believed that ethics, ethical behavior, ethical reasoning, and ethical decision-making were an important component of a college education and the courses that they taught. However, for twelve (75%) of the faculty interviewed; this intent was not, in the word of one of the participants, "underlined." There was often no transparency for the student that ethical issues are of importance to the subject being studied.

The influence of the faculty member's experience in their own undergraduate experience appeared to influence their perception of the goals of general education. The faculty interviewed did not speak with one voice about the goals and definition of general education at Penn State. Although Penn State had explicitly written goals for general education, faculty members were not held to those goals in the creation and delivery of their courses. The results showed that the faculty members' views of the goal of general education at Penn State varied from providing a broad, liberal arts education, to survey courses designed to provide students with vocabulary and basic information about a field of study, to courses designed to help learn to learn. This uncertainty about the goals of

Penn State general education was evident in the student interviews. Only one student (5%) could articulate the goals of general education. The remaining 20 students (95%) believed that the intent of general education was to make them a 'well-rounded' person by having them study courses outside of their major. Since many of the students had faculty advisers who themselves may not have been familiar with Penn State's goals for general education, it is not surprising that the students were unaware of the curricular goals for general education.

In spite of the lack of understanding of the explicit goals of general education at Penn State, the interviews with the faculty and students and the review of the syllabi and other supporting materials, showed that, in fact, the faculty approach their pedagogy with intent. The pedagogical elements that faculty used included critical thinking skills, analyzing skills, argumentation skills, decision-making skills, active engagement in the materials, inferential and interpretive skills, logic and persuasion, problem solving, reasoning, and reflection. In addition, nine of the faculty members (56%) interviewed indicated that since the majority of their students were freshmen and sophomores, they felt obligated to also assist their students in developing skills like note-taking, library research, and writing.

This study was specifically designed to investigate this intentionality in relationship to the development of the ethical reasoning of students. For four of the faculty interviewed (25%), the intent was made clear to the students, as shown in the explicit goals listed on their syllabi. Two of those courses had course descriptions that included ethics. In the other two courses, the faculty added an ethics component to their

content. For the other twelve faculty members interviewed (75%), the intent was shown through the choice of assignments and class discussions. Students were introduced to scenarios and challenges that would encourage and develop their ethical reasoning skills. The students who were interviewed more often pointed to the courses they took that had explicit ethics intent as influencing their ethical reasoning, indicating that perhaps the institution needs to, in some way, ensure that the student sees these connections between what they are learning and its relationship to ethical reasoning and decision-making. Schneider and Schoenberg (1998) wrote about one of the more recently articulated goals of general education, gaining self -knowledge and grounded values, at many institutions:

> This learning goal [gaining self-knowledge and grounded values] is seldom manifested in specific degree requirements but underlies, as implicitly it always has, undergraduate education in general and the general education curriculum in particular. Good teaching, now as ever, tries to help students place and define themselves within their particular cultures and the broader society and to do so within expanding frameworks of knowledge, self-awareness, and increased capacity for reflective judgment. . . . [We] frequently invite students to reflect on their own sources of identity and values and to engage with challenging ethical, moral, and human dilemmas. (p. 32)

This described quite accurately the experience that students are having at Penn State and reflect the goals of the most recent strategic plan at Penn State.

The issue of academic integrity, although not an original research question, rose to the fore during the research with both faculty and students. Penn State had a comprehensive policy addressing academic integrity which included the requirement that all faculty provide a statement related to academic integrity to their students. Every syllabus reviewed included this statement. The faculty members, in the teaching of their course, addressed this issue in a variety of ways. For three faculty members (19%), they

merely pointed out the statement on their syllabus at the start of class. Seven faculty members (44%) used the opportunity before each assignment to remind students of their responsibilities to be ethical learners and to not cheat or plagiarize. Still two others (13%) believed that to assume that students would cheat was to 'normalize' the cheating behavior and, therefore, let students know that ethical behavior was expected and did not dwell on the negative. The students interviewed were aware of the academic integrity policy at Penn State. For four of the students (19%), the repetition of the policy in all classes made the message less significant; it became "white noise" that was easily ignored. Four students (19%) believed that the context in which the faculty spoke about academic integrity was important to how students responded. Faculty who expected students to behave ethically and not present cheating behaviors were more likely to have students respond favorably to the policy. Two students (10%) thought that the academic integrity policy had no effect – students who were going to cheat would cheat. McCabe, Trevino and Butterfield (2001) reviewed research on 10 years of cheating and academic integrity policies at colleges and universities and found similar results from their research. One recommendation that they had was the importance of addressing this at the institutional level including but not limited to establishing an honor code and to create an "ethical community" whereby "students not only receive formal ethics instruction but also learn by actively discussing ethical issues and acting on them. Students not only receive formal ethics instruction but also learn by actively discussing ethical issues and acting on them" (McCabe et al., 2001, p. 228). The results of this research study supported past research on academic integrity and suggested that by having the faculty

show more transparency in their efforts to infuse ethical decision-making into the curriculum, and specifically general education courses, the institution would not only be influencing the ethical reasoning development of the students but would be adding to the establishment of an 'ethical community' on Penn State campuses.

Another question raised by the researcher was whether there were particular knowledge domains where ethical reasoning was included in the content of the courses. Although many faculty assumed that the knowledge domains of the humanities and social and behavior sciences would be the logical place for this to occur, the results of this research showed that across all knowledge domains there was content that lent itself to discussions, assignments, and opportunities for ethical reasoning and decision-making, and that faculty provided opportunities for student reflection and analysis. Research by Nelson Laird and Garver (2008) showed a difference by disciplinary area in the pedagogical approach to general education courses. This research did not support the results from the Nelson Laird and Garver (2008) research. Faculty members at Penn State shared pedagogical processes across the knowledge domains. Analysis, reflection, critical thinking, and writing and speaking skills were among the skills required of their students across disciplines. Opportunities for ethical reasoning and decision making were also seen across disciplines.

After it was determined that faculty and students believed that the ethical reasoning development of the students was important, the researcher looked to solutions to ensuring that a Penn State education provided this opportunity for all students. The question was posed to both faculty and students: If ethical reasoning development is an

important outcome of a college education, how could this be best accomplished at Penn State? Faculty members and students did not have one voice on this question and perhaps, one voice is not necessary in order for this to occur. Four scenarios emerged. One scenario was to require a course in ethics as part of the general education curriculum. This course could be in any content area, but would have a significant portion of the course devoted to ethical theory and deep ethical questions. A second scenario was to not include an ethics requirement in the general education curriculum, but to ensure that all majors had an ethics requirement. In most cases, this requirement would be fulfilled by a specific ethics course related to the major. The third scenario would be to identify courses at Penn State that have an ethics component of at least x% (percentage to be determined by the faculty senate) of the course. This could be an 'E' designation similar to designations that the university already employs for writing across the curriculum (W), for United States and International Cultures (US/IL). The fourth scenario would be any combination of the above scenarios.

Issues related to any change in policy or curriculum would require that the faculty members make varying degrees of change to their course content. Syllabi should have more explicit references to opportunities for ethical decision-making/ethical reasoning. Standard syllabi should be revised to include any changes that are made. Faculty would need to be encouraged to consider how their course content could be further refined through the selection of texts or assignments to provide more opportunities for students to think deeply about issues that have ethical components and to point these out to students

directly. Adjunct faculty, who often teach general education courses, would need to be educated in the expectations set forth by the University for the course(s) that they teach.

Course content and methods of instruction impact the ethical reasoning of students. The University would need to provide resources and training to faculty on ways to better incorporate content and pedagogy that leads to the ethical reasoning development of their students. In addition, students made it clear that unless there was a specific requirement, they would not voluntarily choose to take ethics-specific coursework. Therefore, there would need to be a change in academic requirements that included an ethical component.

**Implications**

Based on the findings of this study, implications have been formulated that might be of value to the institution studied as well as other institutions wishing to have more intentional influence on the ethical reasoning development of their students. There are three major areas where change could occur: course requirements, faculty requirements, and student requirements.

**Course requirements.** In order to facilitate ethical reasoning development in students, it is necessary to ensure that course content and pedagogy have intentionality and transparency. This can be accomplished through changes in curricular requirements or changes in existing course requirements. Syllabi would need to be adjusted to better reflect this intentionality. In many cases, this would not mean that significant changes need to be made in either course content or pedagogy, but the intent to provide

opportunities for ethical decision-making and ethical reasoning development needs to be made more explicit.

**Faculty requirements.** The expectation that certain courses will be considered a mechanism for intentional ethical reasoning development in students must be communicated to the faculty who are teaching those courses. Guidelines for content and pedagogy that are acceptable means towards this end must be established by faculty and communicated to all faculty members including adjunct faculty. The institution would most likely need to provide resources such as workshops, teaching/learning mentors, pedagogical research, and possible content materials to be used in the classroom.

**Student requirements.** Institutions would need to determine if the changes in courses would also change the way students choose courses. Determining whether these changes occur in the general education curriculum or the major curriculum would have an impact on this. It was clear from this research, that students will not voluntarily select ethics-oriented courses and so academic requirements would need to be changed or current required courses would need to be infused with curricular changes that promote ethical reasoning development.

**Recommendations for Future Research**

There are several limitations in this research that could provide the opportunity for further research, a broader perspective, and perhaps, greater insights into the role of general education in the ethical reasoning development of college students. Although no differences were seen among the three campuses studies, future research could include faculty and students at all the campuses of the university studied. This would provide a

comprehensive look at the university's general education curriculum and its relationship to student ethical reasoning development. Additionally, the inclusion of adjunct faculty who teach general education would provide a broader view. It might also be interesting to have research focused solely on the adjunct faculty view as well. This research did not look at the possible impact of certain demographic characteristics of either the faculty or the students. This might be of import to future research. Also, the role of the transfer student in general education course that are traditionally populated with freshman and sophomore students. Since this research was limited to one institution, broadening the research to other like institutions might be instructive. And, a comparative study of the faculty perspective at different Carnegie classified institutions could provide further insights. If the institution studied chooses to make changes to the current curriculum, a longitudinal study of student ethical reasoning development over the time of the change would be of value as well. Research into specific pedagogical strategies and their impacts on the ethical reasoning development of the students taking the courses would provide greater guidance on how best to influence student ethical reasoning development through general education coursework. Further research into the role of academic integrity policy and procedures might also lend valuable information on how to establish graduates of colleges and universities who have an ethical grounding and the ability to make sound ethical decisions. This research was on the faculty perspective. Further research on the ethical reasoning development of the student through pre and post testing following the general education curriculum would also be instructive.

## Conclusion

The role of general education in the ethical reasoning development of college students is currently defined by the faculty's interpretation of the role of the general education curriculum and their personal belief systems. It was evident that faculty believed that the courses they teach can and should influence students in a variety of ways including ethical reasoning. It did not appear that massive structural changes needed to be made to the curriculum, but instead, greater transparency and intentionality within the goals of the course might strengthen the role of general education in the ethical reasoning development of the student.

## References

AAC & U. (2012). Core commitments: Educating students for personal and social responsibility. Retrieved from http://www.aacu.org/core_commitments/value.cfm

Abdolmohammadi, M. J., Read, W. J., & Scarbrough, D. P. (2003). Does selection-socialization help to explain accountants' weak ethical reasoning. *Journal of Business Ethics, 42*, 71-81. doi: http://dx.doi.org/10.1023/A:1021691001119

Alexander, H. A. (2003, Fall). Moral education and liberal democracy: Spirituality, community, and character in an open society. *Educational Theory, 53*(4), 67-387. doi: 10.1111/j.1741-5446.2003.00367.x

Allen, M. J. (2006). *Assessing general education programs*. Boston, MA: Anker.

Anderson, M. W., Teisl, M., Criner, G., Tisher, S., Smith, S., Hunter, M., Bicknell, E. (2007). Attitude changes of undergraduate university students in general education courses. *The Journal of General Education, 56*(2), 149-168. doi: 10.1353/jge.2007.0016

Aper, J. P. (1996, April 11-13). Environmental ethics and the ethical environment of the undergraduate curriculum. *Proceedings of Conference on Values in Higher Education Ethics and the College Curriculum: Teaching and Moral Responsibility.* Retrieved from http://web.utk.edu/~unistudy/ethics96/jpa.html

Aron, I. E. (1977, February). Moral philosophy and moral education: A critique of Kohlberg's theory. *The School Review, 85*(2), 197-217. doi: 10.1086/443328

Arthur, J. (2005, September). The re-emergence of character education in British educational policy. *British Journal of Educational Studies, 53*(3), 239-254. doi: 10.1111/j.1467-8527.2005.00293.x

Ashmore, R. B., & Starr, W. C. (Eds.). (1991). *Ethics across the curriculum: The Marquette experience.* Milwaukee, WI: Marquette University Press.

Association of American Colleges. (1994). *Strong foundations: Twelve principles for effective general education programs.* Washington, DC: Association of American Colleges.

Astin, A. W. (1997). *What matters in college? Four critical years revisited.* San Francisco, CA: Jossey-Bass.

Baccalaureate Degree Curriculum in Penn State Faculty Guidelines. (n.d.). Retrieved from http://senate.psu.edu/guide/sec1.html

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Process, 5,* 248-287. doi: 10.1016/0749-5978(91)90022-L

Barry, B. E., & Ohland, M. W. (2009, October). Applied ethics in the engineering, health, business, and law professions: A comparison. *Journal of Engineering Education, 98*(4), 377-388. doi: http://dx.doi.org/10.1002/j.2168-9830.2009.tb01034.x

Beauvais, L. L., Desplaces, D. E., Melchar, D. E., & Bosco, S. M. (2007). Business faculty perceptions and actions regarding ethics education. *Journal of Academic Ethics, 5*, 121-136. doi: 10.1007/s10805-007-9046-4

Bebeau, M. J. (2002). The defining issues test and the four component model: Contributions to professional education. *Journal of Moral Education, 31*(3), 271-295. doi: 10.1080/0305724022000008115

Bebeau, M. J., Pimple, K. D., Muskavitch, K. M. T., Borden, S. L., & Smith, D. H. (1995, December). Moral reasoning in scientific research: Cases for teaching and assessment. *Poynter Center for the Study of Ethics and American Institutions,* 1-83. Retrieved from http://poynter.indiana.edu/

Beltramini, R. F., Peterson, R. A., & Kozmetsky, G. (1984). Concerns of college students regarding business ethics. *Journal of Business Ethics*, *3*, 195–200. doi: http://dx.doi.org/10.1007/BF00382919

Bergem, T. (1990, May). The teacher as moral agent. *Journal of Moral Education, 19*(2), 88-100. doi: http://dx.doi.org/10.1080/0305724900190203

Berkowitz, M. W. (1991). Moral education of college students. In R. B. Ashmore & W. C. Starr (Eds.), *Ethics across the curriculum: The Marquette experience* (pp. 107-119). Milwaukee, WI: Marquette University Press.

Biggs, D. A., & Barnett, R. (1981). Moral judgment development of college students. *Research in Higher Education, 14*(2), 91-102. doi: 10.1007/BF00976287

Blackburn, R., Armstrong, E., Conrad, C., Didham, J., & McKune, T. (1976). *Changing practices in undergraduate education*. Washington, DC: Carnegie Foundation for the Advancement of Teaching.

Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theory and methods* (5th ed.). Boston, MA: Pearson Education.

Boning, K. (2007). Coherence in general education: A historical look. *The Journal of General Education, 56*(1), 1-16. doi: 1A0.1353/jge.2007.0008

Borenstein, J., Drake, M. J., Kirkman, R., & Swann, J. L. (2010, June). The engineering and science issue test (ESIT): A discipline-specific approach to assessing moral judgment. *Science and Engineering Ethics, 16*(2), 387-407. doi: 10.1007/s11948-009-9148-z

Boudah, D. J. (2011). *Conducting educational research: Guide to completing a major project.* Thousand Oaks, CA: SAGE.

Bourke, B., Bray, N., & Horton, C. C. (2009). Approaches to the core curriculum: An exploratory analysis of top liberal arts and doctoral-granting institutions. *Journal of General Education, 58*(4), 219-240. doi: 10.1353/jge.0.0049

Bowen, H. R., Cleak, P., Doud, J. P., & Douglass, G. K. (1977). *Investment in learning: The individual and social value of American higher education.* San Francisco, CA: Jossey-Bass.

Bowen, S. H. (2004, Fall). What's in a name? The persistence of "general education." *Peer Review, 7*(1), 30-31. Retrieved from http://search.proquest.com.ezaccess.libraries.psu.edu/docview/216602819

Boyer, E. L. (1987). *College: The undergraduate experience in America.* New York: Harper & Row.

Boyer, E. L., & Hechinger, F. M. (1981). *Higher learning in the nation's service.* Washington, DC: The Carnegie Foundation for Advancement of Technology.

Boyer, E. L., & Levine, A. (1981). *A quest for common learning: The aim of general education.* Washington, DC: The Carnegie Foundation for the Advancement of Teaching.

Brink, D. O. (2007). Some forms and limits of consequentialism. In D. Copp (Ed.), *The Oxford handbook of ethical theory* (pp. 380-423). New York: Oxford University Press.

Brint, S., Proctor, K., Murphy, S. P., & Turk-Bicakci, L. (2009, November/December). General education models: Continuity and change in the U.S. undergraduate curriculum, 1975-2000. *The Journal of Higher Education, 80*(6), 605-642. doi: http://dx.doi.org/10.1353/jhe.0.0071

Brint, S. G., Riddle, M., Turk-Bicakci, L., & Levy, C. S. (2005, March/April). From the liberal to the practical arts in American colleges and universities: Organizational analysis and curricular change. *The Journal of Higher Education, 76*(2), 151-180. doi: 1353/jhe.2005.0011

Brubaker, J. S., & Rudy, W. (1997). *Higher education in transition: a history of American colleges and universities*. New Brunswick, NJ: Transaction.

Buelow, J. R., Mahan, P. L., & Garrity, A. W. (2010, February). Ethical dilemmas as perceived by healthcare students with teaching implications. *Journal of College Teaching and Learning, 7*(2), 85-92. Retrieved from http://journals.cluteonline.com/index.php/TLC/article/view/92/89

Burks, B. D., & Sellani, R. J. (2008, Fall). Ethics, religiosity, and moral development of business students. *Journal of Leadership, Accountability and Ethics,* 40-71. Retrieved from http://ezaccess.libraries.psu.edu/login?url=http://search.proquest.com.ezaccess.libraries.psu.edu/docview/197548848?accountid=13158

Callahan, D., & Bok, S. (Project Directors). (1980). *The teaching of ethics in higher education: A report by the Hastings Center.* Hastings-on-Hudson, NY: Institute of Society, Ethics and the Life Sciences.

Callister, L. C., Luthy, K. E., Thompson, P., & Memmott, R. J. (2009). Ethical reasoning in baccalaureate nursing students. *Nursing Ethics, 16*(4), 499-510. doi: 10.1177/0969733009104612

Campbell, E. (2008). The ethics of teaching as a moral profession. The Ontario Institute for Studies in Education of the University of Toronto. *Curriculum Inquiry, 38*(4), 357-385. doi: 10.1111/j.1467-873X.2008.00414.x

Carnegie Foundation for the Advancement of Teaching. (1977). *Missions of the college curriculum: A contemporary review with suggestions.* San Francisco, CA: Jossey-Bass. doi: 10.1177/0273475306288660

Chance, J. M. (1980). Curricular approaches to general education. In Society for Values in Higher Education, Project on General Education Models, *General Education, Issues and Resources* (pp. 40-69). Washington, DC: Association of American Colleges.

Chickering, A. W. (1972, April). Undergraduate academic experience. *Journal of Educational Psychology*, *63*(2), 134-143. doi: 10.1037/h0032635

Churchill, L. R. (1982, May-June). The teaching of ethics and moral values in teaching: Some contemporary confusions. *The Journal of Higher Education, 53*(2), 296-306. doi:10.2307/1981749

Cohen, A. M. (1998). *The shaping of American higher education: Emergence and growth of the contemporary system.* San Francisco, CA: Jossey-Bass.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research 3e: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: Sage.

Crain W. C. (2000). *Theories of development*: *concepts and applications.* Upper Saddle River, NJ: Prentice-Hall.

Cremin, L. A. (1980). *American education, the national experience, 1783-1876*. New York: Harper & Row.

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: SAGE.

Dalton, J. C., & Crosby, P. C. (2010, May). How we teach character in college: A retrospective on some recent higher education initiatives that promote moral and civic learning. *Journal of College and Character, 2*(2), 1-10. doi:10.2202/1940-1639.1264

Dalton, J. C., & Crosby, P. C. (2011, May). Core values and commitments in college: The surprising return to ethics and character in undergraduate education. *Journal of College and Character, 12*(2), 1-4. doi: http://dx.doi.org/10.2202/1940-1639.1796

DeAngelo, L., Hurtado, S., Pryor, J. H., Kelly, K. R., Santos, J. L., & Korn, W. S. (2008). *The American college: National norms for the 2007-2008 HERI faculty survey*. Los Angeles: Higher Education Research Institute, UCLA.

Dellaportas, S. (2006). Making a difference with a discrete course on accounting ethics. *Journal of Business Ethics, 65*, 391–404. doi:10.1007/s10551-006-0020-7

Derryberry, W. P., & Thoma, S. J. (2005, January). Moral judgment, self-understanding and moral actions: The role of multiple constructs. *Merrill-Palmer Quarterly, 51*(1), 67-92. doi: 10.1353/mpq.2005.0005

Dey, E. L., & Associates. (2010). *Engaging diverse viewpoints: What is the campus climate for perspective-taking?* Washington, DC: Association of American Colleges and Universities. Retrieved from http://www.aacu.org/core_ commitments/documents/Engaging_Diverse_Viewpoints.pdf

Donaldson, T., & Werhane, P. H. (Eds.). (1983). *Ethical issues in business.* Englewood Cliffs, NJ: Prentice Hall.

Dressel, P. L., & DeLisle, F. H. (1969). *Undergraduate curriculum trends*. Washington, DC: American Council on Education.

Drover, W., Franczak, J., & Beltramini, R. F. (2012). A 30-year historical examination of ethical concerns regarding business ethics: Who's concerned? *Journal of Business Ethics, 111*(4), 431-438. doi: 10.1007/s10551-012-1214-9

Dufrene, R. L., & Glosoff, H. L. (2004, April). The ethical decision-making scale-revised. *Measurement and Evaluation in Counseling Development, 37*(1), 2-14. Retrieved from http://search.proquest.com/docview/195600905?accountid=13158

Eble, K. E. (1984, March-April). Teaching's highest aims. *Academe, 70*(1), 10-16. doi:10.2307/40249149

Eisenberg, N., Carlo, G., Murphey, B., & vanCourt, P. (1995, August). Prosocial development in late adolescence: A longitudinal study. *Child Development, 6*(4), 1179-1197. doi:10.2307/1131806

Eisner, E. W. (1998). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice.* Upper Saddle River, NJ: Prentice- Hall.

Elder, L. (1999, Spring). Critical thinking: Teaching the foundations of ethical reasoning. *Journal of Developmental Education, 22*(3), 30-31. Retrieved from http://search.proquest.com/docview/228491548?accountid=13158

Elliott, D. (2007). *Ethics in the first person: A guide to teaching and learning practical ethics.* Lanham, MD: Rowman and Littlefield.

Etzioni, A. (1989, Summer). Are business schools brainwashing their MBAs? *Business and Society Review, 70*, 18-19. Retrieved from http://aladinrc.wrlc.org/bitstream/handle/1961/893/B190.pdf?sequence=1

Feldman, K. A., & Newcomb, T. M. (1970). *The impact of college on students, Volume I: An analysis of four decades of research.* San Francisco, CA: Jossey-Bass.

*Finding Aid for the Pennsylvania State University*. General Education Committee Records. Penn State University Archives. Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm

Finelli, C. J., Holsapple, M. A., Ra, E., Bielby, R. M., Burt, B. A., Carpenter, D., Harding, T. S., & Sutkus, J. A. (2012, July). An assessment of engineering students' curricular and co-curricular experiences and their ethical development. *Journal of Engineering Education, 101*(3), 469-494. doi: http://dx.doi.org/10.1002/j.2168-9830.2012.tb00058.x

Fisch, L. (Ed.). (1996, Summer). Ethical dimensions of college and university teaching: Understanding and honoring the special relationship between teachers and students. *New Directions for Teaching and Learning, 66.* San Francisco, CA: Jossey-Bass.

Ford, R.C. & Richardson, W.D. (1994, March). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics,* 13(3), 205-221. http://dx.doi.org/10.1007/BF02074820

Fraedrich, J., Cherry, J., King, J., & Guo, C. (2005, Fall). An empirical investigation of the effects of business ethics training. *Marketing Education Review, 15*(3), 27–35. Retrieved from: Business Source Premier, Ipswich, MA.

Franzosi, R. (2004). *From words to numbers: Narrative, data, and social science*. New York: Cambridge University Press.

Frieden, G. L., & Pawelski, J. (2003). Affective development in college students: Strategies that promote ethical decision-making and compassionate choice. *Journal of College and Character, 4*(5), 1-10. doi:10.2202/1940-1639.1355

Fuhrmann, B. S. (1997). Philosophies and aims. In J. G. Gaff, J. L. Ratcliff, & Associates, *Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change* (pp. 86–99). San Francisco, CA: Jossey-Bass.

Gaff, J. G. (1983). *General education today: A critical analysis of controversies, practices and reforms.* San Francisco, CA: Jossey-Bass.

Gaff, J. G. (1991). *New life for the college curriculum: Assessing achievements and furthering progress in the reform of general education.* San Francisco, CA: Jossey-Bass.

Gaul, A. L. (1987). The effect of a course in nursing ethics on the relationship between ethical choice and ethical action in baccalaureate nursing students. *Journal of Nursing Education, 26*(3), 113-117. Retrieved from http://search.proquest.com/docview/1026700499?accountid=13158

Gibson, W. (2010). Qualitative research as a method of inquiry in education. In D. Hartas (Ed.), *Educational research and inquiry: Qualitative and quantitative approaches* (pp. 54-64). New York: Continuum International.

Gilligan, C. (1981). Moral development. In A. W. Chickering and Associates (Ed.), *The modern American college: Responding to the new realities of diverse students and a changing society* (pp. 139-157). San Francisco, CA: Jossey-Bass.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge, MA: Harvard University Press.

Granitz, N., & Loewy, D. (2007). Applying ethical theories: Interpreting and responding to student plagiarism. *Journal of Business Ethics, 72*, 293-306. doi: 10.1007/s10551-006-9171-9

Hancock, D. R., & Algozzine, B. (2011). *Doing case study research: A practical guide for beginning researchers* (2nd ed.). New York: Teachers College Press.

Harding, T. S., Carpenter, D. D., & Finelli, C. J. (2012, April). An exploratory investigation of the ethical behavior of engineering undergraduates. *Journal of Engineering Education, 101*(2), 346-374. doi: 10.1002/j.2168-9830.2012.tb00053.x

Hatch, J. A. (2002). *Doing qualitative research in education settings.* Albany, NY: State University of New York Press.

Hersh, R. H., & Schneider, C. G. (2005, Summer/Fall). Fostering personal and social responsibility on college and university campuses. *Liberal Education, 91*(3/4), 6. Retrieved from http://www.aacu.org/liberaleducation/le-sufa05/le-sufa05feature1.cfm

Hesse-Biber, S. N., & Leavy, P. (2006). *The practice of qualitative research*. Thousand Oaks, CA: SAGE.

Jarrett, J. L. (1991). *The teaching of values.* New York: Routledge.

Jones, D. A. (2009). A novel approach to business ethics training: Improving moral reasoning. *Journal of Business Ethics, 88*, 367-379. doi: 10.1007/s10551-008-9969-8

Jonker, J., & Pennink, B. W. (2009). The essence of research methodology. Berlin: Springer.

Kazanjian, V. H., & Laurence, P. L. (Eds.). (2000). *Education as transformation: Religious pluralism, spirituality, and a new vision for higher education in America.* New York, NY: Peter Lang.

Kohlberg, L. (1968). Early education: A cognitive-development view. *Child Development*. *39*(4), 1013-1063. Retrieved from: http://www.jstor.org/stable/1127272

Kohlberg, L. (1969). *Stages in the development of moral thought and action*. New York: Holt, Rinehart & Winston.

Kohlberg, L. (1976). Moral stages and moralization: The cognitive development approach. In T. Lickona (Ed.), *Moral development and behavior* (pp. 31-55). New York: Holt Rinehart & Winston.

Kohlberg, L. (1981). *The philosophy of moral development: Vol. 1. The nature and validity of moral stages*. San Francisco, CA: Harper & Row.

Kohlberg, L. (1984). *Essays in moral development: Vol. 2. The psychology of moral development.* New York: Harper & Row.

Kohlberg, L. (1985). A just community approach to moral education in theory and practice. In M. Berkowitz & F. Oser (Eds.), *Moral education: Theory and practice* (pp. 27-82). Hillsdale, NJ: Erlbaum.

Kohlberg, L., & Candee, D. (1984). The relationship of moral judgment to moral action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Morality, moral behavior, and moral development* (pp. 52-73). New York: Wiley.

Kohlberg, L., & Hersh, R. (1977, April). Moral development: A review of the theory. *Theory into Practice, 16*(2), 53-59. doi:10.1080/00405847709542675

Kovac, J., & Coppola, B. (1997, April 10-12). *Universities as moral communities.* Proceedings of Conference on Values in Higher Education Institutional Ethics: The Moral Dimensions of University Policy. Knoxville, TN: University of Tennessee, Knoxville. Retrieved July 12, 2007, from http://web.utk.edu/~unistudy/values/proc1997/ddw.htm

Krawczyk, R. M. (1997). Teaching ethics: Effect on moral development. *Nursing Ethics, 4*(1), 57-65. doi: http://dx.doi.org/10.1177/096973309700400107

Krippendorff, K. (1980). *Content analysis: An introduction to its methodology*. Newbury Park, CA: Sage.

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*. Second Edition. Thousand Oaks, CA: Sage.

Laney, J. T. (1990). Through thick and thin: Two ways of talking about the academy and moral responsibility. In W. W. May (Ed.), *Ethics and higher education* (pp.49-65). New York: MacMillan.

Latzer, B. (2004, October). Common knowledge: The purpose of general education. *The Chronicle of Higher Education, 51*(7), B20. Retrieved November 29, 2010, from Research Library Core (Document ID: 733547611)

Lawson, B. E., & Koch, D. F. (Eds.). (2004). *Pragmatism and the problem of race.* Bloomington, IN: Indiana University Press.

Lazerson, M., Wagener, U., & Shumanis, N. (2000, May/June). What makes a revolution? Teaching and learning in higher education, 1980-2000. *Change, 32*(3), 12-19. doi:10.1080/00091380009601731

Levine, A. (1978). *Handbook on undergraduate curriculum. A report for the Carnegie Council on Policy Studies in Higher Education.* San Francisco, CA: Jossey-Bass.

Levine, A. (1980). *When dreams and heroes died: A portrait of today's college student.* San Francisco, CA: Jossey-Bass.

Lynch, W. T. (2000, Winter). Teaching engineering ethics in the United States. *Technology and Society Magazine, IEEE, 16*(4), 27-36. doi: 10.1109/44.642561

Magnell, T. (1998). Where values and education meet. In T. Magnell (Ed.), *Values and Education* (pp. 9-18). Atlanta, GA: Rodopi.

Mayhew, M. J, & King, P. (2008, March). How curricular content and pedagogical strategies affect moral reasoning development in college students. *Journal of Moral Education, 37*(1), 17-40. doi:10.1080/03057240701803668

Mayhew, M., Seifert, T., & Pascarella, E. (2010). A multi-institutional assessment of moral reasoning development among first-year students. *Review of Higher Education, 33*(3), 357-390. . Retrieved October 30, 2010, from Education Module. (Document ID: 1988322811).

McCabe, D. L., Trevino, L. K., & Butterfield, K. D. (2001). Cheating in academic institutions: A decade of research. *Ethics and Behavior, 11*(3), 219-232. doi: 10.1207/S15327019EB1103_2

McGrath, E. J. (1976). *General education and the plight of modern man.* Indianapolis, IN: The Lilly Endowment.

Mentkowski, M., & Associates. (2000). *Learning that lasts: Integrating learning, development, and performance in college and beyond.* San Francisco, CA: Jossey-Bass.

Middle States Commission on Higher Education. (2009). *Characteristics of excellence in higher education: Eligibility requirements and standards for accreditation.* Philadelphia, PA: Middle States Commission on Higher Education.

Miller, G. E. (1988). *The meaning of general education: The emergence of a curriculum paradigm.* New York: Teachers College Press.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

Nelson Laird, T. F., & Garver, A. K. (2008). The effect of teaching general education courses on deep approaches to learning: How disciplinary context matters. *Research in Higher Education, 51*(3), 248-265. doi: 10.1007/s11162-009-9154-7

Nelson Laird, T. F., Niskode-Dossett, A. S., & Kuh, G. D. (2009). What general education courses contribute to essential learning outcomes. *The Journal of General Education, 58*(2), 66-84. doi: 10.1353/jge.0.0037

Newton, R. R. (2000). Tensions and models in general education planning. *The Journal of General Education, 49*(3), 165-181. doi: 1353/jge.2000.0023

Nicgorski, W. (1992). The college experience and character development. In K. Ryan & T. Lickona (Eds.), *Character development in schools and beyond,* Washington, DC: Council for Research in Values and Philosophy.

Nucci, L., & Pascarella, E. T. (1987). The influence of college of moral development. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. III, pp. 271-326). New York: Agathon Press.

Park, M., Kjervik, D., Crandell, J., & Oermann, M. H. (2012). The relationship of ethics education to moral sensitivity and moral reasoning skills of nursing students. *Nursing Ethics, 19*(4), 568-580. doi: 10.1177/0969733011433922

Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students*. San Francisco, CA: Jossey-Bass.

Pascarella, E. T., Wolniak, G. C., Seifert, T. A. D., Cruce, T. M., & Blaich, C. F. (2005). Liberal arts colleges and liberal arts education: New evidence on impacts. *ASHE Higher Education Report, 31*(3). San Francisco, CA: Wiley Periodicals.

Patton, M. W. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Patton, M. W. (2002). *Qualitative research and evaluation methods.* Thousand Oaks, CA: Sage.

Paul, R., & Elder, L. (2009, Fall). Critical thinking: Ethical reasoning and fairminded thinking, Part I. *Journal of Developmental Education, 33*(1), 38-39. Retrieved from http://search.proquest.com/docview/742857469?accountid=13158

Pellegrino, E. D., & Achilles, T. C. (1983, February). *The teaching of values and the successor generation*. Wilmington, DE: The Atlantic Council's Working Group on the Successor Generation.

Perry, W. G. (1999). *Forms of ethical and intellectual development in the college years: A scheme.* San Francisco, CA: Jossey-Bass.

Perry, W. G., Jr. (1981). Cognitive and ethical growth: The making of meaning. In A. W. Chickering and Associates (Eds.), *The modern American college: Responding to the new realities of diverse students and a changing society* (pp. 76-116). San Francisco, CA: Jossey-Bass.

Peterson, R., Beltramini, R., & Kozmetsky, G. (1991). Concerns of college students regarding business ethics: A replication. *Journal of Business Ethics*, *10*, 733–738. doi: http://dx.doi.org/10.1007/BF00705707

Piaget, J. (1965). *The moral judgment of the child.* New York, NY: Free Press.

Pickens, J. (2005). Attitudes and perceptions. In N. Bortkowski (Ed.), *Organizational behavior, theory, and design in health care* (pp. 43-76). Sudbury, MA: Jones & Bartlett.

Ponemon, L. A. (1992, April/May). Ethical reasoning and selection-socialization in accounting. *Accounting, Organizations and Society, 17*(3/4), 239-258. doi: http://dx.doi.org/10.1016/0361-3682(92)90023-L

Power, F. C., Higgins, A., & Kohlberg, L. (1989). *Lawrence Kohlberg's approach to moral education.* New York, NY: Columbia University Press.

Ratcliff, J. L. (1997). What is a curriculum and what should it be? In J. G. Gaff & J. L. Ratcliff & Associates (Eds.), *Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change* (pp. 5-29). San Francisco, CA: Jossey-Bass.

Ratcliff, J. L., Johnson, D. K., LaNasa, S. M., & Gaff, J. G. (2001). *The status of general education in the year 2000: Summary of a national survey.* Washington, DC: Association of American Colleges and Universities.

Reed, E. S. (1996). Selves, values, cultures. In E. S. Reed, E. Turiel, & T. Brown (Eds.), *Values and knowledge* (pp. 1-15). Mahwah, NJ: Lawrence Erlbaum.

Reed, E. S., Turiel, E., & Brown, T. (Eds.). (1996). *Values and knowledge.* Mahway, NJ: Lawrence Erlbaum.

Rest, J. R. (1979). *Development in judging moral issues.* Minneapolis, MN: University of Minnesota Press.

Rest, J. R. (1986). *Moral development: Advances in research and theory.* New York: Praeger.

Rest, J. R. (1994). Background: Theory and research. In J. R. Rest & D. Narvaez (Eds.), *Moral development in the professions: Psychology and applied ethics* (pp. 2-26). Hillsdale, NJ: Lawrence Erlbaum.

Rest, J. R., & Narvaez, D. (Eds.). (1994). *Moral development in the professions: Psychology and applied ethics.* Hillsdale, NJ: Lawrence Erlbaum.

Rest, J. R., Narvaez, D., Bebeau, M., & Thoma, S. (1999). *Postconventional moral thinking: A neo-Kohlbergian approach.* Mahwah , NJ : Erlbaum.

Rest, J., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (2000). A Neo-Kohlbergian approach to morality research. *Journal of Moral Education, 29*(4)*,* 381-396. doi: http://dx.doi.org/10.1080/713679390

Reynolds, C. H. (1996, Summer). Making responsible academic ethical decisions. In L. Fisch (Ed.), *Ethical dimensions of college and university teaching: Understanding and honoring the special relationship between teachers and students* (pp. 65-74). New Directions for Teaching and Learning, No. 66. San Francisco, CA: Jossey-Bass.

Rholes, W. S., &, Bailey S. (1983). The effects of moral reasoning on consistency between moral attitude and related behaviors. *Social Cognition*, 32-48. doi: 10.1521/soco.1983.2.1.32

Ritter, B. A. (2006). Can business ethics be trained? A study of the ethical decision-making process in business students. *Journal of Business Ethics, 68*, 153–164. doi: 10.1007/s10551-006-9062-0

Rossman, G. B., & Rallis, S. F. (2012). *Learning in the field: An introduction to qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.

Rudolph, F. (1962). *The American college and university, a history.* New York: Knopf.

Rudolph, F. (1977). *Curriculum: A history of the American undergraduate course of study since 1636.* San Francisco, CA: Jossey Bass.

Rudolph, F. (1990). *The American college and university: A history.* Athens, GA: University of Georgia Press.

Schlaefli, A., Rest, J. R., & Thoma, S. J. (1985, Autumn). Does moral education improve moral judgment? A meta-analysis of intervention studies using the defining issues test. *Review of Educational Research, 55*(3), 319-352. doi: http://dx.doi.org/10.2307/1170390

Schneider, C. G. (2000). Educational missions and civic responsibility: Toward the engaged academy. In T. Ehrlich (Ed.), *Civic responsibility and higher education* (pp. 98-123). Phoenix, AZ: American Council on Education and Oryx Press.

Schneider, C. G., & Schoenberg, R. (1998, Spring). Contemporary understanding of liberal education. *Liberal Education, 84*(2), 32-34. Retrieved from http://search.proquest.com.ezaccess.libraries.psu.edu/docprintview/209813506/fulltext/12F...%205/15/2011

Schwartz, M. (2005). *Advising for general education.* University Park, PA: Office of Undergraduate Education.

Self, D. J., & Ellison, E. M. (1998, January). Teaching engineering ethics: Assessment of its influence on moral reasoning skills. *Journal of Engineering Education, 87*(1), 29-34. doi: 10.1002/j.2168-9830.1998.tb00319.x

Shapiro, J. P., & Stefkovich, J. A. (2001). *Ethical leadership and decision-making education: Applying theoretical perspectives to complex dilemmas.* Mahway, NJ: Lawrence Erlbaum.

Sheridan, D. A. (1998). Modern and postmodern challenges to liberal education. In D. Glyver & D. L. Weeks (Eds.), *The liberal arts in higher education: Challenging assumptions, exploring possibilities* (pp. 25-45). Lanham, MD: University Press of American.

Sloan, D. (1980). The teaching of ethics in the American undergraduate curriculum, 1876-1976. In D. Callahan & S. Bok (Eds.), *Ethics teaching in higher education* (pp. 1-57). New York: Plenum.

Smith, D. H. (1988). Teaching ethics in a professional age. In B. A. Kimball (Ed.), *Teaching undergraduates: Essays from the Lilly endowment workshop on liberal arts.* Buffalo, NY: Prometheus.

Stark, J. S., & Lattuca, L. R. (1997). *Shaping the college curriculum: Academic plans in action.* Boston, MA: Simon & Schuster.

Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, *7*(17), n.p. Retrieved from http://PAREonline.net/getvn.asp?v=7&n=17

Stenhouse, L. (1971, June). The humanities curriculum project: The rationale. *Theory into Practice, 10*(3), 154-162. doi: http://dx.doi.org/10.1080/00405847109542322

Stern, P. N., & Porr, C. J. (2011). *Essentials of accessible grounded theory*. Walnut Creek, CA: Left Coast Press.

Sternberg, R. J. (2010, Summer). Teaching for ethical reasoning in liberal education. *Liberal Education, 96*(3), 32-37. Retrieved from http://search.proquest.com/docview/759241918?accountid=13158

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Thousand Oaks, CA: Sage.

Thomas, N. L. (2000). The college and university as citizen. In T. Ehrlich (Ed.), *Civic responsibility and higher education* (pp. 63-97). Phoenix, AZ: American Council on Education and Oryx Press.

Thomas, R. B. (1962). *The search for a common learning: General education, 1800-1960.* New York: McGraw-Hill.

Thomas, R. M. (1997). *An integrated theory of moral development.* Westport, CT: Greenwood.

Thorne, L. (2001). Refocusing ethics education in accounting: An examination of accounting students' tendency to use their cognitive moral capability. *Journal of Accounting Education, 19*(2), 103-117. doi: http://dx.doi.org/10.1016/S0748-5751(01)00014-8

Toombs, W., Amey, M. J., & Chen, A. (1991). General education: An analysis of contemporary practice. *The Journal of General Education, 40,* 102-118. Retrieved from http://www.jstor.org/stab.e/277707132

Toombs, W., Fairweather, J., Chen, A., & Amey, M. (1989, August). *Open to view: Practice and purpose in general education 1998.* University Park, PA: Center for the Study of Higher Education.

Trevino, L. K. (1992). Moral reasoning and business ethics: Implications for research, education, and management. *Journal of Business Ethics, 11*(5-6), 445-459. doi: 10.1007/BF00870556

Turiel, E. (1983). *The development of social knowledge: Morality and convention.* Cambridge, UK: Cambridge University Press.

Turiel, E. (2002). *The culture of morality: Social development, context, and conflict.* Cambridge, UK: Cambridge University Press.

Turiel, E. (2008). Thought about actions in social domains: Morality, social conventions, and social interactions. *Cognitive Development, 23,* 136-154. doi:10.1016/j.cogdev.2007.04.001

Van der Ven, J. A. (1998). *Formation of the moral self.* Grand Rapids, MI: William B. Erdman.

Warnell, J. M. (2010). An undergraduate business ethics curriculum: Learning and moral development outcomes. *Journal of Business Ethics Education, 7*, 63-84. doi: 10.5840/jbee201075

Weber, J. R. (1992, September). Teaching moral reasoning to nurses. *Journal of Holistic Nursing, 10*(3), 263-274. doi: 10.1177/089801019201000309

Weber, R. P. (1990). *Basic content analysis*. Newbury Park, CA: Sage.

Wertz, F., & Charmaz, K. (2011). *Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive*. New York: Guilford Press. Retrieved http://www.pensu.eblib.com/patron/FullRecord.aspx?p=674984

Wehlburg, C. M. (2010, Spring). Integrated general education: A brief look back. *New Directions for Teaching and Learning*, *No. 121* (pp. 1-97). Wiley Periodicals. doi: 10.1002/tl.383

*What is general education?* (n.d.). Retrieved October 15, 2010, from http://bulletins.psu.edu/bulletins/bluebook/general_education.cfm?section=generalEd1

Whitely, J. M. (1982). *Character development in college students, Volume 1: The freshman year.* Schenectady, NY: Character Research.

Wilhelm, W. J. (2008). Integrating instruction in ethical reasoning into undergraduate business courses. *Journal of Business Ethics Education, 5*, 5-34. doi: http://dx.doi.org/10.5840/jbee200852

Willey, S. L., Mansfield, N. R., & Sherman, M. B. (2012, Fall). Integrating ethics across the curriculum: A pilot study to assess students' ethical reasoning. *Journal of Legal Studies Education, 29*(2), 263-296. doi: http://dx.doi.org/10.1111/j.1744-1722.2012.01107.x

Woods, M. (2005, January). Nursing ethics education: Are we really delivering the good(s)? *Nursing Ethics, 12*(1), 5-18. doi:10.1191/0969733005ne754oa

Yin, R. K. (2011). *Qualitative research from start to finish*. New York: Guilford.

# Appendix A

## Components of General Education at Penn State

**Components of General Education at Penn State**

The components of General Education of all campuses at Penn State include:

- Skills courses in quantitative and communication areas to teach student to work with numbers, to reason quantitatively, to apply basic mathematical processes to daily work and everyday living, to communicate information clearly both orally and in writing (Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm).
- Studies in the knowledge domains of the Arts, Humanities, Health Sciences, Natural Sciences, and the Social and Behavioral Sciences. Courses in the area of the Arts will teach students to recognize the comprehensive role of arts and architecture as an expression of the cultural values of a society. Through courses in the Arts area, students should recognize aesthetic values as an integral part of society's essential need and gain lifelong benefits through the acquisition and appreciation of arts-related skills. Humanistic studies are divided into the four categories of literature, history and culture, advanced language, and philosophy. The study of the Humanities should develop competency in interpretive understanding of the human condition and of the values inherent in it. The Health Sciences include courses in health and physical activity. They focus on the theory and practice of life span wellness and fitness activities and on the knowledge, attitudes, habits, and skills needed to live well. The Natural Sciences reveal the order, diversity, and beauty of nature and in so doing enable students to develop a greater appreciation of the

world around them. Students will be taught how to acquire scientific factual information, to use scientific methodology, and to develop an appreciation of the natural world. Students will gain an understanding of how scientists reason and how they draw conclusions and think critically. Courses in the Social and Behavioral sciences will help develop a student's understanding of the diverse personal, interpersonal, and societal forces that shape people's lives and to teach them how to approach these subjects through the concepts, principles, and methods of scientific inquiry (Retrieved from http://bulletins.psu.edu/bulletins/bluebook/general_education.cfm?section=generalEd1).

- First Year Seminars to introduce students to the scholarly community of the University by acquainting them with the learning tools and resources available at Penn State and orienting them to the scholarly community from the outset of their undergraduate studies in a way that will bridge to later experiences in their chosen majors (Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm).
- Writing intensive courses of the "Writing Across the Curriculum" component to further enhance writing skills (Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm).
- United States Cultures and International Cultures courses to provide opportunities to increase understanding of the relationship between people of different cultures and to widen international perspectives. The U.S. Cultures

courses will cultivate student knowledge of issues of social identity such as ethnicity, race, class, religion, gender, physical/mental disability, age, or sexual orientation. Students will gain knowledge of different United States values, traditions, beliefs, and customs and will increase a student's knowledge of their interactions. International cultures courses increase student knowledge of the variety of international societies and cultivate student knowledge of the similarities and differences among international cultures, conveys to students a knowledge of other nation's cultural values, traditions, beliefs, and customs and increases a student's knowledge of the range of international cultural achievements and human conditions through time. (Retrieved from http://www.libraries.psu.edu/digital/findingaids/378.htm).

# Appendix B

## The Six Stages of Moral Judgment According to Kohlberg

## The Six Stages of Moral Judgment According to Kohlberg

| *Level and Stage* | *What is Right* | *Reasons for Doing Right* | *Social Perspective of Stage* |
|---|---|---|---|
| LEVEL1: Preconventional | | | |
| Stage 1: heteronomous morality | Avoiding breaking rules backed by punishment; obedience for its own sake; to avoid physical damage to persons and property. | Avoidance of punishment, and the superior power of authorities. | Egocentric point of view. Doesn't consider the interests of others or recognize that they differ from the actor's; doesn't relate two points of view. Actions are considered physically rather than in terms of psychological interests of others. Confusion of authority's perspective with one's own. |
| Stage 2: Individualism, instrumental purpose, and exchange | Following rules only when it is to someone's immediate interest; acting meets your own interests and needs and letting others do the same. Right is also what's fair, an equal exchange, a deal, an agreement. | To serve your own needs or interests in a world where you have to recognize that other people have their interests too. | Concrete individualistic perspective. Aware that everybody has his own interest to pursue and these conflict, so that right is relative (in the concrete individualistic sense). |
| LEVEL II: Conventional | | | |
| Stage 3: Mutual interpersonal expectations, relationships, and interpersonal conformity | Living up to what is expected by people close to you or what people generally expect of people in your role as son, brother, friend, etc. "Being good" is important and means having good motives, showing concern about others. It also means keeping mutual relationships, such as trust, loyalty, respect, and gratitude. | The need to be a good person in your own eyes and those of others. Belief in the Golden Rule. Desire to maintain rules and authority which support stereotypically good behavior. | Perspective of the individual in relationships with other individuals. Aware of shared feelings, agreements, and expectations which take primacy over individual interests. Relates points of view through the concrete Golden Rule, putting yourself in the other guy's shoes. Does not yet consider generalized system perspective. |

| *Level and Stage* | *What is Right* | *Reasons for Doing Right* | *Social Perspective of Stage* |
|---|---|---|---|
| Stage 4: Social system and conscience | Fulfilling the actual duties to which you have agreed. Laws are to be upheld except in extreme cases where they conflict with other fixed social duties. Right is also contributing to society, the group, or institution. | To keep the institution going as a whole, to avoid the breakdown in the system "if everyone did it," or the imperative of conscience to meet your defined obligations (easily confused with stage 3 belief in rules and authority). | Differentiation of societal points of view from interpersonal agreement or motives. Takes the point of view of the system that defines roles and rules. Considers individual relations in terms of place in the system. |
| LEVEL III: Post-conventional or principled | | | |
| Stage 5: Social contract or utility and individual rights | Being aware that people hold a variety of values and opinions; that most values and rules are relative to your group. These relative rules should usually be upheld, however, in the interest of impartiality and because they are the social contract. Some nonrelative values and rights like *life* and *liberty,* however, must be upheld in any society regardless of majority opinion. | A sense of obligation to law because of your social contract to make and abide by laws for the welfare of all and for the protection of all people's rights. A feeling of contractual commitment freely entered upon, to family, friendship, trust, and work obligation. Concern that laws and duties be based on rational calculation of overall utility, "the greatest good for the greatest number." | Prior-to-society perspective. Perspective of a rational individual aware of values and rights prior to social attachments and contracts. Integrates perspectives by formal mechanisms of agreements, contract, objective impartiality, and due process. Considers moral and legal points of view; recognizes that they sometimes conflict and finds it difficult to integrate them. |

| *Level and Stage* | *What is Right* | *Reasons for Doing Right* | *Social Perspective of Stage* |
|---|---|---|---|
| LEVEL III: Post-conventional or principled | | | |
| Stage 6: Universal ethical principles | Following self-chosen ethical principles. Particular laws or social agreements are usually valid because they rest on such principles. When laws violate these principles, one acts in accordance with the principle. Principles are universal principles of justice; the equality of human rights and respect for the dignity of human beings as individual persons. | The belief as a rational person in the validity of universal moral principles, and a sense of personal commitment to them. | Perspective of a moral point of view from which social arrangements derive. Perspective is that of any rational individual recognizing the nature of morality or the fact that persons are ends in themselves and must be treated as such. |

Source: Power, Higgins, & Kohlberg (1989, pp. 8-9).

# Appendix C

## Rest's Developmental Features in Moral Judgment

**Rest's Developmental Features in Moral Judgment**

| Stage | Coordination of expectations about actions (how rules are known and shared) | Schemes of balancing interests (how equilibrium is achieved) | Central concept for determining moral rights and responsibilities |
|---|---|---|---|
| Stage 1 | The caretaker makes known certain demands on the child's behavior. | The child does not share in making rules, but understands that obedience will bring freedom from punishment. | The morality of obedience: "Do what you're told." |
| Stage 2 | Although each person is understood to have his own interests, an exchange of favors might be mutually decided. | If each party sees something to gain in an exchange, then both want to reciprocate. | The morality of instrumental egoism and simple exchange: "Let's make a deal." |
| Stage 3 | Through reciprocal role taking, individuals attain a mutual understanding about each other and the on-going pattern of their interactions. | Friendship relationships establish a stabilized and enduring scheme of cooperation. Each party anticipates the feelings, needs, and wants of the other and acts in the other's welfare. | The morality of interpersonal concordance: "Be considerate, nice, and kind and you'll get along with people." |
| Stage 4 | All members of society know what is expected of them through public institutionalized law. | Unless a society-wide system of cooperation is established and stabilized, no individual can really make plans. Each person should follow the law and do his particular job, anticipating that the other people will .also fulfill their responsibilities. | The morality of law and duty to the social order: "Everyone in society is obligated and protected by the law." |
| Stage 5 | Formal procedures are institutionalized for making laws, which one anticipates rational people would accept. | Law-making procedures are devised so that they reflect the general will of the people, at the same time insuring certain basic rights to all. With each person having a say in the decision process, each will see that his interests are maximized while at the same time having a basis for making claims on other people. | The morality of societal consensus: "You are obligated by whatever arrangements are agreed to by due process procedures." |

| Stage | Coordination of expectations about actions (how rules are known and shared) | Schemes of balancing interests (how equilibrium is achieved) | Central concept for determining moral rights and responsibilities |
|---|---|---|---|
| Stage 6 | The logical requirements of non-arbitrary cooperation among rational, equal, and impartial people are taken as ideal criteria for social organization which one anticipates rational people would accept. | A scheme of cooperation that negates or neutralized all arbitrary distribution of rights and responsibilities is the most equilibrated, for such system is maximizing the simultaneous benefit to each member so that any deviation from these rules would advantage some members at the expense of others. | The morality of non-arbitrary social cooperation: "How rational and impartial people would organize cooperation is moral. |

Source: Rest (1979, pp. 22-24)

# Appendix D

## Perry's Scheme of Cognitive and Ethical Development

## Perry's Scheme of Cognitive and Ethical Development

| | | |
|---|---|---|
| Dualism Modified | Position 1 | Authorities know, and if we work hard, read every word, and learn Right Answers, all will be well |
| ↓ | Transition | But what about those Others I hear about? And different opinions? And Uncertainties? Some of our own Authorities disagree with each other or don't seem to know, and some give us problems instead of Answers. |
| | Position 2 | True Authorities must be Right, the others are frauds. We remain Right. Other must be different and Wrong. Good Authorities give us problems so we can learn to find the Right Answer by our own independent thought. |
| | Transition | But even Good Authorities admit they don't know all the answers *yet!* |
| ↓ | Position 3 | Then some uncertainties and different opinions are real and legitimate *temporarily*, even for Authorities. They're working on them to get to the Truth. |
| | Transition | But there are *so many* things they don't know the Answers to! And they won't for a long time! |
| | *Position 4a* | Where Authorities don't know the Right Answers, everyone has a right to his own opinion; no one is wrong! |
| | Transition | But some of my friends ask me to support my opinions with facts and reasons. |
| Relativism Discovered | (*and/or)* | |
| | Transition | Then what right have They to grade us? About what? |
| ↓ | *Position 4b* | In certain courses Authorities are not asking for the Right Answer; They want us to *think* about things in a certain way, *supporting* opinion with data. That's what they grade us on. |
| | Transition | But this "way" seems to *work* in most courses, and even outside them. |
| ↓ | Position 5 | Then *all* thinking must be like this, even for Them. Everything is relative but not equally valid. You have to understand how each context works. Theories are not Truth but metaphors to interpret data with. You have to think about your thinking. |

| | | |
|---|---|---|
| Commitment in Relativism Developed | Transition | But if everything is relative, am I relative too? How can I know I'm making the Right Choice? |
| | Position 6 | I see I'm going to have to make my own decisions in an uncertain world with no one to tell me I'm Right. |
| | Transition | I'm lost if I don't. Then I decide on my career (or marriage or values) everything will straighten out. |
| | Position 7 | Well, I've made my first Commitment! |
| | Transition | Why didn't that settle everything? |
| | Position 8 | I've made several commitments. I've got to balance them-how many, how deep? How certain, how tentative? |
| | Transition | Things are getting contradictory. I can't make logical sense out of life's dilemmas. |
| | Position 9 | This is how life will be. I must be wholehearted while tentative, fight for my values yet respect others, believe my deepest values might yet be ready to learn. I see that I shall be retracing this who journey over and over- but, I hope, more wisely. |

Source: Perry (in Chickering & Associates, 1981, p. 79)

# Appendix E

## Content Analysis Coding Words

## Content Analysis Coding Words

| CODE: | WORDS/PHRASES |
|---|---|
| **ACADEMIC INTEGRITY** | Academic dishonesty |
| **ACADEMIC INTEGRITY** | Academic honesty |
| **ACADEMIC INTEGRITY** | Academic integrity |
| **ACADEMIC INTEGRITY** | Academically ethical |
| **ACADEMIC INTEGRITY** | Plagiarism, copying |
| **CONTEXT** | Cultural, social, political context |
| **CONTEXT** | Principles, principled |
| **CONTEXT** | Universal |
| **ETHIC** | Core Beliefs |
| **ETHIC** | Ethic(s) |
| **ETHIC** | Ethical Awareness |
| **ETHIC** | Ethical Behavior |
| **ETHIC** | Ethical Learning |
| **ETHIC** | Ethical Reasoning |
| **ETHIC** | Justice |
| **ETHIC** | Moral development |
| **ETHIC** | Moral reasoning |
| **ETHIC** | Right and Wrong |
| **ETHIC** | Rights |
| **ETHIC** | Values |
| **ETHIC** | Virtue |
| **PEDAGOGY** | Analyze, analytical |
| **PEDAGOGY** | Argument |
| **PEDAGOGY** | Critical thinking |

| CODE: | WORDS/PHRASES |
|---|---|
| **PEDAGOGY** | Decision-making |
| **PEDAGOGY** | Draw parallels |
| **PEDAGOGY** | Engage |
| **PEDAGOGY** | Infer, inferential |
| **PEDAGOGY** | Interpret, Interpretation skills |
| **PEDAGOGY** | Journal writing |
| **PEDAGOGY** | Logic, logical reasoning |
| **PEDAGOGY** | Persuasion |
| **PEDAGOGY** | Problem-solving |
| **PEDAGOGY** | Reasoning |
| **PEDAGOGY** | Reflection |

# Appendix F

## Sample of Coded Syllabus

# ECON 102 Section Course Syllabus – Fall 2011

**NAME OF COURSE:** Introductory Microeconomic Analysis and Policy

**COURSE DESCRIPTION:** Economics is the study of how people satisfy their wants in the face of limited resources. One way to think about economics is that it is a consistent set of methods and tools that is valuable in analyzing certain types of problems related to decision making, resource allocation, and the production and distribution of goods and services. There are two main branches of economics, microeconomics, and macroeconomics. Macroeconomics is concerned with economy wide factors such as inflation, unemployment, and overall economic growth. Microeconomics deals with the behavior of individual households and firms and how government influences that behavior; it is the subject of this course. More specifically, ECON 002 is an introduction to microeconomic analysis and policy.

Comment [DJE44]: Analyzing

Comment [DJE45]: Decision-making

**COURSE OBJECTIVE:** The principal objective of the course is to enable students to analyze major microeconomic issues clearly and critically. Students will be introduced to the methods and tools of economic analysis, and these analytical tools will be applied to questions of current policy interest. Learning these methods and tools and applying them to interesting policy questions and issues is sometimes called "thinking like an economist." An important goal of this course is to take each student as far down the road of "thinking like an economist" as possible. A variety of mechanisms are used to assess student performance. These evaluation methods typically include exams, quizzes, homework assignments, and group projects.

Comment [DJE46]: Analyze

Comment [DJE47]: Application of knowledge

Comment [DJE48]: Questions and issues

ECON 102 is an introductory course in economics and as such, serves as a prerequisite for several microeconomics-oriented 300level courses. It is also a required course for all majors and minors in economics, and meets requirements for a General Education (GS) or Bachelor of Arts social science course.

Comment [DJE49]: mentions Gened requirements

**DATES & TIMES**

**LOCATION:**

**INSTRUCTOR:** :

**OFFICE HOURS:**

**CONTACT:**

**ELECTRONIC DEVICES:** Cellular phones, pagers, or other personal electronic devices may be brought into the classroom, but they are to be turned off during class hours and stored. This policy also applies to notebook computers tablet computers and personal digital assistants (PDA's). Students who willfully disregard this policy during an examination will be in violation of the Penn State University policy regarding academic honesty and will receive a failing grade for the exam.

ACADEMIC INTEGRITY/DISHONESTY: University Policies and Rules 4920 state that academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at Penn State, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.

Comment [DJE41]: Academic Intgrity

Comment [DJE42]: personal integrity, respect

Comment [DJE43]: fundamental ethical principles

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Comment [DJE410]: Academic Dishonesty

# Appendix G

## Panel of Experts and Pilot Study Recommendations

**Panel of Experts and Pilot Study Recommendations**

**Comments on Faculty Survey**:

Original Survey questions and comments

1. Could you share a little about your academic background with me - [No comments]
2. What general education courses have you taught at Penn State? How many at this particular campus? – [No comments]
3. Can you pick one of those courses and describe for me how you determined the content of the course? – [Suggest that you pick the course from the list provided dependent on what other faculty interviewed had already spoken about.] [Add: If you teach more than one general education course, is the process similar or different for any of the other courses you teach? If different, can you describe?]
4. Penn State has defined some goals for general education. [Add: Do you know what the goals for general education at Penn State are?] [Add: if yes, how were you made aware of these goals?] [Add, if they do not know the goals, what is their definition of general education] How does your course conform to the purpose and goals of general education at Penn State [add: or for general education in general if faculty doesn't know Penn State goals]?
5. What are the important student learning outcomes in the course(s) you teach?

*If ethical reasoning or ethics is not included in the outcomes indicated, ask the following:*

6. I noticed that you did not include ethics, ethical development or ethical reasoning in your course outcomes. Research has shown that during the college years, students continue to grow in their ethical development. What components, if any, might your course contribute to this?
7. The most recent strategic plan at Penn State called for more intentional ethical learning and mentioned that general education might be one way for that to occur. I'd be interested in your perspective on this.

**Other Suggestions:**

1. Ask about academic integrity and how it is introduced to students and how is it enforced
2. Explore the concept of general education at Penn State both broadly and how it might relate to ethical reasoning
3. Explore whether their teaching is influenced by the course being designated a general education course
4. If faculty believes that ethical reasoning is an important component of an education at Penn State, what suggestions do they have for changes in curriculum to allow this to occur?
5. Ask faculty about their impression of what their colleagues do in relation to ethical reasoning and their teaching.

# Appendix H

## Faculty Interview Question Guide

**Faculty Interview Question Guide**

Thank you for taking the time to meet with me. I am a doctoral student at the University of Nebraska at Lincoln and for my dissertation topic I am interested in exploring the role of general education in the development of ethical reasoning in college students. Specifically, I am interested in the faculty perspective so I am interviewing faculty members who teach general education courses at three branch campuses at Penn State.

Please review and sign the Informed Consent Form.

I will be digitally taping our interview as well as taking extensive notes as we talk. I would like to have the opportunity to share the transcript of our conversation with you after it has been transcribed for your review and approval. I also would hope to allow for the possibility of a follow-up interview if needed. Would you be willing to do this?

Do you have any questions before we get started?

To start,

1. Could you share a little about your academic background with me

   Possible Probes:

   a. academic credentials – where did you receive your degree(s), in what majors?
   b. number of years teaching
   c. different institutions where you have taught

2. What general education courses have you taught at Penn State? How many at this particular campus?

3. Can you pick one of those courses and describe for me overall how you determined the content of the course?

    Possible Probes:

    a. How long have you taught this course (duration)
    b. Syllabus creation
    c. Texts chosen
    d. Content based on student interest level
    e. Assignments required
    f. Class activities directed toward projected outcomes
    g. Anticipated student learning outcomes
    h. Assessment

4. If you teach more than one general education course, is the teaching process similar or different for any of the other courses you teach? If different, can you describe?
5. Penn State has defined goals for general education. How does your course conform to the goals of general education at Penn State?

    Possible Probes:

    a. Are there guidelines from Penn State about teaching general education courses? If yes, do you use these guidelines when developing your general education course(s)?
    b. Do you know the goals of general education for Penn State?
    c. If no, what is your definition of general education?
    d. Where did your definition of general education come from?

e. Does the fact that the course has been designated as meeting a general education requirement influence how you develop the course? If yes, in what ways?

6. What are the important student learning outcomes in the course(s) you teach?

*If ethical reasoning development is not included in the outcomes indicated, ask the following*

I noticed that you did not include ethical reasoning development in your course outcomes. Research has shown that during the college years, students continue to grow in their ethical reasoning development. What components, if any, of your course(s) might contribute to this?

Possible Probes:

a. If yes, can you give examples of any intentional or unintentional learning outcomes that might lead to ethical considerations?

b. Do you provide opportunities for students to make connections between the content of the course and their life experiences?

c. Do you think other faculty members in your particular general education category have ethical reasoning as a learning outcome in their courses?

d. Are there other disciplines that you believe better lend themselves to developing ethical reasoning?

7. The most recent strategic plan at Penn State called for more intentional ethical learning and mentioned that general education might be one way for that to occur. I'd be interested in your perspective on this.

Possible Probes:

a. Do you think that ethical reasoning should be a goal of a college education? Why or why not?

b. Do you think general education is a way to do this? Why or why not?

8. If ethical reasoning has been an outcome of your class, how effective do you believe it has been? How do you measure this?

9. How do you handle academic integrity?

Possible probes:

a. Do you discuss your academic integrity policy with your students? If yes, when and how often

b. What role do you believe this plays in ethical reasoning?

10. What materials could you share with me that might help me better understand your course

Possible probes:

1. Syllabi
2. Class assignments
3. Texts

11. Do you have any general observations that you would like to share?

12. Are there any questions I should have asked that I did not ask?

# Appendix I

## Student Interview Question Guide

**Student Interview Question Guide**

Thank you for taking the time to meet with me. I am a doctoral student at the University of Nebraska at Lincoln and for my dissertation topic I am interested in exploring the role of general education in the development of ethical reasoning in college students. Specifically, I am interested in the faculty perspective so I am interviewing faculty members who teach general education courses at three branch campuses at Penn State. I am also interested in interviewing students who have completed general education courses at Penn State taught by those faculty.

Please review and sign the Informed Consent Form.

I will be digitally taping our interview as well as taking extensive notes as we talk. I would like to have the opportunity to share the transcript of our conversation with you after it has been transcribed for your review and approval. Do you have any questions before we get started?

To start,

1. Could you share a little bit about yourself? –

   Possible Probes:

   a. How many semesters have you studied at Penn State?

   b. What is your major?

2. What general education courses have you taken at Penn State?

3. Why has Penn State included general education as part of your curriculum?

   Possible probe:

   a. Penn State has defined goals for general education. Are you aware of these goals?

4. Can you explain to me the assignments or opportunities you had in your general education courses that helped you to develop your reasoning skills.

Possible probe:

   a. If student does not mention course with interviewed faculty, specifically ask about that course

5. Did you have the opportunity to explore ethical dilemmas in your coursework?
   a. Could you give examples
   b. Probe examples that faculty member indicated that they included in the coursework
6. Is Academic Integrity mentioned in your classes?
   a. on syllabi?
   b. discussed in class?
7. Do you think it is important to have coursework in ethics as part of your curriculum?
   a. Does your major require a course
   b. Would you take a course that specified that it had an ethics component with a designation such as an “E” similar to “W” or “US’ or IL

**Thank you for meeting with me. Would you like to review a copy of the transcript of this interview to check for accuracy?**

# Appendix J

## General Education Courses Used for Content Analysis

## Penn State University Catalog Course Descriptions

## General Education Courses Used for Content Analysis

## Penn State University Catalog Course Descriptions

### Arts (GA)

1. ART 001 (GA)
   **Introduction to the Visual Arts** (3) Introduction to the media, elements, function, making, and meaning of visual arts today and in diverse historical and cultural contexts.
   Effective: Spring 2004
2. ART 010 (GA)
   **Introduction to Visual Studies** (3) Introduction to visual studies; pictorial space and the principles of visual organization.
   Effective: Fall 2004
3. ART 017 (GA)
   **Introduction to Metal Arts** (3) Introduction for non-art majors to fundamental jewelry making and small-scale metalsmithing processes including fabrication, surface treatment, and finishing of metalwork.
   Effective: Spring 2004
4. ART 020 (GA)
   **Introduction to Drawing** (3) Introductory experience in making of art through drawing media; designed for non-majors seeking general overview of studio practice.
   Effective: Spring 2004
5. ART 050 (GA)
   **Introduction to Painting** (3) Introductory experience in making of art through painting media; designed for non-majors seeking a general overview of studio practice.
   Effective: Fall 2004
6. ART H 100 (GA;IL)
   **Introduction to Art** (3) An approach to the understanding of art through a critical analysis of selected works of architecture, painting, and sculpture. Students who have passed ART H 110 may not schedule this course.
   Effective: Spring 2006
7. ART H 111 (GA;IL)
   **Ancient to Medieval Art** (3) Survey of Ancient Egyptian, Greek, Roman, Byzantine, Early Medieval, Romanesque, and Gothic art, with an emphasis on sculpture and painting.
   Effective: Spring 2006
8. ART H 112 (GA;IL)
   **Renaissance to Modern Art** (3) Survey of Renaissance, Baroque, Rococo, Romantic, Modern, and Contemporary art, with an emphasis on painting,

sculpture, and graphic arts.
Effective: Spring 2006

9. COMM 150 (GA)
   **The Art of the Cinema** (3) The development of cinema to its present state; principles of evaluation and appreciation; examples from the past and present.
   Effective: Spring 2007
10. ENGL 050 (GA)
    **Introduction to Creative Writing** (3) Practice and criticism in the reading, analysis and composition of fiction, nonfiction and poetry writing.
    Effective: Spring 2001
11. INART 001 (GA)
    **The Arts** (3) Develop critical perception, knowledge, and judgments through an examination of the basic concepts common among the arts.
    Effective: Spring 2006
12. INART 115 (GA;US)
    **The Popular Arts in America: Popular Music** (3) An examination of the roots, development, and significance of popular music in our culture.
    Effective: Fall 2011
13. MUSIC 005 (GA)
    **An Introduction to Western Music** (3) A general survey of art music in western society, highlighting important composers and stylistic developments.
    Effective: Spring 2004
14. MUSIC 007 (GA;US)
    **Evolution of Jazz** (3) Study of the origins and development of jazz as an art form.
    Effective: Summer 2005
15. MUSIC 009 (GA;IL)
    **Introduction to World Musics** (3) An overview of the music of India, China, Japan, Indonesia, Africa, and the Middle East.
    Effective: Summer 2005
16. THEA 102 (GA)
    **Fundamentals of Acting** (3) Introduction to the art and craft of acting for non-theatre majors.
    Effective: Fall 2003
17. THEA 105 (GA)
    **Introduction to Theatre** (3) An introduction and overview of the history, craft, and art of the theatre to foster an informed appreciation of theatrical events. This course is an alternate to THEA 100.
    Effective: Spring 2003

**Humanities (GH)**

1. AAA S 101 (WMNST 101) (GH;US)
   **The African American Woman** (3) The sociological, historical, and political

experiences of African American women, their roles and contributions to society.
Effective: Summer 2005 Ending: Fall 2012

2. AAA S 102 (WMNST 102) (GH;IL)
**Women of Color: Cross-Cultural Perspective** (3) Global examination of value systems of women of color; attention to minority ethnic groups in the United States and developing countries.
Effective: Summer 2005 Ending: Fall 2012
3. AAA S 191 (HIST 191) (GH;IL)
**Early African History** (3) Explores important economic and cultural transformations in the making of early African empires from 1 MBC to 1750.
Effective: Summer 2005 Ending: Summer 2012
4. AAA S 192 (HIST 192) (GH;IL)
**Modern African History** (3) Impact of the slave trade, expansion of Islam, colonial conquest, social and cultural transformations, resistance, nationalism, and independence.
Effective: Summer 2005 Ending: Summer 2012
5. AM ST 100 (GH;US)
**Introduction to American Studies** (3) A study of selected attempts to identify and interpret movements and patterns in American culture.
Effective: Spring 2006
Prerequisite: third-semester standing
6. AM ST 105 (ENGL 105) (GH;US)
**American Popular Culture and Folklife** (3) Survey of popular culture, folklife, and ethnicity, synthesizing material from such areas as literature, media, entertainment, print, music, and film.
Effective: Fall 2008
7. CMLIT 001 (GH;IL)
**Introduction to Western Literatures Through the Renaissance** (3) Introductory comparative survey of European and American literatures of Ancient through Renaissance periods, considering genre, themes, cultural and literary values.
Effective: Spring 2005
8. CMLIT 002 (GH;IL)
**Introduction to Western Literatures Since the Renaissance** (3) Introductory comparative survey of European and American literatures, post-Renaissance through Modern, considering genre, themes, cultural, and literary values.
Effective: Summer 2005
9. CMLIT 003 (GH;IL)
**Introduction to African Literatures** (3) Comparative analysis of drama, essay, novel, poetry, and stories from traditional oral forms to contemporary expressions of African literary styles.
Effective: Summer 2005
10. CMLIT 005 (GH;US;IL)
**Introduction to Literatures of the Americas** (3) Comparative interpretation of

the oral and written literary traditions of North, Central, and South America.
Effective: Summer 2005

11. CMLIT 010 (GH;IL)
**World Literatures** (3) The development of literature around the world--from epic, legend, lyric, etc. in the oral tradition to modern written forms.
Effective: Fall 2010
12. CMLIT 108 (GH;IL)
**Myths and Mythologies** (3) World mythology: myths primarily of non-Western cultures, based on selected areas and traditions around the world.
Effective: Summer 2005
13. ENGL 001 (GH)
**Understanding Literature** (3) Explores how major fiction, drama, and poetry, past and present, primarily English and American, clarify enduring human values and issues.
Effective: Spring 2003
14. ENGL 129 (GH)
**Shakespeare** (3) A selection of the major plays studied to determine the sources of their permanent appeal. Intended for non-majors.
Effective: Spring 2003
15. ENGL 136 (GH)
**The Graphic Novel** (3) The graphic novel as a literary and visual form (produced primarily in English).
Effective: Summer 2010
16. ENGL 139 (GH;US)
**Black American Literature** (3) Fiction, poetry, and drama, including such writers as Baldwin, Douglass, Ellison, Morrison, and Wright.
Effective: Summer 2005
17. ENGL 182A (GH;US;IL)
**Literature and Empire** (3) Literature written in English from countries that were once part of European empires, e.g., India, Canada, South Africa, and others.
Effective: Summer 2005
18. ENGL 184 (CMLIT 184) (GH;IL)
**The Short Story** (3) Lectures, discussion, readings in translation, with primary emphasis on major writers of the 19th and 20th centuries.
Effective: Spring 2006
19. ENGL 194 (WMNST 194) (GH;US;IL)
**Women Writers** (3) Short stories, novels, poetry, drama, and essays by English, American, and other English-speaking women writers.
Effective: Summer 2005
20. HIST 001 (GH;IL)
**The Western Heritage I** (3) A survey of the Western heritage from the ancient Mediterranean world to the dawn of modern Europe.
Effective: Spring 2006

21. HIST 002 (GH;IL)
    **The Western Heritage II** (3) A survey of the Western heritage from the dawn of modern Europe in the seventeenth century to the present.
    Effective: Spring 2006
22. HIST 020 (GH;US)
    **American Civilization to 1877** (3) An historical survey of the American experience from its colonial beginnings through the Civil War and Reconstruction.
    Effective: Spring 2006
23. HIST 021 (GH;US)
    **American Civilization Since 1877** (3) An historical survey of the American experience from the emergence of urban-industrial society in the late 19th century to the present.
    Effective: Spring 2006
24. PHIL 001 (GH)
    **Basic Problems of Philosophy** (3) Introduction to central philosophical themes, including the mind/body problem, the existence of God, ethical problems, the nature of reality. Students may take only one course for General Education credit from PHIL 001 GH or 004 GH.
    Effective: Spring 2000
25. PHIL 003 (GH)
    **Persons, Moral Values and the Good Life** (3) Major ethical positions and assumptions regarding questions of freedom, choice, obligation, and conflicts in contemporary moral conduct, values, and reasoning.
    Effective: Fall 2004
26. PHIL 103 (GH)
    **Introduction to Ethics** (3) Ethical theory about virtue, duty, autonomy, and life quality applied to moral problems, including character, violence, oppression, abortion, and suicide.
    Effective: Fall 2003
27. RL ST 001 (GH;US;IL)
    **Introduction to World Religions** (3) An historical and comparative survey of the principal beliefs and practices of the world's major religions.
    Effective: Summer 2005
28. RL ST 003 (GH;US;IL)
    **Introduction to the Religions of the East** (3) Religious experience, thought, patterns of worship, morals, and institutions in relation to culture in Eastern religions.
    Effective: Summer 2005
29. S T S 100 (GH)
    **Science, Technology, and Culture** (3) A survey of the development and culture of science, technology, and medicine in world history.
    Effective: Spring 2011

30. S T S 101 (GH)
    **Modern Science, Technology, and Human values** (3) Relationships of science and technology to human aspirations, values, and arts.
    Effective: Spring 1996

**Natural Sciences (GN)**

1. ANTH 021 (GN)
   **Introductory Biological Anthropology** (3) The role of human biology and evolution in culture, society, and behavior.
   Effective: Spring 2001
2. ASTRO 001 (GN)
   **Astronomical Universe** (3) The development of modern understanding of the astronomical universe from planets and stars to galaxies and cosmology. Student who have passed ASTRO 005, ASTRO 006, or ASTRO 010 may not take this course for credit.
   Effective: Fall 2009
3. BI SC 001 (GN)
   **Structure and Function of Organisms** (3) An exploration of how cellular structures and processes contribute to life and how life displays unity even in its diversity. Students who have passed BIOL 027, 110, or 141 may not schedule this course.
   Effective: Fall 2004
4. BI SC 002 (GN)
   **Genetics, Ecology, and Evolution** (3) The study of how living organisms inherit their traits, how plants and animals evolved, and how they now interact. Students who have passed BIOL 033, 110, 220W, or 222 may not schedule this course.
   Effective: Spring 2003
5. BI SC 003 (GN)
   **Environmental Science** (3) Kinds of environments; past and present uses and abuses of natural resources; disposal of human wastes; prospects for the future. Students who have passed BIOL 220 or any other upper-level ecology course in biology may not schedule this course.
   Effective: Fall 2003
6. BI SC 004 (GN)
   **Human Body: Form and Function** (3) A general survey of structure and function--from conception, through growth and reproduction, to death. Students who have passed BIOL 129 and 141 may not schedule this course.
   Effective: Spring 2002
7. BIOL 110 (GN)
   **Biology: Basic Concepts and Biodiversity** (4) A study of the evolution of the major groups of organisms including the fundamental concepts of biology.
   Effective: Fall 2003

8. BIOL 120 (GN;US;IL)
   **Plants, Places, and People** (3) Useful and dangerous plants; historical (archaeological), cultural (ethnological), and economic (anthropocentric) aspects, including structural and chemical characteristics of botanical importance. Students who have passed BIOL (PPATH;S T S) 424 may not schedule this course.
   Effective: Spring 2008
9. BIOL 129 (GN)
   **Mammalian Anatomy** (4) Anatomy of a mammal, with special reference to that of man. Students who have passed BIOL 421 may not schedule this course.
   Effective: Fall 2003
10. BIOL 141 (GN)
    **Introductory Physiology** (3) Explanation of the normal structure and function of the animal body, with special emphasis on human body systems. Students who have passed BIOL 472 may not schedule this course.
    Effective: Fall 2003
11. CHEM 001 (GN)
    **Molecular Science** (3) Selected concepts and topics designed to give non-science majors an appreciation for how chemistry impacts everyday life. Students who have received credit for CHEM 003, 101, or 110 may not schedule this course.
    Effective: Summer 2007
12. CHEM 110 (GN)
    **Chemical Principles I** (3) Basic concepts and quantitative relations. Students may take only one course for General Education credit from CHEM 110 or CHEM 101. GN To receive Natural Sciences General Education (GN) credit for certain chemistry courses requires both lecture and laboratory courses be taken. These courses are: (CHEM 106 or CHEM 110 or CHEM 110H) and CHEM 111; (CHEM 112 or CHEM 112H) and (CHEM 113 or CHEM 113B). Students may take only one course for General Education credit from CHEM 101 GN or CHEM 110 GN.
    Effective: Fall 2009
    Prerequisite: satisfactory performance on the Chemistry and Math FTCAP tests--i.e. placement beyond the level of CHEM 101 and MATH 022; or CHEM 101 and MATH 022 or MATH 041
13. CHEM 112 (GN)
    **Chemical Principles II** (3) Continuation of CHEM 110, including an introduction to the chemistry of the elements. GN To receive Natural Sciences General Education (GN) credit for certain chemistry courses requires both lecture and laboratory courses be taken. These courses are: (CHEM 106 or CHEM 110 or CHEM 110H) and CHEM 111; (CHEM 112 or CHEM 112H) and (CHEM 113 or CHEM 113B).
    Effective: Spring 2009
    Prerequisite: CHEM 110 or CHEM 106

14. EARTH 100 (GN)
    **Environment Earth** (3) Natural processes and their relationship to anthropogenic influences. General principles of global cycles and the role they play in natural hazards, global warming, ozone depletion, etc.
    Effective: Fall 2004
15. EARTH 101 (GN;US)
    **Natural Disasters: Hollywood vs. Reality** (3) Analysis of the causes and consequences of natural disasters; comparison of popular media portrayal of disasters with perspective from scientific research.
    Effective: Summer 2005
16. EARTH 105 (AAA S 105) (GN;IL)
    **Environments of Africa: Geology and Climate Change** (3) Significant natural features of Africa as related to human endeavor; case studies include the Nile, climate change, and natural resources.
    Effective: Summer 2005
17. EARTH 150 (GN)
    **Dinosaur Extinctions and Other Controversies** (3) Dinosaur extinctions and other major and controversial events in the history of life.
    Effective: Spring 2004
18. EM SC 150 (S T S 150) (GN;IL)
    **Out of the Fiery Furnace** (3) A history of materials, energy and man, with emphasis on their interrelationships. For nontechnical students.
    Effective: Spring 2006
19. ENT 202 (GN)
    **The Insect Connection** (3) An introduction to the diversity of insects and the ways in which they interact with humans and impact our world.
    Effective: Summer 1998
20. GEOG 010 (GN)
    **Physical Geography: An Introduction** (3) Survey and synthesis of processes creating geographical patterns of natural resources, with application of basic environmental processes in resource management.
    Effective: Spring 2006
21. GEOSC 020 (GN)
    **Planet Earth** (3) Nontechnical presentation of earth processes, materials, and landscape. Practicum includes field trips, study of maps, rocks, and dynamic models, introduction to geologic experimentation. (This course includes from one to several field trips for which an additional charge will be made to cover transportation.) This course contains from one to several field trips for which an additional charge will be made to cover transportation.
    Effective: Fall 2003
22. HORT 101 (GN)
    **Horticultural Science** (3) Introduction to horticulture with emphasis on plant domestication, morphology, classification, world food crops, commodities,

gardens, propagation, and agrochemicals.
Effective: Spring 2002

23. METEO 003 (GN)
**Introductory Meteorology** (3) Nontechnical treatment of fundamentals of modern meteorology and the effects of weather and climate. A student who took METEO 002 may take the laboratory part of this course for 1 credit only.
Effective: Spring 2003
24. PHYS 001 (GN)
**The Science of Physics** (3) Historical development and significance of major concepts, with emphasis on the nature of physics and its role in modern life. (For students in non-mathematical fields.)
Effective: Fall 2004
25. PHYS 150 (GN)
**Technical Physics I** (3) Elementary treatment of topics in mechanics, heat, wave motion, and sound leading toward an understanding of technical applications.
Effective: Spring 2007
Prerequisite: 1 1/2 units of algebra. Prerequisite or concurrent: MATH 021 or MATH 081
26. PHYS 151 (GN)
**Technical Physics II** (3) Elementary treatment of topics in electricity, light, and modern physics leading toward an understanding of technical applications.
Effective: Fall 2001
Prerequisite: PHYS 150
27. PHYS 211 (GN)
**General Physics: Mechanics** (4) Calculus-based study of the basic concepts of mechanics: motion, force, Newton's laws, energy, collisions, and rotation.
Effective: Fall 1999
28. PHYS 212 (GN)
**General Physics: Electricity and Magnetism** (4) Calculus-based study of the basic concepts of electricity and magnetism.
Effective: Fall 1999
Prerequisite: MATH 140 PHYS 211
29. PHYS 250 (GN)
**Introductory Physics I** (4) Selected topics in mechanics, heat, and sound.
Effective: Fall 2002
Prerequisite: MATH 022 MATH 026 ; or MATH 040 ; or MATH 041 or satisfactory performance on the mathematics proficiency examination
30. PHYS 251 (GN)
**Introductory Physics II** (4) Selected topics in light, electricity, and magnetism.
Effective: Fall 2002
Prerequisite: PHYS 250

**Social and Behavioral Sciences (GS)**

1. ANTH 001 (GS;US;IL)
   **Introductory Anthropology** (3) Prehistoric and traditional peoples and cultures; traditional customs and institutions compared with those of modern society.
   Effective: Summer 2005
2. ANTH 045 (GS;US;IL)
   **Cultural Anthropology** (3) Beginnings of human culture; economic life, society, government, religion, and art among traditional peoples.
   Effective: Summer 2005
3. B A 100 (GS)
   **Introduction to Business** (3) A comprehensive view of the contemporary environment of business.
   Effective: Summer 2008
4. CAS 202 (GS)
   **Introduction to Communication Theory** (3) Survey of human communication studies in relational, interpersonal, group, organization, intercultural, health, technology and communication systems.
   Effective: Spring 2003
5. CAS 203 (GS)
   **Interpersonal Communication** (3) Exploration of competent communication and the skills necessary to manage personal and professional relationships.
   Effective: Fall 2003
6. CIVCM 211 (CAS 222, AYFCE 211) (GS;US;IL)
   **Foundations: Civic and Community Engagement** (3) Conceptual foundations of public scholarship and orientation to contemporary themes and issues in civic and community engagement.
   Effective: Spring 2011
7. COMM 100 (GS)
   **The Mass Media and Society** (3) Mass communications in the United States: organization, role, content, and effects of newspapers, magazines, television, radio, books, and films.
   Effective: Spring 2002
8. CRIMJ 100 (CRIM 100) (GS)
   **Introduction to Criminal Justice** (3) Overview of the criminal justice system, including legal foundations, processing and correction of offenders, extent and types of crime, victims.
   Effective: Spring 2008
9. ECON 102 (GS)
   **Introductory Microeconomic Analysis and Policy** (3) Methods of economic analysis and their use; price determination; theory of the firm; distribution.
   Effective: Spring 2011

10. ECON 104 (GS)
    **Introductory Macroeconomic Analysis and Policy** (3) National income measurement; aggregate economic models; money and income; policy problems.
    Effective: Spring 2011
11. EDTHP 115A (GS;US)
    **Competing Rights: Issues in American Education** (3) An examination of educational issues relevant to democratic citizenship; emphasis is on understanding the relationship among politics, schools, and society.
    Effective: Spring 2006
12. GEOG 020 (GS;US;IL)
    **Human Geography: An Introduction** (3) Spatial perspective on human societies in a modernizing world; regional examples; use of space and environmental resources; elements of geographic planning.
    Effective: Summer 2005
13. HD FS 129 (GS)
    **Introduction to Human Development and Family Studies** (3) Introduction to psychosocial and family development at all stages of the individual and family life cycle. Student may take only one course for General Education credits from HD FS 129 GS or SOC 030 GS.
    Effective: Fall 2004
14. HD FS 229 (GS)
    **Infant and Child Development** (3) Theory, research, and methods of social/behavioral/biological sciences related to developmental processes and intervention during infancy and childhood.
    Effective: Fall 2004
15. HD FS 239 (GS)
    **Adolescent Development** (3) Social, behavioral, and biological development and intervention throughout adolescence.
    Effective: Spring 2002
16. HD FS 249 (GS)
    **Adult Development and Aging** (3) Physiological, psychological, and social development and intervention from young adulthood through old age.
    Effective: Spring 2003
17. IST 110 (GS)
    **Information, People and Technology** (3) The use, analysis and design of information systems and technologies to organize, coordinate, and inform human enterprises.
    Effective: Summer 2005
18. PL SC 001 (GS)
    **Introduction to American National Government** (3) Introduction to development and nature of American political culture, constitutional/structural arrangements, electoral/policy processes; sources of conflict and consensus.
    Effective: Spring 2002

19. PL SC 003 (GS;IL)
    **Introduction to Comparative Politics** (3) Introduction to study of comparative government and politics: normative/ empirical theories; government functions in modern societies; representative structures and processes.
    Effective: Fall 2007
20. PL SC 014 (GS;IL)
    **International Relations** (3) Characteristics of modern nation-states and forces governing their international relations; nationalism; imperialism; diplomacy; current problems of war and peace. Credit will not be given for both this course and INT U 200.
    Effective: Fall 2007
21. PSYCH 100 (GS)
    **Introductory Psychology** (3) Introduction to general psychology; principles of human behavior and their applications.
    Effective: Spring 2007
22. PSYCH 212 (GS)
    **Introduction to Developmental Psychology** (3) Developmental principles; physical growth; linguistic, intellectual, emotional, and social development from infancy to maturity.
    Effective: Spring 2007
    Prerequisite: PSYCH 100
23. PSYCH 221 (GS)
    **Introduction to Social Psychology** (3) Research and theory on topics including interpersonal attraction, aggression, helping, attitudes, attribution, cooperation, competition, and groups, from a psychological perspective.
    Effective: Spring 2007
    Prerequisite: PSYCH 100
24. PSYCH 231 (GS;US)
    **Introduction to the Psychology of Gender** (3) Psychological study of gender in historical and contemporary perspective. Role of gender in development, self-concept, social relations, and mental health.
    Effective: Spring 2007
    Prerequisite: PSYCH 100
25. PSYCH 232 (GS;US;IL)
    **Cross-Cultural Psychology** (3) This course examines how ethnic and cultural background influences patterns of human thought and behavior.
    Effective: Spring 2007
    Prerequisite: PSYCH 100
26. PSYCH 238 (GS)
    **Introduction to Personality Psychology** (3) Past and recent conceptualizations of key issues and root ideas of personality psychology.
    Effective: Spring 2007
    Prerequisite: PSYCH 100

27. S T S 245 (GS;IL)
    **Globalization, Technology, and Ethics** (3) An investigation of technology and ethics in the globalized world from contemporary, socio-cultural, and historical perspectives.
    Effective: Summer 2008
28. SOC 001 (GS)
    **Introductory Sociology** (3) The nature and characteristics of human societies and social life. Students may take only one course for General Education credit from SOC 001 GS or R SOC 011 GS.
    Effective: Spring 2003
29. SOC 005 (GS)
    **Social Problems** (3) Current social problems such as economic, racial, and gender inequalities; social deviance and crime; population, environmental, energy, and health problems.
    Effective: Spring 2003
30. WMNST 001 (GS;US;IL)
    **Introduction to Women's Studies** (3) Interdisciplinary consideration of the scholarly theories and research pertaining to women's experiences and women's status in contemporary American society.
    Effective: Summer 2005

**Writing/Speaking (GWS)**

1. CAS 100 (GWS)
   **Effective Speech** (3) Introduction to speech communication: formal speaking, group discussion, analysis and evaluation of messages.
   Effective: Fall 2003
2. CAS 100A (GWS)
   **Effective Speech** (3) Principles of communication, implemented through presentation of speeches, with some attention to group discussion and message evaluation.
   Effective: Fall 2003
3. CAS 100B (GWS)
   **Effective Speech** (3) Principles of communication, implemented through group problem solving, with some attention to formal speaking and message evaluation.
   Effective: Fall 2003
4. CAS 100C (GWS)
   **Effective Speech** (3) Principles of communication, implemented through analysis and evaluation of messages, with some attention to formal speaking and group discussion.
   Effective: Fall 2003
5. ENGL 015 (GWS)
   **Rhetoric and Composition** (3) Instruction and practice in writing expository prose that shows sensitivity to audience and purpose.

Effective: Fall 1991
Prerequisite: ENGL 004 or satisfactory performance on the English proficiency examination

6. ENGL 202B (GWS)
   **Effective Writing: Writing in the Humanities** (3) Instruction in writing persuasive arguments about significant issues in the humanities. (A student may take only one course for credit from ENGL 202A, 202B, 202C, and 202D.)
   Effective: Summer 1996
   Prerequisite: ENGL 015 or ENGL 030 ; fourth-semester standing
7. ENGL 202C (GWS)
   **Effective Writing: Technical Writing** (3) Writing for students in scientific and technical disciplines. (A student may take only one course for credit from ENGL 202A, 202B, 202C, and 202D.)
   Effective: Summer 1996
   Prerequisite: ENGL 015 or ENGL 030 ; fourth-semester standing

# Appendix K

## Sample Email Requesting Participation Sent To Faculty

**Sample Email Requesting Participation Sent To Faculty**

I am sending this email on behalf of Deborah Erie, Director of Enrollment Management at Penn State Brandywine. Deborah Erie is a doctoral student at the University of Nebraska – Lincoln.
She is conducting a qualitative research project about the perceptions of faculty who teach general education courses. She is focusing on faculty at Penn State campuses, and she has requested that I send this email to you.
You have been identified as a fulltime faculty member who has taught a general education course during the 2011-2012 or 2012-2013 academic year. I am writing this e-mail on her behalf to ask for your help in this research project.

Please contact Ms. Erie if you are interested in participating in this study.

Deborah Erie
Director of Enrollment Management
Penn State Brandywine
dje4@psu.edu
610-892-1201 (work)
610-675-4861 (cell)

If you agree to participate, she will arrange a convenient location for an interview that will take approximately 60 minutes of your time.
The interview can take place in your office or another location at your convenience.
She is interested in examining your experiences in teaching general education courses at Penn State and your teaching processes and methods. Specifically, she is interested in how general education courses lead to the ethical reasoning development in students and your perspective on this.
The interview will be recorded, and the recordings will be erased after they are transcribed. No identifying information will be used in any materials created from these interviews. You will have the opportunity to review the transcripts and to request a follow up interview if needed. The information obtained in this study will be published in her dissertation, with the possibility that the results will also be published a professional journal or presented at professional conferences. This research has received IRB approval from both the University of Nebraska-Lincoln and The Pennsylvania State University (Penn State).
You are free to decide not to participate in this study or to withdraw at any time without adversely affecting our relationship or your relationship with Penn State. Your decision will not result in any loss of benefits to which you are otherwise entitled.

There may be no direct benefit to you if you participate in this research, however you will be contributing to the improvement of educational techniques that may impact general education at Penn State.

Please indicate whether you are interested in participating in this research by contacting Deborah Erie by email or phone at the contact information listed below.

Deborah Erie
Director of Enrollment Management
Penn State Brandywine
dje4@psu.edu
610-892-1201 (work)
610-675-4861 (cell)

Dr. Richard Hoover, Doctoral Advisor
University of Nebraska, Lincoln
119 Teachers College Hall
Lincoln, NE 68588-0360
402-472-3058
Rhoover2@unl.edu

# Appendix L

## Faculty Informed Consent Form Sample

**Faculty Informed Consent Form Sample**

**Informed Consent Form**
for

**Title of Project: The Role of General Education in the Development of Ethical Reasoning In College Students: A Qualitative Study on the Faculty Perspective**

**UNL IRB # :13125**
**PSU IRB #: 41749**

**Principal Investigator:** Deborah J. Erie
dje4@psu.edu or debjoerie@gmail.com
610-892-1201 (work) or 610-675-4861 (cell)
Penn State Brandywine
25 Yearsley Mill Road
Media, PA 19063

**Advisor:** Dr. Richard Hoover
University of Nebraska, Lincoln
119 Teachers College Hall,
Lincoln, NE 68588-0360
402-472-3058
Rhoover2@unl.edu

**Purpose of the Study:** The purpose of this research is to explore the role of the faculty who teach general education courses at Penn State University in the ethical reasoning development of college students.

**Procedures to be followed:** You will be asked to participate in an in-depth interview. The interview will be digitally recorded and notes will be taken during the interview

by the interviewer. The interviews will take place at a location identified by the participant. An independent transcriptionist may be used. Participants will have the opportunity to review and approve all transcripts. Faculty participants will also be asked to share materials such as assignments and tests used in the course(s) being described in the interview. The researcher is also interested in observing one class meeting of a general education course being taught by the participant in the study. The researcher will sit in the back of the classroom and may be taking notes. The observation will be used to further provide insights into the educational practice of the faculty in the course. A follow-up meeting may be scheduled to further explore concepts uncovered by the additional documentation. Confidentiality and security of data will be maintained at all times.

**Duration/Time:** The in-depth interview will take between one and two hours. A follow-up meeting of no more than 30 minutes may be required.

**Benefits:** There are no direct benefits for the participants.

**Risks and/or Discomforts:** There are no known risks or discomforts associated with this research.

**Statement of Confidentiality:** Your participation in this research is confidential. The data will be stored and secured at my home office and my work office in a locked file. Any computer files will be contained in a password-protected file. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared. Any information obtained during this study which could identify you will be kept strictly confidential. The data will be stored in a locked cabinet in the investigator's office and will only be seen by the investigator during the study and for three years after the study is complete. The audiotapes will be erased after transcription.

**Right to Ask Questions:** You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may call the investigator at any time, office phone, (610) 892-1201, or after hours (610) 675-4861. Please contact the investigator:

- if you want to voice concerns or complaints about the research
- in the event of a research related injury.

Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 for the following reasons:

- you wish to talk to someone other than the research staff to obtain answers to questions about your rights as a research participant
- to voice concerns or complaints about the research
- to provide input concerning the research process
- in the event the study staff could not be reached.

**Voluntary Participation:** Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. You are free to decide to participate in this study. You can also withdraw at any time without affecting your relationship with the researchers or the University of Nebraska-Lincoln or Penn State University.
□ I give permission to have the interview audio recorded. I understand that the recording will be transcribed for research purposes.

You must be 18 years of age or older to consent to take part in this research study. If you agree to take part in this research study and the information outlined above, please sign your name and indicate the date below.
You will be given a copy of this form for your records.

| _____ | _____ |
| --- | --- |
| Participant Signature | Date |
| _____ | _____ |
| Person Obtaining Consent | Date |

# Appendix M

## Confidentiality Agreement Transcription Services

**Confidentiality Agreement**
**Transcription Services**

I, _____, transcriptionist, agree to maintain full confidentiality in regards to any and all audiotapes and documentation received from Deborah Erie related to her doctoral study on THE ROLE OF GENERAL EDUCATION IN THE DEVELOPMENT OF ETHICAL REASONING IN COLLEGE STUDENTS: A QUALITATIVE STUDY ON THE FACULTY PERSPECTIVE.
Furthermore, I agree:

---

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents;

2. To not make copies of any audiotapes or computerized files of the transcribed interview texts, unless specifically requested to do so by Deborah Erie;

3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession;

4. To return all audiotapes and study-related documents to Deborah Erie in a complete and timely manner.

5. To delete all electronic files containing study-related documents from my computer hard drive and any backup devices.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Transcriber's name (printed) _____

Transcriber's signature _____ Date _____

# Appendix N

## Transcript Verification Form

**Transcript Verification Form**

Project Title: THE ROLE OF GENERAL EDUCATION IN THE DEVELOPMENT OF ETHICAL REASONING IN COLLEGE STUDENTS: A QUALITATIVE STUDY ON THE FACULTY PERSPECTIVE

---

As we discussed I would like to offer you this opportunity to review the transcript of our recent conversation concerning the general education courses that you teach.

There is no need to worry about editing for grammar but please note any errors you find and add additional comments that you think will provide additional clarity.

Please mark in the appropriate space below to indicate your level of approval for this part of the project.

_____ I approve of the interview transcript without reading it and have no additional comments to add.

_____ I have read the interview transcript and approve it without changes.

_____ I have read the interview transcript and approve it with the noted changes and additional comments.

_____ I do not approve of the interview transcript.

_____ _____

Signature of Participant Printed Name of Participant

_____

Date

PSU USER ID if returned electronically _____

Please return this form and the transcript (only if changes were made) via return email or print and return to:

Deborah Erie, Penn State Brandywine, 130 Vairo Library, 25 Yearsley Mill Road, Media, PA 19063.

Thank you again for your time and participation.

Deborah Erie, Doctoral Candidate
Penn State Brandywine, 25 Yearsley Mill Road, Media, PA 19063
610-892-1201(work), 610-675-4861 (cell), dje4@psu.edu

Advisor: Dr. Richard Hoover, Doctoral Advisor
University of Nebraska, Lincoln
119 Teachers College Hall, Lincoln, NE 68588-0360
402-472-3058, Rhoover2@unl.edu

# Appendix O

## Sample Email Sent To Students

**Sample Email Sent To Students**

As the campus registrar, I am forwarding this email on behalf of Deborah Erie, Director of Enrollment Management at Penn State Brandywine. She is a doctoral student at the University of Nebraska – Lincoln and is conducting a qualitative research project about the perceptions of faculty who general education courses. She is focusing on faculty teaching at Penn State campuses, and she is asking for your help in this research project. If you agree to participate she will arrange a convenient location for an interview that will take approximately 30 minutes of your time.
The interview will take place in Room ____ on campus.
She is interested in examining your experiences in your general education course taught by _____ Specifically, she is interested in how general education courses lead to the ethical reasoning development in students and your perspective on this.
The interview will be recorded, and the recordings will be erased after they are transcribed. No identifying information will be used in any materials created from these interviews. The information obtained in this study will be published in her dissertation, with the possibility that the results will also be published in professional journals or presented at professional conferences. This research has received IRB approval from both the University of Nebraska-Lincoln and The Pennsylvania State University (Penn State).

You are free to decide not to participate in this study or to withdraw at any time without adversely affecting our relationship or your relationship with Penn State. Your decision will not result in any loss of benefits to which you are otherwise entitled. Faculty <u>will not</u> be informed of your participation.
There may be no direct benefit to you if you participate in this research, however you will be contributing to the improvement of educational techniques that may impact general education at Penn State.
Please indicate whether you are interested in participating in this research by contacting Deborah Erie by email or phone at the contact information listed below.
Sincerely,

Campus Registrar

Deborah Erie
Director of Enrollment Management
Penn State Brandywine
dje4@psu.edu
610-892-1201 (work)
610-675-4861 (cell)

Dr. Richard Hoover, Doctoral Advisor
University of Nebraska, Lincoln
119 Teachers College Hall
Lincoln, NE 68588-0360

# Appendix P

## Student Informed Consent Form

**Student Informed Consent Form**

***Student Participant Informed Consent Form***

UNL IRB #: 13125
PSU IRB #: 41749

**Title of Project: The Role of General Education in the Development of Ethical Reasoning In College Students: A Qualitative Study on the Faculty Perspective**

**Purpose of Study:** The purpose of this research is to explore the role of the faculty who teach general education courses at Penn State University in the ethical reasoning development of college students. You are invited to participate in this study because you are a Penn State student who has taken at least one general education course at Penn State.

**Procedures:** You will be asked to meet with the researcher for approximately 20 minutes at a time and location on campus that is convenient for you and will provide enough privacy for the interview. The interview will ask you questions about your experience in a particular general education course that you have completed at Penn State. The interview will be digitally recorded and notes will be taken during the interview by the interviewer. An independent transcriptionist may be used. Participants will have the opportunity to review and approve all transcripts.

**Benefits:** There are no direct benefits to you as a research participant.

**Risks and/or Discomforts:** There are no known risks or discomforts associated with this research.

**Confidentiality:** Any information obtained during this study which could identify you will be kept strictly confidential. The data will be stored in a locked cabinet in the investigator's office and will only be seen by the investigator during the study and for

3 years after the study is complete. The information obtained in this study may be published in scientific journals or presented at scientific meetings but the data will be reported as aggregated data.

**Compensation:** There will be no compensation for participating in this project.

**Opportunity to Ask Questions:** You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

**Freedom to Withdraw:** Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the researchers or the University of Nebraska-Lincoln or Penn State University, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

**Consent, Right to Receive a Copy:** You are voluntarily making a decision whether or not to participate in this research study. You must be 18 years of age or older to consent to take part in this research study. Your signature certifies that you have decided to participate having read and understood the information presented. You will be given a copy of this consent form to keep.

□ I give permission to have the interview audio recorded. I understand that the recording will be transcribed for research purposes.

**Signature of Participant:**

| _____ | _____ |
|---|---|
| Participant Signature | Date |
| _____ | _____ |
| Person Obtaining Consent | Date |

**Name and Phone number of investigator(s):**

Deborah Erie, Principal Investigator Office: (610) 892-1200
Richard Hoover, Ph.D., Secondary Investigator Office: (402) 472-3058

# Appendix Q

## Sample Coded Faculty Interview

DE: Could you describe for me overall how you determine the content of the course?

NAN: It's hard because I have been doing it for so long to think about how I originally determined versus how I determine. I certainly update it from year to year. When I started teaching it here, I thought about – I looked at a lot of different social problems textbooks, looked at the problems that they had in there which were the ones that I – what were the ones that are being written about the most? And then from there, I thought I picked some of them, I don't talk about everything that's in the textbook the ones that I thought were most important and the ones that I thought were most relevant to the students. And the ones that I thought were not covered by other courses. Does that answer the question?

Comment [A1]: SOCIAL PROBLEMS/SOCIAL CONTEXTY

Comment [DJE42]: RELEVANCE

Comment [DJE43]: Not covered by other courses

DE: Could you describe the classroom environment for me?

NAN: Sure. It's primarily a lecture class although there is a lot of interaction. I don't just lecture or talk for 75 minutes and have them sit there. There is a lot of back and forth discussion during the lecture. They do do some group work when we read the other book. I give them discussion questions in advance that they have on Angel and they look at those questions and they break them up into groups to answer the questions. Each group is assigned a couple of questions and then we talk about the questions as a group. So there is a section of the course that is a little bit more discussion oriented. But it is primarily lecture.

Comment [DJE44]: INTERACTION

Comment [A5]: DISCUSSION, questions and answers

Comment [DJE46]: DISCUSSION

DE: What kind of assignments do you require of the students?

NAN: In general, I have them do.... They have three exams. None of them are cumulative each exam covers a section of the course. They are multiple choice, true, false, matching and then short answer. I am grading them right now. And then they have reading response papers. This semester they will have four of them. They are short essays, like two page essays where I give them a specific question based on a particular reading and they're supposed to answer content based questions but then also reflection questions. Then I encourage them to relate it to their own experience in some way or to kind of go beyond....

Comment [A7]: READING RESPONSE PAPERS-REFLECTION PAPERS

Comment [DJE48]: REFLECTION

Comment [DJE49]: RELATE

DE: What are your anticipated learning outcomes for your course?

NAN: It all sounds like, I don't know, like what everybody says, but it's true. Like I do want them to think more critically about the world and about.... I guess the main outcome is to understand the difference between system blamed theories versus person blamed theories. Sociologists are looking at how social structure affects interaction and how it affects behavior and I want them to understand that people don't just act as individuals with, you know, no external forces that there's a lot of things going on beyond what we can control that affect our behavior. So if somebody's on welfare it's not because, not necessarily because they are lazy and not usually because they are lazy that there are other economic factors. So that's my main goal. You know, making sure that they understand these broader social forces and how they impact individuals and how they impact them.....you know...

Comment [A10]: THINK MORE CRITICALLY ABOUT THE WORLD

Comment [DJE411]: SOCIAL FORCES

# Appendix R

## Faculty Interview Codes and Themes

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| REFLECTION | x | | U | | | |
| GROUP PROJECTS | x | | | | | |
| CURRENT ISSUES | x | | | | | |
| CRITICAL THINKING | x | | | | | |
| COMMUNICATION | x | | | | | |
| GOALS OF GENERAL ED | | x | | | x | |
| ETHICAL REASONING | | | I | | | x |
| ACADEMIC INTEGRITY | | | | | | x |
| CULTURE OF HONESTY | | | | | | x |
| INFLUENCE ON STUDENTS | x | | U | | | |
| ENGAGED | x | | U | | | |
| PROCESS | x | x | | | | |
| ETHICAL LEARNING | | | I | | | x |

238

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| LIVE A GOOD LIFE | | | I | | | x |
| RELEVANCE | | | i | | | |
| CURRENT ISSUES | | | i/u | | | |
| ENGAGEMENT | x | | u | | | |
| MINUTE PAPER ACTIVIY | x | | u | | | |
| INDIVIDUAL RESPONSIBILITY | | | i | | | x |
| JOURNAL WRITING | x | | u | | | |
| QUESTIONING | x | | u | | | |
| ENGAGING | x | | u | | | |
| THINKING | x | | u | | | |
| OTHER PEOPLE'S VIEWS | | x | i | | x | x |
| BASE GENED ON PAST EXPERIENCES | | | | | x | |
| ETHICAL AUTONOMY | | | i | | | x |

239

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| ONGOING QUESTIONING | x | | u | | | |
| ETHICAL GROUNDING | | | i | | | x |
| CRITICAL READING | x | x | u | | | |
| INTERCULTURAL COMMUNICATION | | x | u | | x | |
| TEACH STUDENTS HOW TO THINK | x | | u | | | |
| INTERRELATING CONCEPTS | x | | u | | | |
| LEARNING TO THINK | x | x | u | | | |
| TYING THINGS TOGETHER | x | | u | | | |
| WORK TOGETHER, HELP EACH OTHER | x | | | | | |
| MAKE CONNECTIONS | | x | u | | | |
| COOPERATION | | x | u | | | |
| DISCOMFORT WITH THE WORD ETHICS | | | | x | | |
| ETHICS IN RESEARCH - DON'T FUDGE THE DATA | | | i | | | x |

240

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| PERSONAL TRUSTWORTHINESS | | | i | | | x |
| PERSONAL RELIABILITY | | | i | | | x |
| HONOR CODE | | | i | | | x |
| HONEST & ETHICAL | | | i | | | x |
| DISCOMFORTWITH ETHICS | | | | x | | x |
| WHAT IS GENERAL EDUCATION | | | | | x | |
| FACULTY BUY-IN | | x | | | | |
| ETHICS IN THE CURRICULUM | | x | i | | | x |
| ETHICS ACROSS DISCIPLINES | | | i | | | x |
| PASSIONATE ABOUT DOING THE RIGHT THING | | | i | | | x |
| DECISION MAKING FOR THE GOOD OF THE PEOPLE | x | x | i | | | x |
| LEARNING OUTCOMES | x | | | | | |

241

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| PROVIDE PRINCIPLES TO THEIR OWN LIFE | | | i | | | x |
| WRITING PROMPTS | x | | u | | | |
| DIFFERENT VIEW OF ETHICS | x | | i | x | | x |
| DISCUSSION ABOUT ETHICS | x | | i | | | x |
| REFLECTIONS | x | x | u | | | |
| DOGMATIC MESSAGES DON'T HELP THEM THINK | x | | u | | | x |
| INTENTIONAL IS THE VALUABLE WORD | | | i | | | x |
| GENEDS GIVE EVERYONE EXPOSURE TO IDEAS | | | u | | x | |
| AVOID RIGIDNESS OF REQUIREMENTS TO HAVE ETHICS IN THE CURRICULUM | x | | | | x | x |
| INFUSION BECOMES A NORM RATHER THAN A LESSON | | | | | | x |
| MAKE CHEATING NOT NORMATIVE | | | | | | x |
| STUDENTS POLICE THEMSELVES IS PREFERABLE | | | | | | x |

242

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| DISCUSSION BASED | x | | u | | | |
| DIFFERENCES, DIVERSITY, INEQUALITY | | | u | | | x |
| RELATE TO THEIR OWN EXPERIENCES | x | | i | | | x |
| GOALS OF GENED TO HELP WITH THEIR PERSONAL LIVES | | x | u | | x | |
| DISCUSS ISSUES WITH PEOPLE OF DIFFERING VIEWS | x | | u | | | |
| INTRODUCTORY NATURE OF GENED COURSES | | | | | x | |
| IF YOU ARE CRITICAL, RATIONAL HUMAN BEING, YOU MAKE GOOD ETHICAL DECISIONS | | x | i | | | x |
| ADDRESS FUNDAMENTAL QUESTIONS | x | | u | | | |
| CHALLENGE STUDENTS TO THINK ABOUT THE TOUGH QUESTIONS | x | | u | | | |

243

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| HUMAN NATURE AND HUMAN QUESTIONS | x | | i | | | x |
| CAN TEACH ETHICS AT A PUBLIC INSTITUTION AND KEEP RELIGION OUT OF IT | x | x | i | x | x | x |
| VALUE NEUTRAL NOT POSSIBLE | x | | i | x | | x |
| CHANGED THINKING AS A RESULT OF THE CLASS | x | | i | | | x |
| CALL TO ACTION | x | | u | | | |
| FORM INDEPENDENT IDEOLOGIES | | | i | | | x |
| SPEAKING ABOUT ETHICS AND ETHICAL CONSIDERATIONS IS INTEGRAL TO THE CURRICULUM | x | | i | | | x |
| COLLEGE FOSTERS ETHICAL DEVELOPMENT | | x | i | | | x |
| POSSIBLE RESISTANCE FROM FACULTY - NOT MY ROLE | | | | x | | |

244

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| PUBLIC UNIVERSITY MAKES YOU HAVE MORE OF A RESPONSIBILITY | | | i | x | | x |
| RELATE CONCEPTS TO EVERYDAY LIFE | x | | u | | | |
| NOBLESSE OBLIGE | | | i | | x | x |
| LIVING A GOOD LIFE | | | | | x | |
| COMMUNICATION SKILLS | x | x | u | | | |
| ETHICS AND MORALITY | | | i | | | x |
| LOOK AT THINGS FROM VARIOUS PERSPECTIVES | x | | u | | x | |
| GET PHILOSOPHICAL BUT DON'T GIVE MY OPINION | x | | | x | | |
| BRING ISSUES FORWARD TO THINK ABOUT | x | | u | | | |
| THINK ABOUT PERSONAL MORALS AND ETHICS | x | | i | | | x |

245

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| WHAT'S RIGHT OR WRONG DOESN'T COME FROM ONE DISCIPLINE | x | x | i | x | | x |
| WHAT'S IMPORTANT ARE THE QUESTIONS | x | | u | | | |
| COURSE IN ETHICS OR MORAL PHILOSOPHY | x | | i | | | x |
| IDEALS ARE DIFFERENT THAN REALITY | | | | | | |
| FALL FROM GRACE PREVENTED BY EXAMINING OUR CONSCIENCE | | | | | | x |
| PENN STATE PRINICIPLES | | x | i | | | x |
| FIND ISSUES WITHIN THE CURRICULUM AND RAISE THEM | x | | u | | | |
| IDENTIFY ETHICAL ISSUES IN THEIR PROFESSION | x | | i | | | x |
| PROFESSIONAL RESPONSIBILITY & ETHICS | x | | x | x | | x |
| CASE STUDIES | x | | i/u | | | x |
| ACCREDITATION REQUIREMENTS | | | | | | |

246

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| ETHICS OF TECHNOLOGY | x | | i | | | x |
| VALUES | | | | | | x |
| DISCUSSION FORUMS | x | | u | | | |
| ENGAGE WITH MATERIAL | x | | u | | | |
| HISTORICAL/SOCIAL CONTEXT OF ETHICS | x | x | i | | | x |
| OPEN-ENDED QUESTIONS | x | | u | | | |
| CLASS EXERCISES | x | | u | | | |
| PROJECTS | x | | u | | | |
| CLASS DISCUSSION & PARTICIPATION | x | | u | | | |
| CONSCIOUS EFFORT | x | | i | | | x |
| CREATE GOOD CITIZENS | | x | i | | x | x |
| RECOGNIZE ETHICAL SITUATIONS/DILEMMAS | | x | i | | | x |
| UNDERSTAND ETHICAL THEORY | x | | i | | | x |

247

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| CREATE GOOD CITIZENS | | | i | | x | x |
| SPECIFIC ETHIC COURSES AND GENERALIZED | | x | i | | x | x |
| ETHICS REQUIREMENTS FOR ACCREDITATION | | | i | | | x |
| RIGHT & WRONG | | | i | | | x |
| MORALITY & Immorality | | | i | | | x |
| JUSTICE & INJUSTICE | | | i | | | x |
| TALK ABOUT CORE HUMAN VALUES | | | i | | | x |
| CHOICE OF TEXTS IS CRITICAL | x | | u | | | |
| HONE IN ON CONTROVERSIAL ISSUES | x | | i | | | x |
| THE FACT THAT GENED IS A SURVEY COURSE DICTATES HOW COURSE IS TAUGHT | | | | | x | |
| CULTIVATE ABETTER, A MORE NOBLE SOCIETY | | | u | | x | |

248

| **THEMES** | CONTENT/PEDAGOGY | KNOWLEDGE DOMAINS | INFLUENCE | ATTITUDE | GENED GOALS | ETHICAL DECISIONMAKING |
|---|---|---|---|---|---|---|
| | PEDAGOGY | RELATIONSHIP TO GENERAL EDUCATION | INTENTIONAL VS UNINTENTIONAL | PERCEPTION OF OTHER FACULTY | DEFINITION/PURPOSE OF GENERAL EDUCATION | ETHICAL CONTENT/ETHICAL REASONING |
| **CODES** | | | | | | |
| WHAT IS MY PROPER RELATIONSHIP WITH OTHERS | | | i | | | x |
| LEARNING TO COMMIT TO VALUES | | | i | | | x |
| UNDERLINE WHAT'S ALREADY THERE | x | | i | | | x |
| ENGAGE STUDENTS IN ETHICAL CONTEMPLATION | x | | i | | | X |
| BLOOM'S TAXONOMY | x | | | | x | |

249

# Appendix S

## Classroom Observation Protocol

**Classroom Observation Protocol**

**Campus: _____ Teacher ID # _____**

**Course Name and Number: _____GenEd Designation(s): _____**

**Lesson Topic:**

**_____**

**Number of students in class: _____**

**Observer Name: _____ Date: _____**

| Not Observed the Lesson | Somewhat Characterizes the Lesson | | | | Characterizes |
|---|---|---|---|---|---|
| **N/O** | **1** | **2** | **3** | **4** | **5** |

1. **This lesson encouraged students to seek and value various modes of investigation or problem solving.**

(Focus: Habits of Mind)

**Teacher:**
Presented open-ended questions
Encouraged discussion of alternative explanations
Presented inquiry opportunities for students
Provided alternative learning strategies

**Students:**
Discussed problem-solving strategies
Posed questions and relevant means for investigating
Shared ideas about investigations

**N/0 1 2 3 4 5**
**Additional Observations:**

**2. Teacher encouraged students to be reflective about their learning.**
(Focus: Metacognition – students' thinking about their own thinking)

**Teacher:**
Encouraged students to explain their understanding of concepts
Encouraged students to explain in own words both what and how they learned
Routinely asked for student input and questions

Discussed what they understood from the class and how they learned it
Identified anything unclear to them
Reflected on and evaluated their own progress toward understanding

**Students:**

**N/0 1 2 3 4 5**

**Additional Observations:**

**3. Interactions reflected collaborative working relationships and productive discourse among students and between teacher/instructor and students.**
(Focus: Student discourse and collaboration)

**Teacher:**
Organized students for group work
Interacted with small groups

Provided clear outcomes for group

**Students:**

Worked collaboratively or cooperatively to accomplish work relevant to task

Exchanged ideas related to lesson with peers and teacher

**N/0 1 2 3 4 5**

**Additional Observations:**

**4. Intellectual rigor, constructive criticism, and the challenging of ideas were valued.**
(Focus: Rigorously challenged ideas)

**Teacher:**
Encouraged input and challenged students' ideas
Was non-judgmental of student opinions
Solicited alternative explanations

Provided evidence-based arguments
Listened critically to others' explanations
Discussed/Challenged others' explanations

**Students:**

**N/0 1 2 3 4 5**

**Additional Observations:**

**5. The instructional strategies and activities probed students' existing knowledge and preconceptions.**
(Focus: Student preconceptions and misconceptions)

**Teacher:**
Pre-assessed students for their thinking and knowledge
Helped students confront and/or build on their ideas
Refocused lesson based on student ideas to meet needs

**Students:**
Expressed ideas even when incorrect or different from the ideas of other students
Responded to the ideas of other students

**N/0 1 2 3 4 5**

**Additional Observations:**

**6. The lesson promoted strongly coherent conceptual understanding in the context of clear learning goals.** (Focus: Conceptual thinking)

| **Teacher:** | **Students:** |
|---|---|
| Asked higher level questions | Asked and answered higher level questions |
| Encouraged students to extend concepts and skills | Related subordinate ideas to broader concept |
| Related integral ideas to broader concepts | |

**N/0 1 2 3 4 5**

**Additional Observations:**

**7. Students were encouraged to generate conjectures, alternative solution strategies, and ways of interpreting evidence.**
(Focus: Divergent thinking)

| **Teacher:** | **Students:** |
|---|---|
| Accepted multiple responses to problem-solving situations | Generated conjectures and alternate interpretations |
| Provided example evidence for student interpretation | Critiqued alternate solution strategies of teacher and peers |
| Encouraged students to challenge the text as well as each other | |

**N/0 1 2 3 4 5**

**Additional Observations:**

**8. Appropriate connections were made between content and other curricular areas.**

| **Teacher:** | **Students:** |
|---|---|
| Integrated content with other curricular areas | Made connections with other content areas |
| Applied content to real-world situations | Made connections between content and personal life |

**N/0 1 2 3 4 5**

**Additional Observations:**

**9. Were any opportunities offered for ethical reasoning?**

| **Teacher:** | **Students:** |
|---|---|
| Presented scenarios that provided opportunities for students to reflect on ethical issues | Reflected on their values |
| Asked students to reflect on their values | |

**Additional Observations:**

*Adapted from Oregon Teacher Observation Protocol, L. Flick, P. Morrell, C. Wainwright ( 2004)*
*http://ret.fsu.edu/Files/Tools/Appendix.C.pdf*

# Appendix T

## Independent Auditor Report

PENNSTATE
Brandywine
OFFICE OF STUDENT AFFAIRS

Penn State Brandywine
25 Yearsley Mill Road
Media, PA 19063

Telephone: 610-892-1270
610-892-1279
Fax Number: 610-892-1358
bw-StuAffairs@psu.edu

**External Audit Attestation**
**Matthew R. Shupp, Ed.D., NCC, DCC**
**Director of Student Affairs, Penn State Brandywine**
**Adjunct Faculty, Shippensburg University of Pennsylvania**
**Affiliate Faculty, Widener University**

Deborah J. Erie asked me to perform an audit of her qualitative design dissertation study, entitled "The Role of General Education in the Development of Ethical Reasoning in College Students: A Qualitative Study on the Faculty Perspective", to determine the extent to which the study methods and interpretation of the data are trustworthy.

As part of this audit, I had the opportunity to review the following:

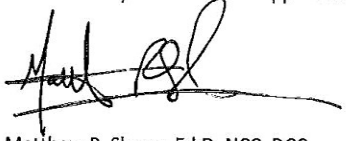
- The completed research paper (Chapters 1-3), paying particular attention to Chapter three
- The original verbatim transcripts of the faculty interviews for the study (N=16)
- Copies of the syllabi from the interviewed faculty
- The qualitative data and codes used in the interpretation of the data
- The original verbatim transcripts of the student interviews for the study (N=21)
- The original questions that guided the student interviews

In addition to the review of the data, research questions, and interview questions, Deborah and I discussed her methods and interpretations at length, including the process by which the qualitative data were analyzed using typological methods described in the paper.

After reviewing the materials above, the research paper, and a lengthy conversation with Deborah, I can submit the following conclusions:

1. The methods and focus of the study were aligned with the stated research questions.
2. The methodology used was consistent with the proposed methodology in Chapter three of the dissertation.
3. The data collection and analysis procedures were consistent with those described in Chapter three of the dissertation.
4. This study was found to be organized and carefully implemented. The data was analyzed in a manner consistent with the proposal and with relevance to the research questions.
5. Therefore, the conclusion of this auditor is that this study is trustworthy.

Attested to by Matthew R. Shupp on May 13, 2013



Matthew R. Shupp, Ed.D, NCC, DCC
Director of Student Affairs

PENNSTATE
Brandywine

OFFICE OF STUDENT AFFAIRS

Penn State Brandywine
25 Yearsley Mill Road
Media, PA 19063

Telephone: 610-892-1270
610-892-1279
Fax Number: 610-892-1358
bw-StuAffairs@psu.edu

Penn State Brandywine
Media, PA 19063

Adjunct Faculty, Shippensburg University of Pennsylvania
Shippensburg, PA 17257
Affiliate Faculty, Widener University
Chester, PA 19013

# Appendix U

## Independent Auditor Confidentiality Agreement

## Confidentiality Agreement

I, _____, agree to maintain full confidentiality in regards to any and all audiotapes and documentation received from Deborah Erie related to her doctoral study on THE ROLE OF GENERAL EDUCATION IN THE DEVELOPMENT OF ETHICAL REASONING IN COLLEGE STUDENTS: A QUALITATIVE STUDY ON THE FACULTY PERSPECTIVE.

Furthermore, I agree:

---

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents;

2. To not make copies of any audiotapes or computerized files of the transcribed interview texts, unless specifically requested to do so by Deborah Erie;

3. To store all study-related audiotapes and materials in a safe, secure location as long as they are in my possession;

4. To return all audiotapes and study-related documents to Deborah Erie in a complete and timely manner.

5. To delete all electronic files containing study-related documents from my computer hard drive and any backup devices.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audiotapes and/or files to which I will have access.

Auditor's name (printed) _____

Auditor's signature _____

Date _____

# Appendix V

## Student Interview Codes and Themes

**Themes and Codes for Student Interviews**

Theme 1: Definition of General Education

Not aware of Penn State's definition (20)

General learning (12)

Gives you a world view (3)

Shows you diversity of thinking (2)

Courses outside of your major (3)

No definition (1)

Theme2: Purpose/Goals of General Education

Unsure why it is required (5)

To be well-educated (3)

To be well-rounded (4)

Better understanding of the world we live in (2)

Learn information beyond the major (3)

Redirect your focus /Other ways of thinking (2)

Help your GPA by taking easy courses (2)

Theme 3: Where were reasoning skills learned in the classroom

Can't think of any opportunities (10)

Science courses (7)

- chemistry
- physics
- environmental science

biology

astronomy

Math courses (2)

All courses (1)

Engineering design (1)

Theme 4: What specific assignments led to increased reasoning skills?

Analyze materials (2)

Writing critically (3)

Writing papers and essays (1)

Using sources to validate your opinions (1)

Physics problems (2)

Chemistry labs (2)

Math problems (3)

Engineering design problems (1)

Theme 5: Ethical reasoning/Ethics/Ethical decision-making

Opportunities in first year seminar (5)

Diversity-focused courses (1)

Bio-ethics discussed in biology course (1)

Ethics discussed in political science course (1)

Ethics discussed in economics course (2)

Ethics discussed in literature course (1)

Ethics related to human research/experiments in psychology course (2)

Ethics and technology course (1)

Environmental science class (1)

Speech class (1)

Religion classes (2)

Sociology class (1)

Ethics course required for the major (7)

Theme 6: Academic Integrity

On all the syllabi (20)

It's meaningless (4)

- if you're going to cheat, you will
- students still cheat
- it's just words on paper

I think it's important to know not to cheat (1)

Not gone over much (4)

- faculty put it on paper and expect us to know it
- faculty just have to tell you about it
- it's a requirement

Emphasized more at Penn State than other colleges (1)

Theme 7: Should a course in ethics be required at Penn State?

Ethics should be required in major (7)

Ethics should be required in general education (7)

It should be a requirement to have something related to ethics before graduation (18)

It should not be required (1)

Neutral or no opinion (2)