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Ethics across the curriculum: Detecting and describing emergent trends in ethics education

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ABSTRACT

This paper presents an inclusive and emergent approach to identifying ethics courses and revealing their pedagogical methods and goals. It outlines a two-year study of undergraduate and professional courses at a private university addressing ethical themes. The study began with three assumptions: 1) ethics education occurs across the curriculum; 2) instructors are master practitioners with learning theories and goals that are often implicit; and 3) education contributes to three domains of human development: existential, civic, and vocational. These principles informed the development of a method for describing ethics education based on instructor reports of what and how they teach. Results of an application of this method are presented, and implications for ethics teaching and assessment in higher education are discussed.

1. Introduction

Despite a proliferation of ethics courses and programs over the past half-century, which some scholars have labeled “ethics booms,” our understanding of the current landscape of ethics instruction in higher education is thin (Davis, 1999; Elliott & June, 2018). A major obstacle to understanding collegiate and post-collegiate ethics education is that prior studies which sought to determine common goals, approaches, and pedagogies, among ethics instructors are now outdated (Hastings Center, 1980) or limited in scope (e.g., Colby, Beaumont, Ehrlich, & Corngold, 2007; Colby, Ehrlich, Beaumont, & Stephens, 2003; Watts & Becker, 2008). There is currently no consensus on how to define ethics education or what counts as an ethics course (Felton & Sims, 2005). At the same time, the landscape of higher education has changed drastically, in many ways, over the past forty years from student demographics to the demands of globalization to technological development (Baker & Baldwin, 2015; Kezar, 2001; Zirkel & Cantor, 2004). One could argue that, despite—or perhaps because of—these changing features, higher education is struggling to adapt rapidly enough to keep pace with student needs (Blumenstyk, 2015; Scott & Kirst, 2017). Our understanding of instructional goals and assessment methods for ethics education is thus inadequate at a moment in history when there is demand for even more robust ethics preparation for students (Bloodgood, Turnley, & Mudrack, 2010; Coleman, Atkinson, & Waduge, 2015; Forsha, 2017; Waples, Antes, Murphy, Connelly, & Mumford,

2008).

Historically, philosophy and theology departments were the primary loci of ethics instruction. Today, universities seek to teach ethics across a wide range of contexts - through a diverse array of humanities courses, across a range of professional schools, and within general education programs or other core curriculum requirements, among others. The values and missions of universities also influence the scope and character of ethics education across campus.

It seems as though discipline-specific studies of ethics curricula and outcomes are not lacking, particularly in the context of specific professions (Konow, 2017), such as business (e.g., Floyd, Xu, Atkins, & Caldwell, 2013; Nicholson & DeMoss, 2009), engineering (e.g., Herkert, 2000; Hess & Fore, 2018), medicine (e.g., Lehmann, Kasoff, Koch, & Federman, 2004), and public relations (Austin & Toth, 2011). What is missing from the literature, however, is a clear picture of ethics instruction at the undergraduate or university-level that transcends specific schools and divisions. Researchers have examined the prevalence of ethics courses in specific disciplines (e.g., Austin & Toth, 2011), the priorities of expert stakeholders in ethics education (e.g., Floyd et al., 2013), and administrative perceptions of the adequacy of ethics education (e.g., Nicholson & DeMoss, 2009; Lehmann et al., 2004). Other researchers have examined whether professionals who have completed ethics courses demonstrate greater ethical awareness (e.g., Grady et al., 2008) or stronger ethical reasoning (e.g., Wang & Calvano, 2015). Although studies like these have made substantial contributions to

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discipline-specific accounts of ethics education, they are difficult to synthesize in a way that presents a holistic representation of university ethics education as most students experience it.

1.1. Ethics across the curriculum

Many institutions are working to integrate ethics throughout the curriculum (Elliott & June, 2018). This means that students' ethics education will likely occur across departments, and discipline-specific accounts may not adequately represent students' ethics-related learning opportunities. For example, an engineering department may offer only a few courses that deal directly with ethics, but the institution's general education standards may require students take an ethics course offered by another department, such as philosophy, government, or history. Since students' educational experiences transcend departments, describing their ethics education requires attention to courses across the university. The research methods proposed here are intended to provide a campus-wide description of curricular opportunities for ethics education.

In addition, the emergence of new domains of ethical problems and greater commitment to respecting diverse approaches to ethics make it important to account for ethics education taking place under different labels. For example, institutions may describe ethical outcomes in terms of civic responsibility or leadership (Chunoo & Osteen, 2016), and courses supporting achievement of these goals may be described in these terms rather than as ethics courses. In a study of undergraduate ethics education at a single institution, Van Wart, Baker, and Ni (2014) found that an examination of syllabi revealed many faculty are teaching ethics, despite not explicitly claiming to do so. As discussed by Matchett (2008), ethics is inevitably taught across the curriculum as students explore complex issues in different disciplines, but this ethics education is often implicit and poorly coordinated, leaving students confused about the meaning and usefulness of ethics.

This research is focused on understanding ethics education in the context of courses with at least some references to ethically relevant content, though we acknowledge it is possible to think of nearly all education as having embedded ethical lessons. As a first step toward illuminating the broad scope of ethics education, its definition should be expanded to include courses that address ethics alongside a more dominant topic and do not satisfy ethics course requirements. Given that ethics education may not always be explicitly labeled as such, it is critical to gain a clearer understanding of what sorts of courses instructors believe constitute ethics courses. In short, we need to know what ethics education looks like from the perspective of those who deliver it: instructors.

1.2. Understanding ethics education as a craft

Several strategies might be used to identify the methods and goals that should inform ethics education. Some scholars have drawn on disciplinary concerns and accreditation standards (e.g., Commission on Public Relations Education, 2006) to arrive at a body of knowledge and set of skills that ethics education should support (e.g., Felton & Sims, 2005). Another approach is to start with a theory of moral or ethical development and design ethics curricula to promote progress along a particular developmental trajectory. The present research was designed to contribute an additional perspective by drawing on the expertise of educators regarding their methods and goals for ethics education.

In higher education, instructors are attuned to new and developing ethical challenges in their fields of expertise, and their experience teaching and mentoring students may help them identify the needs and goals of students in ethics education. Also, many instructors refine their teaching techniques over years of practice based on feedback in the form of student engagement and evidence of learning (Shulman, 1987). The resulting pedagogical expertise can be considered a form of craft practice learned through modeling and refined through practice

(Grimmett & MacKinnon, 1992). As in other crafts, the methods and the mechanisms teachers use to support learning are often implicit, making it difficult to recognize and benefit from teachers' knowledge (Hiebert, Gallimore, & Stigler, 2002). If made explicit, the goals and methods of instructors in ethics education can help illuminate the range of ethically complex issues addressed in classrooms across the university, as well as the most effective teaching methods for achieving different learning outcomes.

1.3. Contributions of ethics education to human development

As suggested by the discussion of ethics education as a craft practice, the present approach does not privilege any single ethical framework or theory of moral development. It does, however, seek to situate ethics education within a framework of human development. Current discussions of the role of education tend to focus narrowly on its importance to preparing students for success in the workplace, leaving some dissenters to advocate for the educational mission of enriching the life of the mind, and others working to reinvigorate the commitment of educational institutions to prepare students for democratic life (Allen, 2016). Allen (2016) argues that education should cultivate capacities "to prepare ourselves for breadwinning work; to prepare ourselves for civic and political engagement; to prepare ourselves for creative self-expression and world-making; and to prepare ourselves for rewarding relationships in spaces of intimacy and leisure" (p. 17). The first of these capacities is needed for vocational/professional development, the second for civic development, and the third and fourth for existential/personal development. Viewing ethics education in terms of development in these three domains can help illuminate potential gaps and lend coherence to clusters of skills and outcomes associated with each (see Mintz & Tal, 2014 for a similar approach in the context of environmental sustainability education).

Vocational development may be the easiest to understand in the contemporary educational context, though promoting it presents challenges stemming from significant changes in the vocational roles students may fill. These may introduce novel ethical problems that might not be easily resolved using traditional professional ethical frameworks. The rapidly developing fields of artificial intelligence and bioengineering are just two examples of the many professional domains in which ethics education must evolve to meet the needs of future practitioners.

The role of education in promoting civic development has long been emphasized in the United States (e.g., Bok, 2001; Colby, Ehrlich, Beaumont, Rosner, & Stephens, 2000; Dewey, 1916), though educational institutions may focus on cultivating different forms of civic development, with some focusing more on traditional civic responsibilities, such as voting, and others encouraging more critical engagement aimed at ameliorating injustices (Westheimer & Kahne, 2004). What these different approaches have in common is a realization that schools have a mandate to cultivate the knowledge, skills, and dispositions needed to sustain civic and community life, many of which, such as commitments to justice and equality, are appropriate topics for ethics education.

Existential development is a widely recognized but contested goal of education and higher education especially. Higher education can help individuals clarify and develop their understandings of themselves and the world in ways that manifest primarily in their personal, rather than professional or civic, lives. The pursuit of existential development in the context of ethics education may take a variety of forms that are united in their focus on improving students' capacities for self-definition and the cultivation of rewarding personal relationships.

Examining ethics education through the lenses of these three domains of human development helps reveal why educators may utilize a wide array of pedagogical methods in pursuit of many different sorts of learning outcomes and how all of these methods may be appropriately seen as contributing to ethics education. This perspective also clarifies

the importance of attending to the goals of specific courses and recognizing that even very effective ethics courses in one domain may be seen as contributing little to development in one or both of the other domains.

1.4. Research questions

The present research project was designed to test a new method for assessing how a university supports ethics education, broadly construed, through its formal curriculum. This method is informed by three principles associated with distinct research questions:

First, ethics education takes place across the curriculum, and the definition of ethics education will include learning that is not described explicitly as ethics education. For example, courses addressing leadership and civic responsibility will be considered potentially relevant even if ethics is not explicitly referred to in the course description. That is, we seek an emergent definition of ethics education. This principle motivates the first research question:

RQ1. What courses are being taught across the university that explicitly or implicitly teach ethics and ethics-related topics?

Second, ethics education is a form of craft practice guided by theories of how people learn ethics that may be implicit or vaguely specified but that can be revealed by examining practices. This leads to the second research question:

RQ2. What methods are instructors using to teach ethics, and what are their goals for student learning?

Third, ethics education can be understood in terms of vocational, civic, and existential human development, making it important to recognize different and potentially conflicting learning outcomes as valid forms of ethics education. This principle prompts the third research question:

RQ3. To what degree do courses address the three domains of human development, and what pedagogical methods and goals are associated with each domain?

These three principles and research questions prompted the development of a method for identifying ethics-related courses by searching the course catalog and the creation of a survey requesting information from instructors about their methods and goals in ethics education. These new methods were tested and refined over three academic semesters. To supplement the information acquired from instructors, a student-facing survey addressing perceptions of learning methods and outcomes was also developed.

2. Methods

This study was conducted at a not-for-profit, private, very high research activity university in the United States. The university includes about 2,400 faculty, about 6,700 undergraduate students, about 13,000 graduate and professional students, and over 10,000 students in continuing education. The university is accredited by the New England Commission of Higher Education, which emphasizes ethics education in its standards but does not explicitly require an ethics course. Eight of its eleven graduate, professional, and continuing education schools have accreditation from eleven different accrediting organizations, all of which explicitly address ethics education in their standards. While the schools and the broader institution may emphasize ethics, it is unlikely to be uniform in methods or outcomes. The methods described below were designed to illuminate emergent trends in ethics education by drawing directly on the expertise of instructors.

2.1. Ethics course identification tool (ECIT)

Consistent with the position that ethics is taught across the

curriculum, not just (or even primarily) in required ethics courses, we developed the ethics course identification tool (ECIT) for detecting potentially ethics-related courses in order to recruit their instructors to the study. Initially, we created a list of courses including at least one of six keywords (i.e., *ethic**, *justice*, *moral**, *responsibilit**, *integrity*, *values*) in their title or description. Examination of the list revealed too many courses selected inappropriately because of keywords being used in different contexts. Additionally, the ECIT also failed to identify courses related to important ethical issues. To address these problems, we began iteratively expanding and refining the list of keywords.

We started by asking affiliated researchers to propose new terms, and then checked the resulting list of courses manually to identify false positives. In order to limit the number of false positives, keywords were given weights so that terms less central to ethics and/or more commonly used did not lead to a course's selection unless they appeared alongside other keywords. So, while "ethic" and "moral" were retained as keywords leading to automatic inclusion, 55 terms (e.g., *justice*, *cruelty*, *duty*) were given half that weight, and an additional 44 terms (e.g., *exploit*, *harm*, *negligence*) were given a quarter the weight of "ethic" and "moral."

To further extend the ECIT beyond the conceptual understandings of ethics shared by the research team, key phrases (going two levels deep) and names under the headings of "ethics" or "moral" in the Cambridge Dictionary of Philosophy (CDP; Audi, 1999) and Stanford Encyclopedia of Philosophy (SEP; Zalta, 2017) were evaluated for inclusion. These terms included 127 unique terms given half a point (e.g., *stigma*, *abortion*), 63 names given half a point (e.g., *Buddha*, *Plato*), and 17 terms given a quarter point (e.g., *abuse*, *ensor*). The terms were not selected to represent all possible ethical thinkers or schools of thought but to help identify courses that might not otherwise be selected using the initial set of terms. Iterative applications and reviews of the dictionary suggested little benefit, and a heightened risk of false-positives, to expanding the search dictionary for the limited purpose of this study.

The final ECIT dictionary¹ included 306 unique ethics-related terms. Course catalogs from each semester in the study period (i.e., Fall 2017, Spring 2018, Fall 2018) were searched for these terms in course titles, short titles, and course descriptions. Courses with dictionary terms with weights that summed to one point or greater were considered likely to have sufficient ethical content to warrant inclusion in the study. In addition, if a course had four or more instances of any single term (e.g., if the term "equality" appeared four times), it was included in the study. Courses identified by the ECIT may not substantially address ethics, but the tool helps define a sampling population for the study and illuminate trends in ethics-related language across the curriculum.

Using the ECIT, of the 3229 course catalog entries for the Fall 2017 semester, 486 (15 %) unique (i.e., not including cross-listings, lab sections, etc.) courses were identified as potentially ethics-related, and three were added manually because they satisfied a general education ethics requirement. Application to the 3238 entries in the Spring 2018 catalog yielded 498 (15 %) ethics-related courses, and the ECIT identified 493 (16 %) courses from the 3089 entries in the Fall 2018 catalog. In all semesters, fewer than half of the selected courses included the term "ethic" or "moral" in their descriptions or titles, and the initial set of weighted terms was responsible for the selection of most courses (see Table 1). The supplementary terms added from the SEP and CDP were less often reasons for including a course, and only 117 (8 %) of the 1477 courses selected across all three semesters would not have been included without the addition of these terms. It therefore seems that adding even more terms to the ECIT would have contributed little to the sample while likely increasing the rate of false positives.

¹ See the project's Open Science Framework page for the ECIT dictionary: https://osf.io/kw8gy/?view_only=854c390698804c4bb7d26fe9c4bcdb95

Table 1
Search Criteria Satisfied by Selected Courses and Courses Associated with Survey Responses.

Inclusion Criterion	Fall 2017	Spring 2018	Fall 2018
Core term(s)	41 %	36 %	42 %
Responses	51 %	48 %	48 %
Researcher-generated weighted terms	61 %	66 %	65 %
Responses	36 %	43 %	49 %
Weighted terms from SEP and CDP	25 %	28 %	26 %
Responses	15 %	26 %	16 %
Combination of weighted terms from both sources needed	6 %	6 %	4 %
Responses	5 %	3 %	0 %

Note. The first row of percentages associated with teach inclusion criterion indicates the percentage of courses selected by the ECIT satisfying that criterion. The second row, labeled “Responses,” indicates the percentage of survey responses that could be linked to courses that satisfied that criterion. Many courses satisfied multiple selection criteria, and only a sample of survey responses could be reliably linked to specific courses.

Table 2
Schools Offering Courses Taught by Survey Respondents.

School	Fall 2017 (N = 121)	Spring 2018 (N = 98)	Fall 2018 (N = 79)
College/Undergraduate	41 %	40 %	56 %
Business School	2 %	3 %	3 %
Dental School	1 %	0 %	0 %
Divinity School	4 %	7 %	10 %
Extension School	15 %	17 %	6 %
Graduate School of Arts & Sciences	5 %	10 %	10 %
Graduate School of Design	6 %	7 %	11 %
Graduate School of Education	9 %	10 %	17 %
Graduate School of Government	8 %	15 %	8 %
Graduate School of Public Health	11 %	8 %	8 %
Law School	15 %	8 %	10 %
Medical School	11 %	7 %	4 %

Note. Many courses were cross-listed at multiple schools, and cross-listing information may be incomplete.

2.2. Participants

Instructors of ethics-related courses were invited via e-mail messages to participate in the study, including up to two reminders, indicating the purpose of the study and the instructor’s courses identified by the ECIT. Participants were asked to affirm consent to participate and given the option of completing the survey anonymously. The consent form described the study and emphasized that instructors

Table 3
Percentage of Participants Selecting Each Type of Course Material and Relations of Human Development Goals and Professional School Affiliation with Selections for Spring and Fall 2018.

Course Material	Fall 2017 N = 121	2018 N = 169	Odds Ratio			
			Civic ^a	Existential ^a	Vocational ^a	Professional School ^b
Philosophical and theoretical readings	61 %	69 %	2.23*	2.25*	0.71	0.59
Personal experiences	52 %	59 %	1.17	0.80	1.74	2.65**
Case studies	60 %	58 %	1.29	0.32**	1.76	2.20*
Popular media	50 %	51 %	1.11	0.76	1.18	1.39
Historical readings	–	51 %	0.95	2.04*	0.72	0.43**
Literature, films, or other forms of artistic expression	36 %	43 %	0.90	2.28*	0.63	0.45*
Empirical readings	57 %	46 %	1.04	0.43*	1.26	1.98*
Professional ethics guidelines	–	26 %	0.71	0.43*	18.32**	2.15*
Social media or web sources	16 %	22 %	1.53	1.02	0.85	0.60

Note. Responses from 2018 with a selected human development goal (n = 159) were analyzed. Predictors sharing a superscript were entered simultaneously. *p < .05, **p < .01, ***p < .001.

should focus on how their course contributes to ethics education. The study protocol was approved by the university’s Institutional Review Board (IRB17-0811). Since some instructors taught more than one course included in the sample, the number of unique instructors was lower than the total number of courses in the sample. In the Fall 2017 semester, 427 instructors were contacted and 121 (28 %) returned complete surveys. In the Spring 2018 semester, 389 instructors were invited, and 98 (25 %) returned surveys, and in Fall 2018, 310 instructors were invited and 79 (26 %) participated. These response rates, though they could be improved, are consistent with response rates in voluntary surveys of ethics curricula (e.g., Nicholson & DeMoss, 2009). Furthermore, although precise guidelines for faculty surveys are difficult to find, recent research indicates that response rates to student surveys as low as 20 % lead to similar results as higher response rates even with small sampling populations (Fosnacht, Sarraf, Howe, & Peck, 2017). Although the undergraduate college was the most common affiliation of respondents across all three waves of the survey, between 44 % and 60 % of respondents in each semester reported affiliations other than the undergraduate college, representing nearly all schools across the university (see Table 2). In addition, instructors recruited on the basis of weighted terms constituted over half of the entire sample of identifiable responses (see Table 1). This confirms that using the ECIT helped expand the sample of responses well beyond what could have been obtained by focusing only on courses in the undergraduate program or those with the terms “ethic” or “moral” in their catalog entries.

Instructors who participated in the Spring and Fall 2018 semesters were asked initial questions to gauge the relevance of their course to the study. First, they were asked to rate their agreement with the statement, “I believe my course belongs in this study on ethics education” on a scale ranging from *strongly disagree* (1) to *strongly agree* (7). Participants also rated their agreement with the statement, “I was surprised that my course was selected for this study on ethics education.” Then, in Fall 2018 only, they indicated the percentage of their course dealing with ethics on a sliding scale.

2.3. Instructor learning theory survey (ILTS)

The Instructor Learning Theory Survey (ILTS) was designed to elicit systematic descriptions from instructors of their pedagogical methods and goals in ethics education. A self-report survey, the ILTS provides direct knowledge of instructors’ conscious intentions and goals. Although there are no apparent reasons for respondents to provide misleading answers, it cannot be certain either that instructors always responded comprehensively or that their understanding of their teaching is fully accurate. Nonetheless, as expert educators and professionals, university faculty are ideal informants for this project. Though created specifically for this project, the ILTS shares elements with other instruments designed to elicit information about

Table 4
Percentage of Participants Selecting Each Course Activity and Relations of Human Development Goals and Professional School Affiliation with Selections for Spring and Fall 2018.

Activity	Fall 2017 N = 121	2018 N = 169	Odds Ratio			
			Civic ^a	Existential ^a	Vocational ^a	Professional School ^b
Class discussions	91 %	95 %	1.64	1.99	0.56	0.37
External preparation for class	60 %	69 %	1.43	0.92	0.76	0.95
Writing analytically	63 %	65 %	1.36	1.16	0.31*	0.45*
Lectures	43 %	58 %	0.78	0.77	0.57	0.72
Student presentations	38 %	53 %	1.38	0.74	1.01	1.08
Reflective writing	31 %	52 %	1.14	3.39**	1.21	0.53
Office hours, out of class interactions with the instructor and/or teaching assistants	39 %	50 %	1.07	1.30	0.74	1.02
Discussion questions and/ or online journal	34 %	43 %	1.92	2.84**	0.81	0.64
Guest speakers	–	41 %	1.13	0.95	1.93	1.53
Group projects	21 %	28 %	1.34	0.70	2.15	2.83
Structured debates	22 %	27 %	0.96	1.30	1.00	1.05
Simulations/ role playing	26 %	25 %	0.69	1.66	1.92	2.15*
Creative projects	15 %	24 %	1.84	5.01**	0.54	0.60
Exams, quizzes	17 %	18 %	0.41**	0.82	1.34	0.64
Field work	–	15 %	0.84	2.59	2.56	3.17*
Field trips	–	11 %	1.28	3.41	1.04	1.04
Service learning	7 %	5 %	–	–	–	–

Note. Responses from 2018 with a selected human development goal (n = 159) were analyzed. Predictors sharing a superscript were entered simultaneously. *p < .05, **p < .01, ***p < .001.

Table 5
Percentage of Participants Selecting Each Form of Engagement and Relations of Human Development Goals and Professional School Affiliation with Selections for Spring and Fall 2018.

Form of Engagement	Fall 2017 N = 121	2018 N = 169	Odds Ratio			
			Civic ^a	Existential ^a	Vocational ^a	Professional School ^b
Engaging with different perspectives	64 %	87 %	2.70	4.67**	1.19	0.40
Reflecting on one's own thinking and values	72 %	82 %	1.49	2.80*	0.56	0.67
Recognizing ethical issues	53 %	70 %	0.99	1.34	1.78	1.01
Identifying the ethical implications of policy and practice	47 %	64 %	2.66**	0.83	3.57**	2.48**
Acquiring knowledge that is ethically relevant	–	63 %	1.02	1.30	2.38*	0.80
Analyzing ethical issues	–	62 %	0.80	2.10*	1.09	0.94
Articulating moral/ethical arguments	53 %	61 %	2.00	1.78	0.62	0.72
Applying ethical reasoning/ principles to specific situations	55 %	59 %	0.81	1.08	0.91	1.29
Identifying means of ethical engagement	16 %	29 %	1.29	1.95	1.89	1.13

Note. Responses from 2018 with a selected human development goal (n = 159) were analyzed. Predictors sharing a superscript were entered simultaneously. Forms of engagement included only in Fall 2017 are shown in the appendix *p < .05, **p < .01, ***p < .001.

Table 6
Percentage of Participants Selecting Each Class Climate Descriptor and Relations of Human Development Goals and Professional School Affiliation with Selections for Spring and Fall 2018.

Climate Descriptor	Fall 2017 N = 121	2018 N = 169	Odds Ratio			
			Civic ^a	Existential ^a	Vocational ^a	Professional School ^b
Open/ participatory	66 %	88 %	0.95	1.58	1.81	1.23
Critical (analytically)	68 %	79 %	1.56	4.02***	1.36	1.53
Reflective	–	71 %	0.99	1.34	1.78	1.01
Civil/ respectful	–	69 %	1.62	1.27	1.26	1.04
Stimulating/ exciting	–	66 %	1.00	1.29	1.32	0.60
Student-centered/ Empowering	44 %	57 %	1.22	1.76	2.14	2.07*
Creative	36 %	40 %	1.28	2.55*	0.92	0.96
Safe (emotionally protective)	45 %	39 %	1.33	1.41	1.17	1.12
Structured/ ordered	31 %	28 %	0.42*	1.99	2.35	1.35
Brave	–	24 %	2.01	1.93	1.77	1.96
Unsettling	–	20 %	1.50	3.46*	0.51	0.82
Authoritative/ disciplined	–	2 %	0.43	2.11	1.53	0.34
Competitive	–	1 %	–	–	–	–

Note. Responses from 2018 with a selected human development goal (n = 159) were analyzed. Predictors sharing a superscript were entered simultaneously. Climate descriptors included only in Fall 2017 are shown in the appendix. *p < .05, **p < .01, ***p < .001.

Table 7
Percentage of Participants Selecting Each Topic as One They Avoid and Relations of Human Development Goals and Professional School Affiliation with Selections for Spring and Fall 2018.

Avoided Topic	Fall 2017 N = 121	2018 N = 169	Odds Ratio			
			Civic ^a	Existential ^a	Vocational ^a	Professional School ^b
My personal political or social views	–	34 %	0.73	1.42	0.89	0.85
Traumatic or triggering personal experiences	18 %	31 %	1.37	0.99	0.40	1.00
Issues or topics outside my area of expertise	–	19 %	1.54	0.83	0.41*	1.23
My own personal narratives	–	14 %	0.97	0.85	0.41	0.55
Social identities	2 %	7 %	0.93	1.49	0.63	1.90
Students' personal narratives	–	4 %	0.68	1.00	1.47	0.68
Students' political or social views	–	4 %	0.33	0.16	0.43	0.40
Controversial events	–	1 %	–	–	–	–

Note. Responses from 2018 with a selected human development goal (n = 159) were analyzed. Predictors sharing a superscript were entered simultaneously. Avoided topics included only in Fall 2017 are shown in the appendix. *p < .05, **p < .01, ***p < .001.

Table 8
Percentage of Participants Selecting Each Achievement Goal and Relations of Human Development Goals and Professional School Affiliation with Achievement Goals for Spring and Fall 2018.

Achievement Goal	Fall 2017 N = 121	2018 N = 169	Odds Ratio			
			Civic ^a	Existential ^a	Vocational ^a	Professional School ^b
Critically evaluate ethical perspectives of multiple stakeholders	53 %	62 %	2.68**	1.25	0.93	1.05
Deliberate with others about ethical problems	50 %	59 %	2.04*	2.57**	0.93	1.22
Analyze and understand problems on a macro or systemic level	–	56 %	2.73**	0.81	1.58	2.55**
Have an ethical orientation	29 %	53 %	2.05*	1.66	0.79	1.14
Articulate and defend moral/ethical arguments	44 %	51 %	1.02	1.41	0.94	1.54
Understand how biases/heuristics can lead to unintended consequences	32 %	50 %	0.50	2.86*	1.26	0.56
Willing and able to identify and confront social injustice	–	49 %	3.45**	1.17	1.37	1.80
Take personal responsibility	30 %	47 %	1.63	1.58	2.73*	2.09*
Have a clear sense of one's own values	31 %	46 %	0.95	2.39*	1.17	1.70
Cultivate one's moral imagination	18 %	44 %	1.73	2.18*	0.39*	0.47*
Develop an expanded sense of moral community	21 %	40 %	1.87	2.61**	0.98	0.96
Demonstrate social responsibility	33 %	39 %	2.46*	1.42	4.47**	1.46
Demonstrate moral/ethical literacy	24 %	38 %	0.93	2.37*	1.68	0.52
Make deliberative moral judgments	15 %	34 %	1.81	1.69	0.73	1.00
Pursue virtue/moral growth	12 %	30 %	1.05	3.81**	1.18	1.51
Ethical commitments to established ethical norms/rules	18 %	27 %	0.66	1.02	7.79**	1.53
Take moral action	12 %	27 %	2.64*	1.87	1.09	1.65
Willing and able to identify and confront threats to freedom	–	24 %	1.35	2.36*	2.01	1.29
Tolerate and reducing moral disagreements and ambiguities	7 %	18 %	1.11	3.85*	1.19	2.95*
Rely on innate moral intuitions	1 %	7 %	2.10	1.76	1.51	1.27
Adopt a classical theoretical lens when making moral judgments	7 %	6 %	0.46	1.67	3.94	0.82

Note. Responses from 2018 with a selected human development goal (n = 159) were analyzed. Predictors sharing a superscript were entered simultaneously. Achievement goals included only in Fall 2017 are shown in the appendix. *p < .05, **p < .01, ***p < .001.

Table 9
Percentage of Participants Selecting Each Outcome as One they Avoid and Relations of Human Development Goals and Professional School Affiliation with Selections for Spring and Fall 2018.

Avoided Outcome	Fall 2017 N = 121	2018 N = 169	Odds Ratio			
			Civic ^a	Existential ^a	Vocational ^a	Professional School ^b
Self-righteousness	61 %	73 %	2.07	1.28	0.92	1.63
Indoctrination	–	70 %	1.14	1.80	0.46	0.84
Moral certainty	58 %	61 %	1.96	1.24	1.01	0.89
Resorting to false moral equivalencies	–	50 %	2.19*	1.32	0.69	1.54
Irrelevance/uselessness of ethical inquiry	42 %	38 %	1.28	2.29*	0.53	0.53
Rationalization/use of ethical language and theory to justify a predetermined end	40 %	37 %	3.26**	1.97	0.93	0.96
Moral relativism	23 %	31 %	1.04	2.43*	0.97	0.63
Going with one's gut/ intuitions	36 %	28 %	1.36	1.64	1.59	1.12

Note. Responses from 2018 with a selected human development goal (n = 159) were analyzed. Predictors sharing a superscript were entered simultaneously. *p < .05, **p < .01, ***p < .001.

instructional methods and goals (e.g., Becker & Watts, 1996; 2001; Trigwell & Prosser, 2004; Watts & Becker, 2008). However, few studies include measures of both methods and instructional goals, and such studies in the domain of ethics education are often focused on ethics in

a limited professional domain (e.g., DuBois & Burkemper, 2002; Lehmann et al., 2004). The ILTS was developed to address this gap with a widely applicable framework for recording the resources instructors deploy in their courses; how they engage students in learning; what

Table 10
Percentage of Participants Selecting Human Development Goal and Relations with Professional School Affiliation for Spring and Fall 2018.

Human Development Goal	Fall 2017 N = 121	2018 N = 169	Odds Ratio Professional School ^b
Professional/ vocational development	43 %	70 %	4.00***
Community-oriented/ civic development	81 %	63 %	1.33
Personal/ existential development	47 %	59 %	0.31***

Note. Responses from 2018 with a selected human development goal ($n = 159$) were analyzed. * $p < .05$, ** $p < .01$, *** $p < .001$.

skills and outcomes they expect students to gain; and how their courses contribute to students' existential, civic, and vocational development. Each of these four categories of the ILTS is explained in detail below.

After each administration of the ILTS, the survey was modified for clarity and to include more response options, many of which were suggested by participants. Here, the final Fall 2018 version of the survey is described in detail (see the project's OSF page for copies of each survey). The most critical changes in the survey were to how participants were asked to rank items and the addition of several response options in response to participant feedback after Fall 2017. These changes make it possible to aggregate only those responses from Spring and Fall 2018, which had slightly different formats but the same response options. The final version of the survey had a median response time of 916 s, or just over 15 min. Since many participants appeared to leave the survey open but inactive for extended periods, the actual time required for the survey may be less.

2.3.1. Materials and activities

The first section of the ILTS includes questions about the materials (e.g., philosophical readings, social media) and activities (e.g., lectures, class discussions) considered most important by the instructor. In addition to a pre-set list of response options (9 materials, 17 activities), participants were given four open response options at the end of each list in which they could enter text. For each list (i.e., materials and activities), participants were asked to select the three most important to their course. Participants who selected three items were subsequently asked to select (but not rank) any additional relevant items. This response format, including the provision of blank response options, was adopted for all subsequent sections of the survey, unless otherwise indicated.

2.3.2. Engagement and climate

The second section of the ILTS includes questions asking instructors how they intend to engage students and what sort of learning environment they try to cultivate. Respondents were asked to choose from a list of 14 terms those most descriptive of the class climate they see as ideal (e.g., open, brave, critical), indicate which of 8 broad topics they work to avoid (e.g., the instructor's own political or social views, controversial events), and select which of 9 types of learning experiences they expect students to engage in (e.g., engaging with different perspectives, analyzing ethical issues).

2.3.3. Outcomes

Participants were asked to report two types of outcomes: First, they were asked to select the three most important of 21 achievement goals (e.g., demonstrating social responsibility, having ethical commitments to established ethical norms/rules). Then, participants reviewed a list of 8 outcomes that ethics instructors might see as undesirable (e.g., moral relativism, moral certainty) and selected the three they most avoid.

2.3.4. Human development

Participants were then asked to think about how the course might more broadly contribute to students' development. The three domains of human development were defined in the survey in the following ways: Community-oriented/civic (capacity for productive engagement as a community member/civic actor); Personal/existential (self

knowledge, capacity to build and sustain personal relationships); and Professional/vocational (capacity to obtain and succeed in an occupation). For this question, participants were asked first to select only the most important domain of human development, and then subsequently asked to select any additional relevant domains.

2.3.5. Course and instructor information

The survey concluded with questions addressing instructors' primary academic affiliation, highest obtained degree, field of study, and academic position. This section also included additional questions about class characteristics (e.g., size, number of teaching assistants), but these are not discussed further.

2.4. Analytical approach

Descriptive statistics are used to depict the sample characteristics and the rates at which respondents select response options in each survey category. Bivariate correlation analyses are used to explore relations among continuous variables (e.g., ratings of surprise at being included in the survey and number of ECIT points associated with their course). Binary logistic regression analyses are used to evaluate whether the selection of response options on the first three ILTS sections (i.e., materials and activities, engagement and climate, and outcomes) relate to respondents' selection of different human development goals and whether the course is oriented toward undergraduate or graduate/professional students. All statistical analyses were conducted using SAS 9.4 statistical software (SAS Institute Inc., Cary, NC, USA).

3. Results

The purpose of this research is to better understand the methods and goals in a wide range of ethics-related courses at a large university and to illuminate how those correspond with different domains of human development. Different pedagogical traditions, institutional priorities, student characteristics, and other factors make it unlikely that the methods and goals of ethics education will be the same across universities. Therefore, the statistics presented here should be interpreted narrowly as describing relations within this sample and, to some extent, the university from which it was obtained. Generalization should also be constrained by the relatively small sample and, especially, the lack of hypotheses driving statistical tests. It should be emphasized, though, that since stakeholders and decision-makers are generally situated at the institutional or lower levels (e.g., departments), there would be little utility to producing results generalizable across institutions. Knowing about trends in ethics education across the nation is important, but administrators, faculty, and students most need to first understand what is happening on their campuses and in their classrooms.

To identify emergent trends at this institution, the percentage of respondents selecting each response option in each survey section was calculated, with responses from Spring and Fall 2018 aggregated. Fall 2017 results are presented independently, both because of substantial differences between the Fall 2017 and 2018 surveys and because aggregating the Fall 2017 and Fall 2018 results would have led to some courses being included twice in the sample.

Using only data from 2018, the likelihood of each response being

selected was regressed on selection of the three human development goals (multiple selections allowed), entered simultaneously in binary logistic regression models. A parallel series of binary logistic regression analyses tested whether selection rates varied depending on whether a course was listed at a professional school (i.e., not the college/undergraduate division or the graduate school of arts and sciences). The binary logistic regression analyses yield estimates of the increased likelihood of a particular response associated with selection of each of the three human development goals. For example, one analysis revealed that ‘professional ethics guidelines’ was more often selected when ‘vocational development’ was selected as a key human development domain (see Table 3). The relation is statistically significant because the p -value is less than .05, and the relation is positive because the odds ratio is greater than 1. In contrast, selecting ‘existential development’ decreases the odds of selecting ‘case studies.’ We know this because the odds ratio associated with ‘existential development’ is less than 1, indicating a negative relation, and the p -value is less than .05, showing that the relation is statistically significant.

The large number of models tested, in addition to reasons noted above, requires conservative interpretation of these results, which are most appropriately understood as describing this sample. Full reports of these analyses, summarized below, are presented in the appendix (Tables A1–A8), and the data underlying them are available on the project’s OSF page.

3.1. Reaction to study inclusion

Most participants agreed that their course belonged in the study. Nearly all agreed to some degree in Spring 2018 (90 %), and 86 % did in Fall 2018. Fewer reported neutrality (7 % in Spring 2018; 8 % in Fall 2018), and even fewer disagreed that their course belonged (3 % in Spring 2018; 6 % in Fall 2018). It seems likely that most instructors who disagreed that their course belonged in the study simply did not respond, but instructors’ lack of participation cannot be reliably interpreted as an indicator of whether their courses address ethics. Many instructors agreed that they were surprised that their course had been selected for this study (29 % in Spring 2018; 37 % in Fall 2018). Respondents who disagreed that their course belonged ($n = 3$ in Spring 2018, $n = 5$ in Fall 2018) were removed from subsequent analyses, with the exception of the analyses examining ECIT points discussed below.

Among the 203 respondents across semesters whose responses could be clearly linked to a course catalog entry, most (51 %) were recruited on the basis of courses that were not identified on the basis of the core terms, “ethic” and “moral,” indicating that the ECIT helped identify relevant courses that might not ordinarily be considered ethics courses. Correlation analyses revealed that participants’ ratings of surprise ($r(116) = -0.13, p = .15$) and agreement that their course belongs ($r(116) = .07, p = .40$) in the study were unrelated to total ECIT points. However, the percentage of their course they reported being related to ethics, reported only in Fall 2018, was positively related to total ECIT points ($r(61) = .34, p = .006$). This positive correlation suggests that the ECIT helps identify ethical content, but the fact that this analysis could only be conducted with a subset of data requires that it be interpreted cautiously.

3.2. Materials and activities

Across the three semesters, case studies, philosophical and theoretical readings, and personal experiences were consistently rated as among the most important course materials (see Table 3). However, binary logistic regression analyses revealed that personal experiences, case studies, empirical readings, and professional ethics guidelines were more commonly deployed in courses associated with professional schools (indicated by significant odds ratios greater than 1), while historical readings, literature, films, and other forms of art were less

common (indicated by significant odds ratios less than 1). Examining course materials in terms of human development goals reveals further nuances: Courses oriented toward professional/vocational development were especially likely to use professional ethics guidelines, while those with an existential orientation were less likely to use them. Existentially oriented courses were also less likely to rely on case studies and empirical readings, but they were more likely to rely on philosophical and theoretical readings (along with civically oriented courses), historical readings, and literature and other forms of creative expression.

There was less apparent variation in the class activities (see Table 4), but courses listed in professional schools tended to emphasize simulations/role playing and field work more than others, and analytic writing less. In terms of human development goals, analytic writing was negatively associated with a vocational orientation, while reflective writing, discussion questions/journaling, and creative projects were positively associated with existentially oriented courses. Civically oriented courses were least likely to rely on exams and quizzes as a pedagogical method.

3.3. Engagement and climate

Courses affiliated with professional schools or identified as targeting civic or vocational/professional development were more likely to encourage students to identify the ethical implications of policy and practice, and, in the case of vocationally oriented courses, acquiring ethically relevant knowledge (see Table 5). In contrast, existentially oriented courses focused on engaging with different perspectives, reflecting on one’s own values, and analyzing ethical issues.

Selections of course climate descriptors appear to differ little across professional and non-professional schools, though student empowerment was more commonly emphasized in the former group (see Table 6). In terms of human development, civically oriented courses were less likely to be described as structured/ordered while existentially oriented courses were more likely to be described as analytically critical, creative, and unsettling.

In general, instructors most often described the course climate they seek to cultivate as critical, open, and reflective. Consistent with their intentions to cultivate rigorous but inviting climates, instructors rarely reported avoiding specific topics (see Table 7). Most often, instructors seem primarily concerned with not discussing their personal social/political views, potentially triggering or traumatizing topics, and, though less so for vocationally oriented courses, areas outside their expertise. Interestingly, while instructors tend to avoid their own opinions, almost no instructors indicated that they try to limit discussion of students’ views.

3.4. Outcomes

All of the achievement goals (19 in Fall 2017; 21 in Spring and Fall 2018) were selected at least once in each wave of the study, demonstrating a wide range of goals in ethics education (see Table 8). However, a few goals were consistently among the most commonly selected across semesters. Being able to critically engage with the perspectives of multiple stakeholders, being able to deliberate with others, and being able to understand problems on a macro or systemic level (or, in Fall 2017, critical consciousness) were most often identified as key skills and capacities to develop.

The emphasis on these goals, however, varied considerably depending on other course characteristics. Courses in professional schools were more likely than others to promote understanding problems on a macro or systemic level, taking personal responsibility, and tolerating and reducing moral disagreements and ambiguities. They were less likely to encourage cultivation of moral imagination. Attending to human development goals also reveals important differences across courses. Civically oriented courses were most likely to promote evaluating the perspectives of stakeholders, deliberating with others (along

with existentially oriented courses), having an ethical orientation, being willing and able to confront social injustice, demonstrating social responsibility (along with vocationally oriented courses), and taking moral action. Vocationally oriented courses, in addition to social responsibility, emphasized taking personal responsibility and having commitments to established ethical norms/rules while being less likely to encourage moral imagination. Existentially oriented courses were most likely to address dealing with moral disagreements and ambiguities, pursuing virtue and moral growth, understanding biases and heuristics, expanding one's moral community, deliberating with others, having clear values, demonstrating moral/ethical literacy, confronting threats to freedom, and cultivating moral imagination.

Instructors tended to agree on the most important outcomes to avoid (see Table 9), namely self-righteousness, moral certainty, and indoctrination. However, rationalization (use of moral/ethical reasoning to justify predetermined ends) and resorting to false moral equivalencies were especially avoided in civically oriented courses, and the idea that ethical inquiry is irrelevant and moral relativism were most avoided in existentially oriented courses.

Examination of the achievement goals, in particular, reveals important differences across courses, suggesting that, in some cases, instructors may work towards potentially conflicting ends. For example, vocationally oriented courses may promote adherence to norms and discourage moral imagination as existentially oriented courses promote it. In other cases, a shift in language may signal more subtle differences in priorities: Civically oriented courses pursue both social responsibility and social justice, while vocationally oriented courses are only associated with the more ideologically neutral language of social responsibility (Table 10).

3.5. Human development

Across all semesters, each domain of human development was selected by a substantial number of instructors, suggesting that ethics education cannot be accurately understood in terms of only one. Unsurprisingly, schools associated with professional schools were most likely to be labeled with a professional/vocational human development goal and least likely to be oriented toward existential/personal development. Recognizing that professional school courses tend to place relatively more emphasis on professional/vocational development helps clarify why they are associated with particular course materials (e.g., case studies), forms of engagement (e.g., identifying the ethical implications of policy and practice), and outcomes (e.g., taking personal responsibility). Similarly, the relatively weaker attention to personal/existential development suggests that some important outcomes, such as understanding bias and developing clear values, may warrant greater attention in professional school courses.

Critically, these results highlight how ethics education may look quite different depending on the targeted domains of human development. It seems unlikely that a single course could address all three and that students will need to engage with a wide array of materials and learning activities to develop a well-rounded set of ethical competencies and commitments.

4. Discussion

This study was designed to develop new methods for addressing three questions important to understanding the breadth of university-level ethics education:

RQ1. What courses across the university explicitly or implicitly teach ethics and ethics-related topics?

RQ2. What methods are instructors using to teach ethics, and what are their goals for student learning?

RQ3. To what degree do courses engage the three domains of human

development, and what methods and goals are associated with each domain?

Analyses of instructor responses point to the effectiveness of the methods in providing preliminary answers to these questions in the context of a single university.

4.1. Ethics across the curriculum

The first research question focuses attention on the extent to which ethics education is supported across the curriculum, rather than isolated in courses centered on ethics. The survey responses from instructors in this study represent just over 25 % of the courses identified by the ECIT as being potentially relevant to the study. The ECIT results cannot independently characterize the distribution of ethics education across the curriculum. Nonetheless, survey responses came from nearly every division of the university, reflect undergraduate and graduate level courses, include small seminar and large lecture courses, and include disciplines ranging from the natural sciences to religion. Most of these courses did not include the terms "ethic" or "moral" in their titles or descriptions, meaning they may not be ordinarily considered contributors to ethics education. Indeed, many instructors indicated surprise that their courses had been selected for the study, while still agreeing that their courses belonged. The answer to the first research question therefore appears to be that ethics is taught across the university, even though it is not always explicitly mentioned in basic descriptions of courses.

4.2. Pedagogical methods and goals in ethics education

The second research question regards the sorts of methods and goals instructors see as central to their teaching. Matchett (2008), in laying out an agenda for ethics across the curriculum, proposes that students should demonstrate knowledge of the values relevant to their intended professional roles, awareness of potential value conflicts, and ethically relevant facts. In addition, they should be able to engage with multiple perspectives, formulate logical and coherent arguments, deploy ethical frameworks and theories, and apply the ethical standards of different professional and social roles.

Many of these outcomes appear among the more common faculty responses. A majority of instructors emphasized acquiring knowledge and, especially, engaging with different perspectives as key forms of engagement, and many identified improving capacities for ethical deliberation and effective articulation of ethical arguments. Fewer, however, placed great emphasis on adhering to ethical norms or developing formal ethical literacy. Instead, the present results signal an orientation toward broader social or civic concerns, with instructors working to promote greater awareness of the ethical implications of systems and institutions, commitment to combating social injustices, and the ability to deliberate with others.

4.3. Contributions of ethics education to human development

Disaggregating courses in professional schools, though, reveals a more nuanced picture that is given further detail by attending to instructors' human development goals. In this way, the present study goes beyond clarifying how instructors differ in their approaches to ethics education to provide a framework for understanding why these differences emerge. For example, moral imagination may be laudable in a personal context, facilitating greater understanding, but less desirable in a professional context, where adherence to norms and rules is critical to building trust.

It is important to note that the different methods and goals associated with different human development domains are not necessarily antagonistic. They may be best applied in different domains, as in the example above, or they may simply be emphasized differently because

of practical constraints, such as time and the course topic. It seems most plausible that the different forms of ethics education revealed by attending to human development domains should all be supported by universities. With no single course likely to support development in all three domains, institutions should seek to ensure that all students encounter each across multiple courses. The results also point to the importance of providing an integrative framework that helps students understand why courses dealing with ethics may do so in noticeably different ways.

4.4. Limitations

The study outlined here was designed to describe the methods and goals in ethics education at a single university. While the methods of this study can be generalized to other institutions, the specific findings should not be generalized. These results indicate a wide range of methods and goals that can be partially understood in terms of human development priorities, but other institutions may advance more narrow sets of pedagogical strategies and outcomes. For example, an institution focused on preparing students for specific occupations may emphasize vocational development, while a liberal arts school may give the vocational domain less attention. Though it seems ideal to cultivate ethics education in all three domains, institutional values and missions may legitimize the prioritization of some over others. The strength of this method lies in its capacity to equip stakeholders with the descriptive information they need to assess alignment of their curricular opportunities for ethics education with their intentions and aspirations.

Yet, future work is still needed to test these methods at other institutions and evaluate their descriptive validity across different contexts. The ECIT proved far more efficient than manually coding the course catalogs, yet data from a more representative set of institutions are needed to refine the list of terms and their weights. Although the ECIT helped identify a large and broadly inclusive set of courses, it must be emphasized that the ECIT cannot be expected to identify all courses that might contribute to ethics education, just as it cannot independently affirm that a course substantively addresses ethics. To more fully address implicit ethics education, future studies may survey random samples of instructors on whether, how, and with what goals they pursue ethics education. The ILTS invites respondents to supply novel response options, and these should be evaluated for inclusion in the survey as it is deployed at a wider range of schools.

Perhaps the greatest limitation of this method in addressing questions about the state of ethics education is that it does not incorporate assessment of student experiences or achievement. Consequently, the results can only be interpreted as indicating what sorts of opportunities for ethics education instructors are attempting to provide. To understand how students are actually learning ethics, it is critical to include their perspectives. However, the results of the first study indicate that there is little agreement about what students should achieve, and it is unclear whether there are validated performance-based assessments of the full range of outcomes pursued by instructors.

4.5. Future directions

To help address the challenges to student assessment posed by the

diverse pedagogical methods and goals in ethics education, the research team developed and piloted the Student Perceptions of Ethics Learning (SPEL) survey, a student-facing self-report instrument based closely on the ILTS. Although students' self-reports elicited by the brief SPEL cannot be taken as direct evidence of actual student achievement, there is strong evidence that self-reported learning is a valid indicator of learning assessed using more objective measures (Douglass, Thomson, & Zhao, 2012). Accordingly, the SPEL is intended to provide an efficient method for describing how students experience ethics education and what they learn across a wide range of courses.

Combined with the ILTS, the SPEL can provide a basis for rigorous course evaluation. Traditional course evaluations have been criticized on the basis that their generic items often fail to align with instructors' goals for their teaching, and their reliance on students' subjective evaluations of the quality of the course and instructor makes their results vulnerable to bias. In contrast, SPEL results can be directly compared with ILTS results at the level of an individual course, allowing instructors to identify and reflect on the alignment of their goals for the course with students' perceptions. Future research is needed to evaluate the utility of this approach in promoting instructor reflection and growth.

The methods developed in this project can also be deployed on a large scale to help map the landscape of ethics education across departments or universities. The ECIT could help rapidly illuminate the ethical themes and concepts dominant across fields of study and institutions. Though requiring more resources, large scale administration of the survey instruments could help researchers identify the materials and activities most instructors and students reliably associate with specific forms of engagement and learning outcomes. Similarly ambitious longitudinal projects could help institutions illuminate shifts in curricula and pedagogy. Future studies of this sort could help contribute to a stronger empirical basis for describing and improving ethics education.

5. Conclusion

The course identification tool (ECIT) and the instructor survey (ILTS), though needing further refinement, offer promising new methods for efficient analysis of the landscape of ethics education in university curricula. Initial results from three waves of a study at a single university support the utility of these methods in helping reveal the breadth and nuance of ethics education. In addition, they motivated the development and initial pilot testing of a student survey (SPEL), which, once refined and validated, could be administered along with the ECIT and ILTS to provide a more comprehensive representation of ethics education. These methods, especially if deployed by a large number of collaborating institutions, can help stakeholders attain a clearer understanding of how universities are striving to prepare students for ethical challenges within and beyond places of higher education.

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Appendix A

Tables A9–A16.

Table A1
Results of Logistic Regression Analyses Predicting Course Materials Ordered by Frequency of Selection (N = 159).

Course Material	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Philosophical and theoretical readings					
Civic	0.80 (0.37)	4.60 (1)	.032	2.23	1.07, 4.63
Existential	0.81 (0.37)	4.79 (1)	.029	2.25	1.09, 4.64
Vocational	−0.34 (0.44)	0.60 (1)	.439	0.71	0.30, 1.69
Professional school ^a	−0.53 (0.35)	2.31 (1)	.128	0.59	0.30, 1.16
Personal experiences					
Civic	0.15 (0.36)	0.19 (1)	.665	1.17	1.01, 4.13
Existential	−0.23 (0.35)	0.41 (1)	.523	0.80	1.28, 5.13
Vocational	0.55 (0.39)	2.02 (1)	.155	1.74	0.42, 2.06
Professional school ^a	0.97 (0.34)	8.29 (1)	.004	2.65	1.36, 5.14
Case Studies					
Civic	0.69 (0.37)	3.48 (1)	.062	1.29	0.97, 1.29
Existential	−1.13 (0.38)	8.78 (1)	.003	0.32	0.15, 0.68
Vocational	0.56 (0.40)	1.97 (1)	.161	1.76	0.80, 3.90
Professional school ^a	0.79 (0.33)	5.64 (1)	.018	2.20	1.15, 4.20
Popular media					
Civic	0.10 (0.35)	0.10 (1)	.757	1.11	0.57, 2.19
Existential	−0.25 (0.34)	0.56 (1)	.453	0.76	0.40, 1.51
Vocational	0.16 (0.38)	0.18 (1)	.673	1.18	0.55, 2.50
Professional school ^a	0.33 (0.32)	1.08 (1)	.298	1.39	0.75, 2.60
Historical readings					
Civic	−0.06 (0.35)	0.02 (1)	.883	0.95	0.48, 1.89
Existential	0.71 (0.34)	4.29 (1)	.038	2.04	1.04, 4.01
Vocational	−0.33 (0.39)	0.71 (1)	.400	0.72	0.33, 1.55
Professional school ^a	−0.84 (0.32)	6.74 (1)	.009	0.43	0.23, 0.81
Literature, films, or other forms of artistic expression					
Civic	−0.10 (0.36)	0.09 (1)	.767	0.90	0.45, 1.81
Existential	0.82 (0.35)	5.52 (1)	.019	2.28	1.15, 4.52
Vocational	−0.47 (0.39)	1.42 (1)	.233	0.63	0.29, 1.35
Professional school ^a	−0.80 (0.32)	6.05 (1)	.014	0.45	0.24, 0.85
Empirical readings					
Civic	0.24 (0.36)	0.45 (1)	.502	1.04	0.63, 1.27
Existential	−0.84 (0.35)	5.86 (1)	.016	0.43	0.22, 0.85
Vocational	0.23 (0.40)	0.25 (1)	.557	1.26	0.58, 2.75
Professional school ^a	0.68 (0.32)	4.49 (1)	.034	1.98	1.05, 3.73
Professional ethics guidelines					
Civic	−0.36 (0.42)	0.66 (1)	.416	0.71	0.31, 1.63
Existential	−0.84 (0.39)	4.62 (1)	.032	0.43	0.20, 0.93
Vocational	2.90 (1.04)	7.82 (1)	.005	18.32	2.39, 140.73
Professional school ^a	0.77 (0.37)	4.35 (1)	.037	2.15	1.05, 4.41
Social media or web sources					
Civic	0.43 (0.42)	1.01 (1)	.314	1.53	0.67, 3.51
Existential	0.02 (0.40)	0.00 (1)	.969	1.02	0.47, 2.21
Vocational	−0.16 (0.44)	0.13 (1)	.721	0.85	0.36, 2.04
Professional school ^a	−0.51 (0.38)	1.81 (1)	.178	0.60	0.29, 1.26

Note. ^aIn contrast with the domains of human development, which were entered simultaneously, professional school affiliation of courses was entered as a predictor in independent analyses. Only data from 2018 were used in these analyses.

Table A2
Results of Logistic Regression Analyses Predicting Course Activities Ordered by Frequency of Selection (N = 159).

Course Activity	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Class discussions					
Civic	0.49 (0.79)	0.39 (1)	.534	1.64	0.35, 7.77
Existential	0.69 (0.82)	0.70 (1)	.402	1.99	0.40, 9.89
Vocational	-0.58 (1.15)	0.26 (1)	.612	0.56	0.06, 5.31
Professional school ^a	-1.00 (0.85)	1.36 (1)	.243	0.37	0.07, 1.96
External preparation for class					
Civic	0.35 (0.37)	0.91 (1)	.340	1.43	0.69, 2.95
Existential	-0.08 (0.37)	0.05 (1)	.831	0.92	0.45, 1.91
Vocational	-0.27 (0.43)	0.39 (1)	.532	0.76	0.33, 1.78
Professional school ^a	-0.05 (0.35)	0.25 (1)	.876	0.95	0.48, 1.87
Writing analytically					
Civic	0.31 (0.37)	0.70 (1)	.405	1.36	0.66, 2.83
Existential	0.15 (0.36)	0.17 (1)	.684	1.16	0.57, 2.34
Vocational	-1.18 (0.48)	6.16 (1)	.013	0.31	0.12, 0.78
Professional school ^a	-0.79 (0.34)	5.39 (1)	.020	0.45	0.23, 0.88
Lectures					
Civic	-0.25 (0.36)	0.49 (1)	.484	0.78	0.39, 1.57
Existential	-0.26 (0.35)	0.55 (1)	.457	0.77	0.39, 1.52
Vocational	-0.57 (0.40)	1.97 (1)	.160	0.57	0.26, 1.25
Professional school ^a	-0.32 (0.32)	1.01 (1)	.315	0.72	0.39, 1.36
Student presentations					
Civic	0.32 (0.35)	0.87 (1)	.350	1.38	0.70, 2.73
Existential	-0.31 (0.34)	0.80 (1)	.370	0.74	0.38, 1.44
Vocational	0.01 (0.39)	0.00 (1)	.987	1.01	0.47, 2.15
Professional school ^a	0.08 (0.32)	0.07 (1)	.791	1.08	0.58, 2.03
Reflective writing					
Civic	0.13 (0.36)	0.14 (1)	.708	1.14	0.57, 2.31
Existential	1.22 (0.35)	11.86 (1)	.001	3.39	1.69, 6.80
Vocational	0.19 (0.40)	0.23 (1)	.630	1.21	0.55, 2.65
Professional school ^a	-0.63 (0.32)	3.86 (1)	.050	0.53	0.28, 1.00
Office hours, or out of class interactions with the instructor and/or teaching assistants					
Civic	0.07 (0.35)	0.35 (1)	.843	1.07	0.54, 2.11
Existential	0.27 (0.34)	0.34 (1)	.435	1.30	0.67, 2.54
Vocational	-0.30 (0.39)	0.39 (1)	.444	0.74	0.35, 1.59
Professional school ^a	0.02 (0.32)	0.01 (1)	.942	1.02	0.55, 1.91
Discussion questions and/or online journal					
Civic	0.65 (0.37)	3.05 (1)	.081	1.92	0.92, 3.98
Existential	1.04 (0.36)	8.32 (1)	.004	2.84	1.40, 5.77
Vocational	-0.21 (.40)	0.28 (1)	.598	0.81	0.37, 1.76
Professional school ^a	-0.45 (0.32)	1.91 (1)	.166	0.64	0.34, 1.20
Guest speakers					
Civic	0.12 (0.35)	0.12 (1)	.728	1.13	0.56, 2.27
Existential	-0.06 (0.34)	0.03 (1)	.870	0.95	0.48, 1.85
Vocational	0.66 (0.41)	2.59 (1)	.107	1.93	0.87, 4.29
Professional school ^a	0.43 (0.32)	1.76 (1)	.185	1.53	0.81, 2.89
Group projects					
Civic	0.29 (0.39)	0.54 (1)	.461	1.34	0.62, 2.88
Existential	-0.36 (0.36)	0.97 (1)	.324	0.70	0.34, 1.43
Vocational	0.77 (0.47)	2.61 (1)	.106	2.15	0.85, 5.44
Professional school ^a	1.04 (0.36)	8.25 (1)	.004	2.83	1.39, 5.74
Structured debates					
Civic	-0.04 (0.39)	0.01 (1)	.914	0.96	0.45, 2.06
Existential	0.26 (0.39)	0.45 (1)	.505	1.30	0.60, 2.79
Vocational	0.00 (0.43)	0.00 (1)	.993	1.00	0.43, 2.35
Professional school ^a	0.05 (0.36)	0.20 (1)	.887	1.05	0.52, 2.13
Simulations/ role playing					
Civic	-0.37 (0.40)	0.86 (1)	.353	0.69	0.32, 1.50
Existential	0.51 (0.40)	1.59 (1)	.207	1.66	0.76, 3.65
Vocational	0.65 (0.48)	1.87 (1)	.171	1.92	0.76, 4.88
Professional school ^a	0.77 (0.37)	4.35 (1)	.037	2.15	1.05, 4.41
Creative projects					
Civic	0.61 (0.46)	1.74 (1)	.187	1.84	0.74, 4.54
Existential	1.61 (0.52)	9.54 (1)	.002	5.01	1.80, 13.92
Vocational	-0.62 (0.44)	1.96 (1)	.161	0.54	0.23, 1.28
Professional school ^a	-0.51 (0.38)	1.82 (1)	.178	0.60	0.29, 1.26
Exams/ quizzes					
Civic	-1.13 (0.43)	7.04 (1)	.008	0.41	0.14, 0.74
Existential	-0.20 (0.45)	0.31 (1)	.648	0.82	0.34, 1.96
Vocational	0.29 (0.53)	0.31 (1)	.575	1.34	0.48, 3.76
Professional school ^a	-0.45 (0.41)	1.20 (1)	.273	0.64	0.28, 1.43
Field work					
Civic	-0.18 (0.49)	0.13 (1)	.716	0.84	0.32, 2.19
Existential	0.95 (0.52)	3.38 (1)	.067	2.59	0.94, 7.13
Vocational	0.94 (0.61)	2.33 (1)	.127	2.56	0.77, 8.53

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Table A2 (continued)

Course Activity	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Professional school ^a	1.15 (0.48)	5.83 (1)	.016	3.17	1.24, 8.10
Field trips					
Civic	0.25 (0.59)	0.18 (1)	.675	1.28	0.41, 4.04
Existential	1.23 (0.67)	3.40 (1)	.065	3.41	0.93, 12.58
Vocational	0.04 (0.60)	0.00 (1)	.947	1.04	0.32, 3.37
Professional school ^a	0.04 (0.50)	0.01 (1)	.932	1.04	0.39, 2.78
Service learning					
<i>Insufficient data for analysis</i>					

Note. ^aIn contrast with the domains of human development, which were entered simultaneously, professional school affiliation of courses was entered as a predictor in independent analyses. Only data from 2018 were used in these analyses.

Table A3

Results of Logistic Regression Analyses Predicting Form of Engagement Ordered by Frequency of Selection (N = 159).

Form of Engagement	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Engaging with different perspectives					
Civic	0.99 (0.51)	3.74 (1)	.052	2.70	0.99, 7.38
Existential	1.54 (0.58)	7.07 (1)	.008	4.67	1.50, 14.55
Vocational	0.17 (0.66)	0.07 (1)	.796	1.19	0.33, 4.33
Professional school ^a	-0.92 (0.52)	3.08 (1)	.079	0.40	0.14, 1.12
Reflecting on one's own thinking and values					
Civic	0.40 (0.45)	0.80 (1)	.370	1.49	0.62, 3.59
Existential	1.03 (0.45)	5.34 (1)	.021	2.80	1.17, 6.71
Vocational	-0.58 (0.60)	0.92 (1)	.339	0.56	0.17, 1.82
Professional school ^a	-0.39 (0.42)	0.88 (1)	.348	0.67	0.30, 1.54
Recognizing ethical issues					
Civic	-0.01 (0.38)	0.00 (1)	.978	0.99	0.47, 2.07
Existential	0.30 (0.37)	0.63 (1)	.427	1.34	0.65, 2.79
Vocational	0.57 (0.41)	1.97 (1)	.160	1.78	0.80, 3.96
Professional school ^a	0.00 (0.35)	0.00 (1)	.984	1.01	0.51, 1.99
Identifying the ethical implications of policy and practice					
Civic	0.98 (0.37)	6.91 (1)	.009	2.66	1.28, 5.52
Existential	-0.19 (0.38)	0.25 (1)	.617	0.83	0.39, 1.75
Vocational	1.27 (0.41)	9.74 (1)	.002	3.57	1.61, 7.95
Professional school ^a	0.91 (0.35)	6.92 (1)	.009	2.48	1.26, 4.89
Acquiring knowledge that is ethically relevant					
Civic	0.02 (0.36)	0.00 (1)	.954	1.02	0.50, 2.08
Existential	0.26 (0.36)	0.52 (1)	.470	1.30	0.64, 2.62
Vocational	0.87 (0.40)	4.79 (1)	.029	2.38	1.09, 5.16
Professional school ^a	-0.22 (0.33)	0.45 (1)	.501	0.80	0.48, 1.53
Analyzing ethical issues					
Civic	-0.23 (0.36)	0.39 (1)	.532	0.80	0.39, 1.62
Existential	0.74 (0.35)	4.51 (1)	.034	2.10	1.06, 4.16
Vocational	0.09 (0.35)	0.05 (1)	.828	1.09	0.49, 2.42
Professional school ^a	-0.06 (0.33)	0.03 (1)	.853	0.94	0.50, 1.79
Articulating moral/ethical arguments					
Civic	0.69 (0.36)	3.69 (1)	.055	2.00	0.99, 4.05
Existential	0.58 (0.35)	2.68 (1)	.101	1.78	0.89, 3.55
Vocational	-0.48 (0.42)	1.30 (1)	.254	0.62	0.27, 1.41
Professional school ^a	-0.33 (0.33)	1.00 (1)	.316	0.72	0.38, 1.37
Applying ethical reasoning/ principles to specific situations					
Civic	-0.22 (0.35)	0.38 (1)	.540	0.81	0.40, 1.61
Existential	0.08 (0.34)	0.05 (1)	.821	1.08	0.55, 2.12
Vocational	-0.09 (.39)	0.05 (1)	.817	0.91	0.42, 1.98
Professional school ^a	0.25 (0.32)	0.60 (1)	.439	1.29	0.68, 2.43
Identifying means of ethical engagement					
Civic	0.25 (0.39)	0.41 (1)	.522	1.29	0.59, 2.79
Existential	0.67 (0.38)	3.01 (1)	.082	1.95	0.92, 4.14
Vocational	0.64 (0.45)	1.02 (1)	.155	1.89	0.79, 4.57
Professional school ^a	0.41 (0.35)	1.42 (1)	.234	1.13	0.77, 2.99

Note. ^aIn contrast with the domains of human development, which were entered simultaneously, professional school affiliation of courses was entered as a predictor in independent analyses. Only data from 2018 were used in these analyses.

Table A4
Results of Logistic Regression Analyses Predicting Climate Descriptors Ordered by Frequency of Selection (N = 159).

Class Climate Descriptor	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Open/ participatory					
Civic	-0.05 (0.54)	0.01 (1)	.921	0.95	0.33, 2.73
Existential	0.46 (0.53)	0.75 (1)	.387	1.58	0.56, 4.47
Vocational	0.60 (0.57)	1.10 (1)	.295	1.81	0.60, 5.53
Professional school ^a	0.21 (0.50)	0.17 (1)	.678	1.23	0.46, 3.31
Critical (analytically)					
Civic	0.44 (0.39)	1.31 (1)	.253	1.56	0.73, 3.32
Existential	1.39 (0.39)	12.68 (1)	<	4.02	1.87, 8.66
Vocational					
Professional school ^a	0.31 (0.45)	0.47 (1)	.491	1.36	0.56, 3.29
Reflective	0.43 (0.40)	1.13 (1)	.288	1.53	0.70, 3.64
Civic	-0.01 (0.38)	0.00 (1)	.978	0.99	0.47, 2.07
Existential	0.30 (0.37)	0.63 (1)	.427	1.34	0.65, 2.79
Vocational	0.57 (0.41)	1.97 (1)	.160	1.78	0.80, 3.96
Professional school ^a	0.00 (0.35)	0.00 (1)	.979	1.01	0.51, 2.01
Civil/ respectful					
Civic	0.48 (0.36)	1.74 (1)	.188	1.62	0.79, 3.31
Existential	0.24 (0.37)	0.43 (1)	.511	1.27	0.62, 2.62
Vocational	0.23 (0.41)	0.32 (1)	.571	1.26	0.56, 2.83
Professional school ^a	0.00 (0.34)	0.00 (1)	.990	1.04	0.51, 1.97
Stimulating/ exciting					
Civic	-0.00 (0.36)	0.00 (1)	.989	1.00	0.49, 2.03
Existential	0.25 (0.36)	0.51 (1)	.474	1.29	0.64, 2.59
Vocational	0.28 (0.40)	0.48 (1)	.486	1.32	0.60, 2.90
Professional school ^a	-0.51 (0.34)	2.27 (1)	.132	0.60	0.31, 1.17
Student-centered/ Empowering					
Civic	0.20 (0.35)	0.31 (1)	.576	1.22	0.61, 2.43
Existential	0.56 (0.35)	2.57 (1)	.109	1.76	0.88, 3.49
Vocational	0.76 (0.39)	3.72 (1)	.054	2.14	0.99, 4.63
Professional school ^a	0.73 (0.33)	4.88 (1)	.027	2.07	1.09, 3.94
Creative					
Civic	0.25 (0.37)	0.69 (1)	.496	1.28	0.63, 2.63
Existential	0.93 (0.36)	6.68 (1)	.010	2.55	1.25, 5.20
Vocational	-0.08 (0.39)	0.04 (1)	.839	0.92	0.43, 2.00
Professional school ^a	-0.04 (0.32)	0.02 (1)	.898	0.96	0.51, 1.81
Safe (emotionally protective)					
Civic	0.29 (0.36)	0.64 (1)	.426	1.33	0.66, 2.69
Existential	0.34 (0.35)	0.97 (1)	.325	1.41	0.71, 2.80
Vocational	0.15 (.40)	0.15 (1)	.700	1.17	0.54, 2.53

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Table A4 (continued)

Class Climate Descriptor	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Professional school ^a Structured/ ordered	0.12 (0.32)	0.13 (1)	.723	1.12	0.59, 2.12
Civic	-0.86 (0.39)	4.97 (1)	.026	0.42	0.20, 0.90
Existential	0.69 (0.40)	2.93 (1)	.087	1.99	0.91, 4.38
Vocational	0.86 (.48)	3.24 (1)	.072	2.35	0.93, 5.97
Professional school ^a	0.30 (0.35)	0.72 (1)	.395	1.35	0.68, 2.68
Brave					
Civic	0.70 (0.45)	2.40 (1)	.122	2.01	0.83, 4.87
Existential	0.66 (0.41)	2.54 (1)	.111	1.93	0.86, 4.35
Vocational	0.57 (.49)	1.36 (1)	.243	1.77	0.68, 4.58
Professional school ^a	0.67 (0.38)	3.17 (1)	.075	1.96	0.93, 4.09
Unsettling					
Civic	0.40 (0.48)	0.72 (1)	.395	1.50	0.60, 3.81
Existential	1.24 (0.53)	5.50 (1)	.019	3.46	1.23, 9.77
Vocational	-0.67 (.46)	2.12 (1)	.145	0.51	0.21, 1.26
Professional school ^a	-0.19 (0.40)	0.23 (1)	.629	0.82	0.38, 1.81
Authoritative/ disciplined					
Civic	-0.85 (1.06)	0.65 (1)	.422	0.43	0.05, 3.40
Existential	0.75 (1.22)	0.37 (1)	.540	2.11	0.19, 23.18
Vocational	0.43 (1.26)	0.11 (1)	.737	1.53	0.13, 18.23
Professional school ^a	-1.09 (1.17)	0.87 (1)	.352	0.34	0.03, 3.32
Competitive					
<i>Insufficient selections for analysis</i>					

Note. ^aIn contrast with the domains of human development, which were entered simultaneously, professional school affiliation of courses was entered as a predictor in independent analyses. Only data from 2018 were used in these analyses.

Table A5
Results of Logistic Regression Analyses Predicting Avoided Topics Ordered by Frequency of Selection (N = 159).

Avoided Topic	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
My personal political or social views					
Civic	−0.32 (0.36)	0.78 (1)	.377	0.73	0.36, 1.47
Existential	0.35 (0.36)	0.94 (1)	.331	1.42	0.70, 2.89
Vocational	−0.12 (0.40)	0.09 (1)	.770	0.89	0.41, 1.95
Professional school ^a	−0.16 (0.33)	0.24 (1)	.625	0.85	0.44, 1.63
Traumatic or triggering personal experiences					
Civic	0.31 (0.39)	0.65 (1)	.420	1.37	0.64, 2.91
Existential	−0.01 (0.38)	0.00 (1)	.971	0.99	0.47, 2.06
Vocational	−0.91 (0.40)	5.11 (1)	.024	0.40	0.18, 0.89
Professional school ^a	−0.00 (0.34)	0.00 (1)	.990	1.00	0.51, 1.95
Issues or topics outside my area of expertise					
Civic	0.43 (0.45)	0.92 (1)	.637	1.54	0.64, 3.73
Existential	−0.18 (0.43)	0.18 (1)	.359	0.83	0.36, 1.93
Vocational	−0.89 (0.45)	3.90 (1)	.048	0.41	0.17, 0.99
Professional school ^a	0.20 (0.40)	0.26 (1)	.607	1.23	0.56, 2.67
My own personal narratives					
Civic	−0.03 (0.49)	0.00 (1)	.948	0.97	0.37, 2.55
Existential	−0.16 (0.50)	0.10 (1)	.746	0.85	0.32, 2.28
Vocational	−0.90 (0.51)	3.14 (1)	.077	0.41	0.15, 1.10
Professional school ^a	−0.60 (0.48)	1.61 (1)	.204	0.55	0.22, 1.39
Social identities					
Civic	−0.08 (0.67)	0.01 (1)	.911	0.93	0.25, 3.47
Existential	0.40 (0.72)	0.31 (1)	.578	1.49	0.36, 6.15
Vocational	−0.46 (0.70)	0.43 (1)	.512	0.63	0.16, 2.48
Professional school ^a	0.64 (0.65)	0.98 (1)	.323	1.90	0.53, 6.76
Students' personal narratives					
Civic	−0.39 (0.95)	0.17 (1)	.684	0.68	0.11, 4.36
Existential	−0.00 (0.97)	0.00 (1)	.998	1.00	0.15, 6.64
Vocational	0.38 (1.20)	0.10 (1)	.749	1.47	0.14, 15.34
Professional school ^a	−0.38 (0.93)	0.17 (1)	.682	0.68	0.11, 4.21
Students' political or social views					
Civic	−1.11 (0.81)	1.90 (1)	.168	0.33	0.07, 1.60
Existential	−1.84 (1.00)	3.40 (1)	.065	0.16	0.02, 1.12
Vocational	−0.83 (1.00)	0.69 (1)	.405	0.43	0.06, 3.10
Professional school ^a	−0.92 (0.85)	1.16 (1)	.282	0.40	0.08, 2.13
Controversial events					
<i>Insufficient selections for analysis</i>					

Note. ^aIn contrast with the domains of human development, which were entered simultaneously, professional school affiliation of courses was entered as a predictor in independent analyses. Only data from 2018 were used in these analyses.

Table A6
Results of Logistic Regression Analyses Predicting Achievement Goals Ordered by Frequency of Selection (N = 159).

Achievement Goal	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Being able to critically evaluate ethical perspectives of multiple stakeholders					
Civic	0.99 (0.36)	7.61 (1)	.006	2.68	1.33, 5.41
Existential	0.23 (0.36)	0.39 (1)	.530	1.25	0.62, 2.54
Vocational	-0.08 (0.41)	0.04 (1)	.851	0.93	0.41, 2.07
Professional school ^a	0.05 (0.33)	0.02 (1)	.881	1.05	0.55, 2.00
Deliberating with others about ethical problems					
Civic	0.71 (0.36)	3.90 (1)	.048	2.04	1.01, 4.13
Existential	0.94 (0.35)	7.12 (1)	.008	2.57	1.28, 5.13
Vocational	-0.07 (0.41)	0.03 (1)	.861	0.93	0.42, 2.06
Professional school ^a	0.19 (0.32)	0.37 (1)	.543	1.22	0.65, 2.29
Analyze and understand problems on a macro or systemic level					
Civic	1.00 (0.36)	7.96 (1)	.005	2.73	1.36, 5.48
Existential	-0.17 (0.36)	0.23 (1)	.631	0.81	0.42, 1.69
Vocational	0.49 (0.40)	1.50 (1)	.220	1.58	0.75, 3.54
Professional school ^a	0.93 (0.33)	7.96 (1)	.005	2.55	1.33, 4.87
Having an ethical orientation					
Civic	0.72 (0.36)	4.10 (1)	.043	2.05	1.02, 4.11
Existential	0.51 (0.34)	2.15 (1)	.143	1.66	0.84, 3.26
Vocational	-0.23 (0.39)	0.35 (1)	.555	0.79	0.37, 1.71
Professional school ^a	0.13 (0.32)	0.17 (1)	.679	1.14	0.61, 2.13
Being able to articulate and defend moral/ethical arguments					
Civic	0.02 (0.35)	0.00 (1)	.946	1.02	0.52, 2.02
Existential	0.34 (0.34)	1.02 (1)	.312	1.41	0.73, 2.74
Vocational	-0.06 (0.39)	0.03 (1)	.872	0.94	0.44, 2.00
Professional school ^a	0.43 (0.32)	1.84 (1)	.175	1.54	0.82, 2.89
Understanding how biases and heuristics can lead to unintended consequences					
Civic	-0.15 (0.35)	0.18 (1)	.676	0.50	0.43, 1.72
Existential	0.81 (0.35)	5.48 (1)	.019	2.86	1.14, 4.47
Vocational	0.44 (0.39)	1.27 (1)	.260	1.26	0.72, 3.38
Professional school ^a	-0.17 (0.32)	0.30 (1)	.582	0.56	0.45, 1.57
Being willing and able to identify and confront social injustice					
Civic	1.24 (0.37)	11.46 (1)	.001	3.45	1.68, 7.05
Existential	0.16 (0.35)	0.21 (1)	.648	1.17	0.59, 2.34
Vocational	0.35 (0.40)	0.62 (1)	.434	1.37	0.63, 3.00
Professional school ^a	0.59 (0.32)	3.33 (1)	.068	1.80	0.96, 3.37
Taking personal responsibility					
Civic	0.49 (0.36)	1.85 (1)	.173	1.63	0.81, 3.29
Existential	0.46 (0.35)	1.72 (1)	.189	1.58	0.80, 3.13
Vocational	1.00 (0.41)	5.96 (1)	.015	2.73	1.22, 6.11
Professional school ^a	0.74 (0.32)	5.19 (1)	.023	2.09	1.11, 3.93
Having a clear sense of one's own values					
Civic	-0.05 (0.35)	0.02 (1)	.879	0.95	0.47, 1.90
Existential	0.87 (0.35)	6.12 (1)	.013	2.39	1.20, 4.76
Vocational	0.16 (0.39)	0.16 (1)	.685	1.17	0.54, 2.53
Professional school ^a	0.53 (0.32)	2.71 (1)	.100	1.70	0.90, 3.18
Cultivating one's moral imagination					
Civic	0.55 (0.38)	2.13 (1)	.145	1.73	0.83, 3.62
Existential	0.78 (0.36)	4.67 (1)	.031	2.18	1.08, 4.41
Vocational	-0.95 (0.40)	5.60 (1)	.018	0.39	0.18, 0.85
Professional school ^a	-0.76 (0.33)	5.43 (1)	.020	0.47	0.25, 0.89
Developing an expanded sense of moral community					
Civic	0.63 (0.38)	2.79 (1)	.095	1.87	0.90, 3.92
Existential	0.96 (0.37)	6.86 (1)	.009	2.61	1.27, 5.34
Vocational	-0.02 (0.40)	0.00 (1)	.954	0.98	0.45, 2.13
Professional school ^a	-0.04 (0.32)	0.02 (1)	.898	0.96	0.51, 1.81
Demonstrating social responsibility					
Civic	0.90 (0.39)	5.33 (1)	.021	2.46	1.15, 5.27
Existential	0.35 (0.36)	0.94 (1)	.334	1.42	0.70, 2.86
Vocational	1.50 (0.47)	10.05 (1)	.002	4.47	1.77, 11.26
Professional school ^a	0.38 (0.32)	1.36 (1)	.244	1.46	0.77, 2.75
Demonstrating moral/ethical literacy					
Civic	-0.08 (0.37)	0.04 (1)	.835	0.93	0.45, 1.90
Existential	0.86 (0.37)	5.46 (1)	.019	2.37	1.15, 4.90
Vocational	0.52 (0.42)	1.57 (1)	.211	1.68	0.75, 3.80
Professional school ^a	-0.65 (0.33)	3.77 (1)	.052	0.52	0.27, 1.01
Making deliberative moral judgments					
Civic	0.59 (0.39)	2.35 (1)	.125	1.81	0.85, 3.84
Existential	0.52 (0.37)	2.02 (1)	.155	1.69	0.82, 3.47
Vocational	-0.31 (0.40)	0.61 (1)	.437	0.73	0.33, 1.61
Professional school ^a	0.00 (0.33)	0.00 (1)	.995	1.00	0.52, 1.93
Pursuing virtue/moral growth					
Civic	0.05 (0.40)	0.01 (1)	.903	1.05	0.48, 2.29
Existential	1.34 (0.43)	9.84 (1)	.002	3.81	1.65, 8.80
Vocational	0.16 (0.43)	0.14 (1)	.704	1.18	0.51, 2.72

(continued on next page)

Table A6 (continued)

Achievement Goal	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Professional school ^a	0.41 (0.35)	1.42 (1)	.234	1.51	0.77, 2.99
Having ethical commitments to established ethical norms/rules					
Civic	-0.42 (0.40)	1.11 (1)	.292	0.66	0.30, 1.44
Existential	0.02 (0.38)	0.00 (1)	.968	1.02	0.48, 2.14
Vocational	2.05 (0.65)	9.79 (1)	.002	7.79	2.15, 27.84
Professional school ^a	0.42 (0.35)	1.44 (1)	.231	1.53	0.77, 3.04
Taking moral action					
Civic	0.97 (0.45)	4.69 (1)	.030	2.64	1.10, 6.37
Existential	0.63 (0.40)	2.43 (1)	.119	1.87	0.85, 4.10
Vocational	0.09 (0.44)	0.04 (1)	.844	1.09	0.46, 2.60
Professional school ^a	0.50 (0.36)	1.93 (1)	.165	1.65	0.81, 3.35
Being willing and able to identify and confront threats to freedom					
Civic	0.30 (0.43)	0.48 (1)	.487	1.35	0.58, 3.14
Existential	0.86 (0.42)	4.12 (1)	.043	2.36	1.03, 5.41
Vocational	0.70 (0.49)	2.03 (1)	.154	2.01	0.77, 5.26
Professional school ^a	0.25 (0.37)	0.47 (1)	.492	1.29	0.63, 2.66
Tolerating and reducing moral disagreements and ambiguities					
Civic	0.10 (0.47)	0.05 (1)	.828	1.11	0.44, 2.78
Existential	1.35 (0.53)	6.42 (1)	.011	3.85	1.36, 10.91
Vocational	0.17 (0.50)	0.12 (1)	.729	1.19	0.45, 3.14
Professional school ^a	1.08 (0.44)	6.14 (1)	.013	2.95	1.25, 6.93
Relying on innate moral intuitions					
Civic	0.74 (0.82)	0.82 (1)	.366	2.10	0.42, 10.45
Existential	0.56 (0.71)	0.63 (1)	.426	1.76	0.44, 7.05
Vocational	0.41 (0.83)	0.25 (1)	.621	1.51	0.30, 7.71
Professional school ^a	0.24 (0.63)	0.14 (1)	.706	1.27	0.37, 4.33
Adopting a classical theoretical lens when making moral judgments					
Civic	-0.77 (0.72)	1.15 (1)	.284	0.46	0.11, 1.90
Existential	0.51 (0.76)	0.46 (1)	.500	1.67	0.38, 7.42
Vocational	1.37 (1.13)	1.47 (1)	.225	3.94	0.43, 36.10
Professional school ^a	-0.20 (0.69)	0.08 (1)	.776	0.82	0.21, 3.18

Note. ^aIn contrast with the domains of human development, which were entered simultaneously, professional school affiliation of courses was entered as a predictor in independent analyses. Only data from 2018 were used in these analyses.

Table A7
Results of Logistic Regression Analyses Predicting Avoided Outcomes Ordered by Frequency of Selection (N = 159).

Avoided Outcome	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Self-righteousness					
Civic	0.73 (0.38)	3.58 (1)	.058	2.07	0.98, 4.41
Existential	0.24 (0.39)	0.38 (1)	.536	1.28	0.59, 2.77
Vocational	-0.08 (0.45)	0.03 (1)	.852	0.92	0.38, 2.24
Professional school ^a	0.49 (0.37)	1.74 (1)	.187	1.63	0.79, 3.38
Indoctrination					
Civic	0.13 (0.38)	0.12 (1)	.726	1.14	0.54, 2.42
Existential	0.59 (0.36)	2.58 (1)	.108	1.80	0.88, 3.67
Vocational	-0.77 (0.48)	2.64 (1)	.104	0.46	0.18, 1.17
Professional school ^a	-0.17 (0.35)	0.25 (1)	.616	0.84	0.43, 1.66
Moral certainty					
Civic	0.67 (0.35)	3.61 (1)	.058	1.96	0.98, 3.91
Existential	0.22 (0.35)	0.38 (1)	.538	1.24	0.62, 2.49
Vocational	0.09 (0.40)	0.05 (1)	.814	1.01	0.50, 2.41
Professional school ^a	-0.11 (0.33)	0.12 (1)	.729	0.89	0.47, 1.70
Resorting to false moral equivalencies					
Civic	0.78 (0.36)	4.84 (1)	.028	2.19	1.09, 4.39
Existential	0.28 (0.34)	0.66 (1)	.417	1.32	0.67, 2.60
Vocational	-0.38 (0.40)	0.91 (1)	.339	0.69	0.32, 1.49
Professional school ^a	0.43 (0.32)	1.84 (1)	.175	1.54	0.83, 2.89
Irrelevance/uselessness of ethical inquiry					
Civic	0.25 (0.37)	0.43 (1)	.510	1.28	0.62, 2.66
Existential	0.83 (0.37)	5.04 (1)	.025	2.29	1.11, 4.74
Vocational	-0.64 (0.39)	2.63 (1)	.105	0.53	0.24, 1.14
Professional school ^a	-0.64 (0.33)	3.70 (1)	.055	0.53	0.28, 1.01
Rationalization/use of ethical language and theory to justify a predetermined end					
Civic	1.18 (0.41)	8.47 (1)	.004	3.26	1.47, 7.22
Existential	0.68 (0.37)	3.43 (1)	.064	1.97	0.96, 4.06
Vocational	-0.07 (0.41)	0.03 (1)	.860	0.93	0.42, 2.07
Professional school ^a	-0.05 (0.33)	0.02 (1)	.887	0.96	0.50, 1.81
Moral relativism					
Civic	0.04 (0.38)	0.01 (1)	.910	1.04	0.50, 2.18
Existential	0.89 (0.38)	5.34 (1)	.021	2.43	1.15, 5.17
Vocational	-0.03 (0.41)	0.01 (1)	.933	0.97	0.44, 2.15
Professional school ^a	-0.56 (0.34)	1.80 (1)	.180	0.63	0.33, 1.23
Going with one's gut/ intuitions					
Civic	0.31 (0.40)	0.59 (1)	.444	1.36	0.62, 2.98
Existential	0.49 (0.39)	1.63 (1)	.202	1.64	0.77, 3.48
Vocational	0.46 (0.45)	1.07 (1)	.301	1.59	0.66, 3.84
Professional school ^a	0.11 (0.35)	0.11 (1)	.745	1.12	0.56, 2.24

Note. ^aIn contrast with the domains of human development, which were entered simultaneously, professional school affiliation of courses was entered as a predictor in independent analyses. Only data from 2018 were used in these analyses.

Table A8
Results of Logistic Regression Analyses of Professional School Affiliation as Predictor of Human Development Goals Ordered by Frequency of Selection (N = 159).

Human Development Goal	b (SE b)	Wald (df)	p	Odds Ratio	95 % CI
Vocational/Professional	1.39 (0.41)	11.46 (1)	< .001	4.00	1.79, 8.92
Civic/Community	0.29 (0.34)	0.72 (1)	.397	1.33	0.69, 2.60
Existential/Personal	-1.17 (0.34)	11.56 (1)	< .001	0.31	0.16, 0.61

Note. Only data from 2018 were used in these analyses.

Table A9
Percentage of Participants Selecting Each Type of Course Material.

Fall 2017 (N = 121)		Spring 2018 (N = 95)		Fall 2018 (N = 74)	
Philosophical and theoretical readings	61 %	Philosophical and theoretical readings	74 %	Philosophical and theoretical readings	62 %
Case studies	60 %	Case studies	62 %	Personal experiences	58 %
Empirical readings	57 %	Personal experiences	60 %	Case studies	39 %
Personal experiences	52 %	Historical readings	60 %	Popular media	53 %
Popular media	50 %	Popular media	52 %	Empirical readings	49 %
Literature, films, or other forms of artistic expression	36 %	Literature, films, or other forms of artistic expression	49 %	Popular media	50 %
Social media or web sources	16 %	Empirical readings	45 %	Empirical readings	26 %
		Professional ethics guidelines	28 %	Literature, films, or other forms of artistic expression	47 %
		Social media or web sources	25 %	Literature, films, or other forms of artistic expression	31 %
				Literature, films, or other forms of artistic expression	45 %
				Historical readings	32 %
				Historical readings	39 %
				Professional ethics guidelines	23 %
				Professional ethics guidelines	16 %
				Social media or web sources	19 %
				Social media or web sources	3 %

Note. Percentages in bold font reflect the percentage of instructors selecting the item as one of the three most important.

Table A10
Percentage of Participants Selecting Each Course Activity.

Fall 2017 (N = 121)		Spring 2018 (N = 95)		Fall 2018 (N = 74)	
Class discussions	91 %	Class discussions	94 %	Class discussions	97 %
Writing analytically	63 %	External preparation for class	72 %	External preparation for class	66 %
External preparation for class	60 %	Writing analytically	66 %	Writing analytically	35 %
Lectures	43 %	Lectures	64 %	Lectures	50 %
Office hours, or out of class interactions with the instructor and/or teaching assistants	39 %	Student presentations	56 %	Student presentations	49 %
Student presentations	38 %	Reflective writing	55 %	Reflective writing	22 %
Discussion questions and/or online journal	34 %	Office hours, out of class interactions with the instructor and/or teaching assistants	55 %	Office hours, out of class interactions with the instructor and/or teaching assistants	43 %
Reflective writing	31 %	Discussion questions and/or online journal	49 %	Discussion questions and/or online journal	34 %
Simulations/ role playing	26 %	Guest speakers	48 %	Guest speakers	31 %
Structured debates	22 %	Group projects	32 %	Group projects	24 %
Group projects	21 %	Structured debates	28 %	Structured debates	24 %
Exams, quizzes	17 %	Simulations/ role playing	27 %	Creative projects	23 %
Creative projects	15 %	Creative projects	24 %	Simulations/ role playing	12 %
Service learning	7 %	Exams, quizzes	22 %	Field work	22 %
		Field work	14 %	Field work	7 %
		Field trips	11 %	Exams, quizzes	16 %
		Service learning	5 %	Field trips	5 %
				Exams, quizzes	14 %
				Field trips	3 %
				Service learning	11 %
				Service learning	0 %
					49 %
					1 %

Note. Percentages in bold reflect percentage selecting the item as one of the three most important.

Table A11
Percentages of Participants Selecting Each Form of Engagement.

Fall 2017 (N = 121)		Spring 2018 (N = 95)		Fall 2018 (N = 74)	
Reflecting on one's own thinking and values	72 %	Engaging with different perspectives	88 %	Engaging with different perspectives	85 %
Analyzing complex topics	69 %	Reflecting on one's own thinking and values	85 %	Reflecting on one's own thinking and values	61 %
Engaging with different perspectives	64 %	Identifying the ethical implications of policy and practice	73 %	Identifying the ethical implications of policy and practice	78 %
Acquiring information	63 %	Analyzing ethical issues	73 %	Recognizing ethical issues	58 %
Applying ethical reasoning/ principles to specific situations	55 %	Recognizing ethical issues	72 %	Acquiring knowledge that is ethically relevant	69 %
Articulating moral/ethical arguments	53 %	Acquiring knowledge that is ethically relevant	68 %	Articulating moral/ethical arguments	27 %
Recognizing ethical issues	53 %	Applying ethical reasoning/ principles to specific situations	67 %	Identifying the ethical implications of policy and practice	55 %
Identifying the ethical implications of policy and practice	47 %	Articulating moral/ethical arguments	65 %	Analyzing ethical issues	32 %
Identifying means of ethical engagement	16 %	Identifying means of ethical engagement	32 %	Applying ethical reasoning/ principles to specific situations	55 %
				Identifying the ethical implications of policy and practice	22 %
				Articulating moral/ethical arguments	54 %
				Recognizing ethical issues	34 %
				Analyzing ethical issues	49 %
				Applying ethical reasoning/ principles to specific situations	20 %
				Identifying the ethical implications of policy and practice	47 %
				Identifying means of ethical engagement	24 %
					26 %
					8 %

Note. Percentages in bold font reflect the percentage of instructors selecting the item as one of the three most important.

Table A12
Percentage of Participants Selecting Each Class Climate Descriptor.

Fall 2017 (N = 121)		Spring 2018 (N = 95)		Fall 2018 (N = 74)	
Critical	68 %	Open/ participatory	89 %	Open/ participatory	85 %
Open	66 %	Critical (analytically)	80 %	Critical (analytically)	77 %
Empowering	49 %	Reflective	72 %	Reflective	70 %
Safe	45 %	Civil/ respectful	71 %	Civil/ respectful	66 %
Student- centered	44 %	Stimulating/ exciting	66 %	Stimulating/ exciting	65 %
Creative	36 %	Student-centered/ Empowering	56 %	Student-centered/ Empowering	59 %
Discursive	31 %	Safe (emotionally protective)	43 %	Creative	41 %
Structured/ ordered	31 %	Creative	40 %	Safe (emotionally protective)	34 %
		Structured/ ordered	28 %	Structured/ ordered	27 %
		Brave	27 %	Brave	20 %
		Unsettling	21 %	Unsettling	18 %
		Authoritative/ disciplined	3 %	Authoritative/ disciplined	1 %
		Competitive	1 %	Competitive	1 %
					0 %

Note. Percentages in bold font reflect the percentage of instructors selecting the item as one of the three most important.

Table A13
Percentage of Participants Identifying Each Topic as One They Avoid.

Fall 2017 (N = 121)		Spring 2018 (N = 95)		Fall 2018 (N = 74)	
Traumatic or triggering personal experiences	18 %	Traumatic or triggering personal experiences	35 %	My personal political or social views	41 %
Personal political or social views	14 %	My personal political or social views	29 %	Traumatic or triggering personal experiences	26 %
Social identities	2 %	Issues or topics outside my area of expertise	18 %	Issues or topics outside my area of expertise	23 %
		My own personal narratives	12 %	My own personal narratives	20 %
		Social identities	9 %	My own personal narratives	18 %
		Students' political or social views	3 %	Students' political or social views	16 %
		Students' personal narratives	3 %	Students' political or social views	5 %
		Controversial events	1 %	Students' personal narratives	5 %
				Students' personal narratives	4 %
				Social identities	3 %
				Social identities	3 %
				Controversial events	0 %
				Controversial events	0 %

Note. Percentages in bold font reflect the percentage of instructors selecting the item as one of the three most important.

Table A14
Percentage of Participants Identifying each Outcome as One they Seek.

Fall 2017 (N = 121)	Spring 2018 (N = 95)	Fall 2018 (N = 74)			
Being able to critically evaluate ethical perspectives of multiple stakeholders	53 %	Being able to critically evaluate ethical perspectives of multiple stakeholders	72 %	Being able to analyze and understand problems on a macro or systemic level	49 %
Deliberating with others about ethical problems	50 %	Deliberating with others about ethical problems	68 %	Being able to critically evaluate ethical perspectives of multiple stakeholders	26 %
Being able to articulate and defend moral/ethical arguments	44 %	Being able to analyze and understand problems on a macro or systemic level	62 %	Deliberating with others about ethical problems	49 %
Being critically conscious	40 %	Understanding how biases and heuristics can lead to unintended consequences	61 %	Having an ethical orientation	23 %
Demonstrating social responsibility	33 %	Having an ethical orientation	58 %	Being able to articulate and defend moral/ethical arguments	46 %
Understanding how biases and heuristics can lead to unintended consequences	32 %	Being able to articulate and defend moral/ethical arguments	55 %	Cultivating one's moral imagination	24 %
Having a clear sense of one's own values	31 %	Being willing and able to identify and confront social injustice	55 %	Being willing and able to identify and confront social injustice	43 %
Taking personal responsibility	30 %	Having a clear sense of one's own values	53 %	Taking personal responsibility	23 %
Having an ethical orientation	29 %	Taking personal responsibility	53 %	Having a clear sense of one's own values	42 %
Demonstrating moral/ethical literacy	24 %	Demonstrating moral/ethical literacy	47 %	Understanding how biases and heuristics can lead to unintended consequences	27 %
Developing an expanded sense of moral community	21 %	Demonstrating social responsibility	46 %	Taking personal responsibility	16 %
Cultivating one's moral imagination	18 %	Cultivating one's moral imagination	45 %	Having a clear sense of one's own values	36 %
Having ethical commitments to established ethical norms/rules	18 %	Developing an expanded sense of moral community	44 %	Understanding how biases and heuristics can lead to unintended consequences	22 %
Making deliberative moral judgments	15 %	Pursuing virtue/moral growth	40 %	Developing an expanded sense of moral community	8 %
Pursuing virtue/moral growth	12 %	Making deliberative moral judgments	39 %	Demonstrating social responsibility	30 %
Taking moral action	12 %	Having ethical commitments to established ethical norms/rules	35 %	Making deliberative moral judgments	14 %
Tolerating and reducing moral disagreements and ambiguities	7 %	Taking moral action	34 %	Being willing and able to identify and confront threats to freedom	27 %
Adopting a classical theoretical lens when making moral judgments	7 %	Being willing and able to identify and confront threats to freedom	27 %	Having ethical commitments to established ethical norms/rules	11 %
Relying on innate moral intuitions	1 %	Tolerating and reducing moral disagreements and ambiguities	26 %	Taking moral action	18 %
		Relying on innate moral intuitions	9 %	Pursuing virtue/moral growth	3 %
		Adopting a classical theoretical lens when making moral judgments	7 %	Tolerating and reducing moral disagreements and ambiguities	16 %
				Adopting a classical theoretical lens when making moral judgments	3 %
				Relying on innate moral intuitions	8 %
					1 %
					4 %
					1 %
					2 %
					0 %

Note. Percentages in bold font reflect the percentage of instructors selecting the item as one of the three most important.

Table A15
Percentage of Participants Identifying Each Outcome as One They Work to Avoid.

Fall 2017 (N = 121)	Spring 2018 (N = 95)	Fall 2018 (N = 74)			
Self-righteousness	61 %	Self-righteousness	73 %	Self-righteousness	74 %
Moral certainty	58 %	Indoctrination	71 %	Indoctrination	58 %
Irrelevance/ uselessness of ethical inquiry	42 %	Moral certainty	62 %	Moral certainty	54 %
Rationalization/ use of ethical language and theory to justify a predetermined end	40 %	Resorting to false moral equivalencies	56 %	Resorting to false moral equivalencies	59 %
Going with one's gut/ intuitions	36 %	Rationalization/ use of ethical language and theory to justify a predetermined end	46 %	Irrelevance/uselessness of ethical inquiry	50 %
Moral relativism	23 %	Irrelevance/ uselessness of ethical inquiry	41 %	Moral relativism	43 %
		Moral relativism	34 %	Rationalization/use of ethical language and theory to justify a predetermined end	27 %
		Going with one's gut/ intuitions	31 %	Irrelevance/uselessness of ethical inquiry	34 %
				Going with one's gut/intuitions	19 %
					28 %
					7 %
					26 %
					16 %
					24 %
					14 %

Note. Percentages in bold font reflect the percentage of instructors selecting the item as one of the three most important.

Table A16
Percentage of Participants Selecting Each Domain of Human Development.

Fall 2017 (N = 106)		Spring 2018 (N = 95)		Fall 2018 (N = 74)	
Civic development	81 %	Professional/ vocational development	68 %	Professional/ Vocational development	73 % 47 %
Personal/ existential development	47 %	Personal/ existential development	63 %	Community- oriented/ Civic development	66 % 24 %
Professional/ vocational development	43 %	Community- oriented/ civic development	61 %	Personal/ Existential development	53 % 19 %

Note. Percentages in bold font reflect the percentage of instructors selecting the item as the most important.

Appendix B. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.stueduc.2020.100914>.

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