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The Moral Limits of Professional Ethics Enculturation

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Abstract: Professional and applied ethicists have evidenced the importance and efficacy of professional ethics education in universities, with some arguing that, in addition to advancing the development of professional ethics standards and individual moral responsibility, professional ethics education should itself be undertaken in an ethical fashion. This paper argues that theorizing ethics enculturation as a multidimensional and dialectical process allows educators and theorists to identify, examine, and redress morally objectionable forms of ethics education. To remain ethical, professional ethics enculturation must identify and avoid morally impermissible approaches that negatively impact those who undergo ethics enculturation and/or those whom the profession serves. Impermissible approaches include moral indoctrination, neglect, corruption, and injury, among others, and operate implicitly and explicitly in professional and educational contexts. Moreover, professional ethics enculturation must remain sufficiently bidirectional to ensure that both developing professionals become properly enculturated within the profession and that the profession is responsive to the needs and concerns of future generations of professionals.

Keywords: Ethics enculturation, ethics education, moral education, professional education, professional ethics, moral development

Postsecondary ethics education has long preoccupied theoretical and applied ethicists, producing an "ethics boom" (Davis 1999) that persists more than half a century later (Callahan and Bok 1980; Elliott and June 2018). The question of how to cultivate ethical professionals (researchers, practitioners, and professors) in STEM and social sciences remains both salient and timely given the important role these disciplines play in advancing technologies, growing economies, and

promoting social and political stability.[1] Recognition of this salience is reflected in the diverse research produced on teaching professional ethics in disciplines like engineering (Hess and Fore 2018), medicine (Wong et al. 2022), business (Jaganjac et al. 2024), accounting (Poje and Zaman Groff 2022), computer science (Parsons and Khuri 2020), computing (Brown et al. 2023), education (Maxwell and Schwimmer 2016), architecture (Hui 2013), law (Nicolae 2015), and public administration (Raadschelders and Chitiga 2021), among others.

The general importance of teaching professional ethics notwithstanding, education theorists highlight that the form of this teaching is as ethically significant as its content. For example, Jarvis (1983) argues that beyond instilling an ongoing ethical commitment to one's profession, professional education must avoid indoctrination which is antithetical to the ideal of education. Education entails openness and criticality, Jarvis maintains, and eschews mindless conformity. Gutmann (2015) argues that professional ethics education must cover a broad range of topics—from professionals' role responsibilities to professions' role in society—and fall within the realm of both professional and liberal arts education. Martin (2016) argues that beyond instilling an other-regarding service-oriented disposition, professional education must expand the cognitive horizons of and be worthwhile for the persons undertaking it.

Such arguments distinguish between morally permissible and impermissible ethics education to highlight that professional ethics education must itself be ethical to advance ethical goals.[2] This paper extends this line of inquiry beyond formal education to ethics enculturation in

[1] When discussing professional ethics enculturation henceforth, we maintain this broad understanding of the term professional and use it to refer to various occupations in STEM and social science disciplines.

[2] We use the term morally permissible to mean morally unobjectionable in the context of education, and later enculturation. Permissibility is the bare minimum for educators to meet. Beyond permissible conduct lies conduct that is morally obligatory (i.e., makes moral demands of us), morally legitimate (i.e., publicly recognized as good or right), and morally supererogatory (i.e., goes beyond the call of duty). We believe higher standards are context dependent so must be determined based on the discipline, university, legal framework, and other contextual features of ethics education and enculturation.

professional disciplines more broadly: the set of processes through which developing professionals are initiated into and internalize the values and norms of their discipline. Building on a framework of ethics enculturation advanced in previous work (Authors 2024), we argue that professional ethics enculturation may involve morally objectionable practices that operate implicitly or outside university boundaries, making them difficult to recognize, foresee, and prevent. To remain morally permissible, ethics enculturation must avoid morally objectionable practices that wrong those being enculturated within a discipline and profession or those whom a profession is expected to serve. The analysis presented in this paper is informed by our experience with higher education in the context of a large public university in the United States.[3] However, we believe it to be relevant and applicable to a variety of contexts wherein ethics enculturation takes place.

The structure of the paper is as follows: First, we outline our ethics enculturation framework to foreground the multidimensional and dialectical nature of enculturation. Second, we argue that professional value cultivation has historically been a holistic process that extends beyond ethics education. The shift from enculturation to education has allowed enculturation to operate covertly, sometimes even counterproductively, and take morally objectionable forms that escape scrutiny. Resolving this problem demands centering on ethics enculturation as a holistic process of value formation. Third, we apply our framework to assess the moral permissibility of professional ethics enculturation. We discuss moral limits of ethics enculturation associated with enculturation's multidimensional and dialectical nature, like avoidance of moral indoctrination, moral neglect, moral corruption, and moral injury. While we offer no comprehensive solution, we delineate impermissible and permissible forms of ethics enculturation.

[3] The university offers doctoral- and professional-level education and is classified as a very high research activity university.

A Framework of Ethics Enculturation

Research highlights the importance of enculturation as a lens for understanding students' initiation into the values and norms of ethical conduct of their discipline (e.g., Emmerich 2015; Nieusma and Cieminski 2018; Pinkert et al. 2023; Smith 2001; West and Chur-Hansen 2004). Underlying this research is the belief that focusing on university curriculum to understand how students learn disciplinary and professional expectations is insufficient. Much of what students learn occurs outside the formal curriculum and touches every aspect of professional culture (Authors 2024).

Despite movement to frame ethics formation in terms of enculturation, the literature is conceptually ambiguous and contradictory. Some scholars think of ethics enculturation as closely related to, or overlapping with, socialization (Hafferty and Franks 1994; Pinkert et al. 2023) while others as distinct from socialization (Emmerich 2015). Some think of enculturation as focusing primarily on the hidden curriculum (Hafferty and Franks 1994; West and Chur-Hansen 2004) while others as permeating all aspects of learning (Smith 2001). Many scholars think of ethics education holistically even though they do not use the language of enculturation. Much has been written, for instance, about the role of the hidden curriculum (e.g., Gupta et al. 2020; Polmear et al. 2019) or codes of conduct (e.g., Bowman 2001; Franeta 2019) in professional ethics education. Some frame this conversation in terms of *ac*culturation while providing descriptions that align with what most call *en*culturation (Avci 2017; Handelsman et al. 2005).

In response to this conceptual diversity, we advanced a framework of ethics enculturation that builds on disciplinary enculturation (Prior and Bilbro 2012) and student socialization (Weidman et al. 2001) in higher education. The framework captures the complexity of ethics enculturation and all factors—internal and external, conscious and unconscious, intentional and

unintentional, etc.—that influence developing professionals' moral development.[4] Accordingly, ethics enculturation, defined broadly as the initiation of professionals into the values and norms of their discipline, is shown to be a multidimensional and dialectical process (Authors 2024).

The multidimensional nature of ethics enculturation is captured by the framework's four quadrants, each representing a different dimension or mode of enculturation: (1) the ethics curriculum of higher education which includes instruction and other learning opportunities; (2) the ethics training students receive within their profession through ethics-related professional development opportunities; (3) the university hidden curriculum which involves modelling and other unstructured/unintentional forms of teaching and learning; and (4) student socialization in professional values through exposure to the profession at various stages in life (Authors 2024, p. 315–317). While the four dimensions or modes of enculturation are often analyzed as distinct, in practice they are interrelated making it difficult to neatly pull them apart. For instance, instructional decisions about what ethics content to teach, how to teach it, and who should teach it, communicate implicit information about the culture of a discipline, which is part of the hidden curriculum, and influence the level and quality of professional exposure that students receive while completing their studies. Some modes may even overlap as they include practices that fit within multiple modes. Consider university and professional training. The line between the two is often blurred in fields like medicine where training occurs in university spaces that are also spaces of clinical practice. Or consider the modelling of ethical conduct which can be explicit and intentional (falling within the explicit curriculum) but also implicit and unintentional (falling within the hidden curriculum). Distinguishing between explicit and implicit modelling is difficult as there is not always a clear line to draw between the two. Instructors readily and imperceptibly

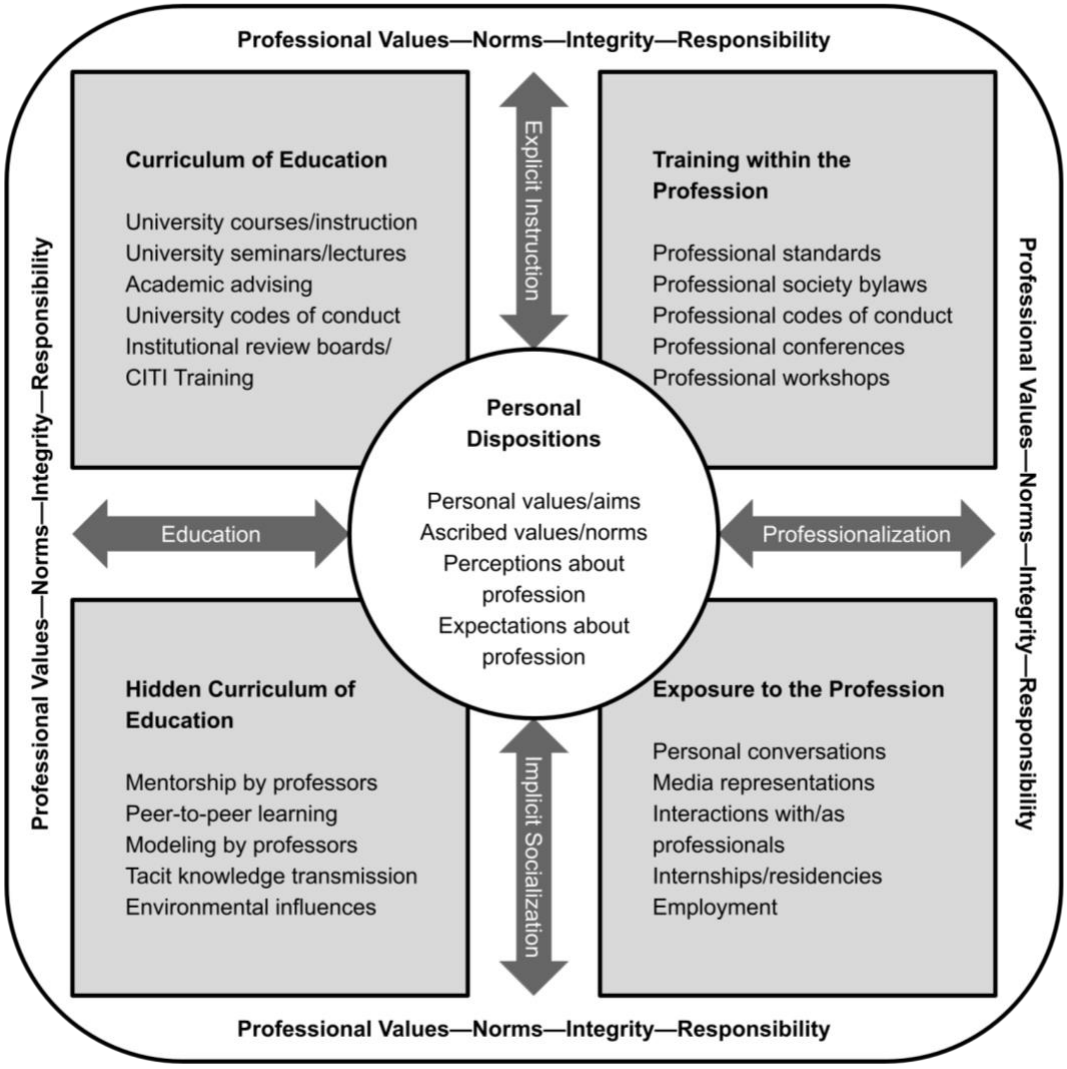
[4] "Developing professionals" denotes students and early-career professionals who are not yet fully enculturated, but is not intended to suggest that experienced professionals do not develop throughout their career.

may move from one mode to another or even occupy ambiguous space between the two, such that intentionality may be both present and absent within the same teaching moment depending on which aspect of the modelling one chooses to focus their attention on. The interrelatedness of and overlap between different dimensions notwithstanding, analyzing each of these dimensions independently enables us to identify problems we might have difficulty identifying otherwise given the complexity of enculturative processes and, in turn, to evaluate the permissibility of our practices through relevant criteria.

The dialectical nature of enculturation is captured by the framework's bidirectional arrows that connect the personal dispositions of developing professionals with the values and norms of the profession within which they are being enculturated.[5] The arrows symbolize a mutually influential process, wherein enculturation changes the dispositions of the enculturated person but the enculturated person's dispositions also (re)shape the values and norms of the profession. On one hand, disciplines enculturate developing professionals by instilling in them the values they are expected to espouse and norms to which they are expected to adhere. On the other hand, developing professionals interpret professional values and norms through their unique moral perspectives, sensitivities, and dispositions and negotiate what it means to embody professional values and adhere to professional norms, as they internalize them and align them with their personal values and standards. In doing so, developing professionals influence professional values and norms both in the short term, by causing subtle changes in the ways in which the developed professionals who interact with them understand these, and in the long term, by entering the profession as full-fledged professionals who bring their own values and norms into the profession and cause generational shifts (see figure 1).

[5] "Dialectical" denotes the reciprocal influence between the entities interacting in enculturation (i.e., student and profession). We do not intend to invoke conceptual associations, Hegelian or otherwise.

Figure 1: Professional Ethics Enculturation Framework



(Reproduced from Authors 2024, p. 315)

In what follows, we engage this framework as indicative of the enculturation process and use it as a jumping point for discussing morally impermissible forms of ethics enculturation that we believe can be observed within processes of ethics enculturation in professional fields.

Recentering Ethics Enculturation

Literature on professional ethics education typically focuses on the first mode of ethics enculturation (*curriculum of education* quadrant of Figure 1). Yet, instilling professional values and norms was not historically reduced to explicit instruction like courses in ethics and professional conduct. Professional codes of ethics that existed throughout the 20th century (Abbott 1983) and proliferated after the 1980s (Davis 1999), codify service expectations that can be traced back to the early 17th century and theology's professional service ethic (Kimball 1996). Before the 20th century, rather than explicit instruction in formal courses, professions relied mostly on institutionalized religion and apprenticeship for training and instilling ethical dispositions in developing professionals (May 1980).

In terms of courses, moral philosophy—central to university education since medieval times—did not gain prominence or expand its curricular presence in the U.S. until the American Revolution in the mid to late 18th century, when advancement of professional education created ethical problems as universities were trying "to reconcile many of the philosophic and scientific influences of the Enlightenment with traditional religious and ethical concerns" (Sloan 1980, p. 2). Even when moral philosophy gained prominence from the late 18th to the late 19th century, student moral development remained a holistic enculturation process wherein "the entire college experience was meant, above all, to be an experience in character development and the moral life" (p. 7).

The expansiveness of ethics enculturation, nonetheless, did not last. Interest in ethics diminished following the late 19th century positivist shift of social science toward what was perceived as the "value-neutral" pursuit of scientific research. The declining interest in ethics and the relegation of moral philosophy to the periphery of higher education with the advent of

electives, limited student exposure to ethical questions. While partially rectified through the provision of professional ethics courses in the early 20th century, professional ethics focused on specific professional problems and was unable to undo the departure from holistic ethics enculturation that characterized the previous century. From the mid 20th century onward, ethics was treated as an academic endeavor divorced from real world problems targeted toward philosophy students. Despite efforts to re-embed ethics in the curriculum through general education, by the late 20th century ethics was unable to retake the holistic enculturation form it once had (Sloan 1980).

The treatment of ethics as a minor component, instead of an animating factor, of the university curriculum arguably persists to this day. Higher education's hyperspecialization at the research institutional level leaves little room for humanities and the liberal arts, and to the extent that humanities courses are offered they target those who specialize rather than being part of a holistic liberal arts education that supports individual moral responsibility. Even though there is evidence that ethics education has been booming since the 1960s (Davis 1999; Hastings Center Staff 1980) and broadening to include generalized and specialized courses that employ a diverse range of teaching methods and learning experiences, ethics education is often reduced to what fits within the formal higher education curriculum (Beever et al. 2021; Kidd et al. 2020; Ongis et al. 2023).

The increasing focus on ethics instruction does not mean that ethics enculturation no longer occurs in higher education and other professional contexts. Rather, it is mostly left to its own devices and operates covertly in ways that can undermine our values and ethical aims. This danger is evident in literature that reveals negative outcomes of enculturation and conflicting messages that developing professionals receive through explicit and implicit enculturation.

In relation to the second quadrant of Figure 1 (*training within the profession*), Franeta (2019) suggests that when codes of conduct supplant other forms of ethics education they may lead to a narrow understanding of moral responsibility, a legalistic mentality that considers anything not explicitly forbidden as permissible, or an overly deferential attitude toward professional power structures. Rosenberg (1998) notes that professional societies with codes of ethics but no system in place to educate members about ethical decision-making, support members in navigating morally difficult situations, and enforce the code when necessary, fail to show due attention to ethical matters. Professional development training can therefore compromise the ethical aims of a profession.

In relation to the third quadrant of Figure 1 (*hidden curriculum of education*), West and Chur-Hansen, (2004) found that medical students were expected to compromise on ethical standards, when these conflicted with other goals. Students were entrusted with procedures they felt ill-equipped to perform or had to sacrifice the quality of patient care to accomplish learning goals of their program. White et al. (2009) found that medical students in clinical settings felt that supervisors routinely violated ethical standards. This led students to compromise, or even reject, values they were taught to adhere to. Despite efforts to cultivate students' ethical dispositions, medical schools may create conditions that counteract explicit ethics instruction.

As to the fourth quadrant of Figure 1 (*exposure to the profession*), research has found that engineers may be unable to act ethically in their workplace due to managerial, organizational, legislative, or legal constraints (Adams 2020; Kim et al. 2020). Santoro (2013) found that teachers leave the profession due to legislative constraints that restrict their ability to serve their students. Working conditions are such that teachers feel unable to stay in the profession while preserving their professional and personal integrity. Like the other quadrants, exposure to the

profession creates conditions that may impede professionals' ability to meet ethical standards, leaving them to choose between compromise or resignation. Such conditions, moreover, socialize developing professionals to consider compromising one's values and standards as an unavoidable, or perhaps even necessary, part of professional conduct.

Conflicting messaging and aims are not unique to modes of enculturation other than explicit ethics education. Similar problems are observed in the first quadrant (*curriculum of education*). Kidd et al. (2020) found that different kinds of ethics instruction may conflict with one another. They note that "vocationally oriented courses may promote adherence to norms and discourage moral imagination as existentially oriented courses promote it" (p. 9). Should adherence to norms create inflexible professionals who lack moral reasoning skills, professionals may be ill-equipped to respond to newly emerging moral problems. This is especially relevant to STEM fields where rapid technological advancement frequently creates unforeseen problems.

Our focus on enculturation is not meant to emphasize the second, third, and fourth modes of enculturation at the expense of the first. It shows that all four modes, not just explicit ethics education, may involve morally objectionable situations that risk wronging or harming developing professionals, (members of) the public which the profession serves, or both groups of stakeholders. Accordingly, evaluating the cultivation of ethical professionals requires once again broadening the scope of normative evaluations from ethics education to enculturation.[6]

[6] We recognize that, since universities have historically discriminated against disadvantaged groups and perpetuated social hierarchies (Taylor and Cantwell 2019), ethics enculturation in higher education has not always been ethical despite being holistic. However, based on ethics education literature, we assume that at least some educators make good faith efforts to promote ethics education in universities and consider a central mission of universities to be promoting the public good. By foregrounding the importance of holistic ethics enculturation, we wish to support this aim.

Establishing Moral Limits in the Ethics Enculturation of Professionals

To establish the moral limits delineated by morally objectionable forms of (and practices in) ethics enculturation, we discuss parameters that ought to influence deliberations about how to structure professional ethics enculturation. We recognize the broad and sustained benefit of ethics engagement and its ongoing need in the professions. In support of ethics, we identify objectionable forms of enculturation and offer initial observations about morally permissible ways of enculturating developing professionals into the values and norms of their professions.

Moral Limits Pertaining to the Multidimensional Nature of Ethics Enculturation

The first set of moral limits pertains to the multidimensional nature of ethics enculturation. While all modes of enculturation involve impermissible practices, some of these practices are easier to identify and address than others. In explicit ethics education (quadrant 1) impermissible practices may be easily observable and addressed through intentionally restructuring the university curriculum. The task is more difficult for the other three modes of enculturation. Implicit modes (quadrants 3 and 4) involve practices that are difficult to identify and prevent because they operate largely unconsciously. Profession-based modes (quadrants 2 and 4) involve practices that are difficult to identify and prevent because they operate outside the direct purview and control of higher education institutions. Identifying these practices and their remedies therefore requires dwelling on the ways in which different modes of enculturation may be morally impermissible or yield morally impermissible outcomes.

Moral Limit 1: Moral Indoctrination and Coercion in the Curriculum of Education

The first moral limit of ethics enculturation concerns the curriculum of education (quadrant 1 of Figure 1). This includes the way in which ethics is taught, whether it be ethics courses, professor-student interactions, or ethics training.

The main concern with ethics instruction is how to teach ethics when reasonable disagreement ensues about moral problems and dilemmas (Hand 2018).[7] In a pluralistic society where people's ethical beliefs and commitments are underpinned by different—sometimes conflicting—foundations, disagreements arise that cannot be easily resolved. Some pertain to the application of uncontroversial moral rules like "do no harm." While most would agree with the rule, it may be difficult to ascertain what doing no harm entails in different situations and particularly when some form of harm is unavoidable. Other disagreements are normative and concern what moral rules ought to guide professional practice. Must "do no harm" receive priority over "treat people fairly?" Does respect for a profession's epistemic authority justify disregarding the wishes of those whom the profession serves? Is "obey your superiors" a suitable rule for professionals? Finally, some disagreements pertain to metaethical justifications about moral beliefs. While a Christian and a Kantian may both agree that we should treat others as moral equals, their reasons for agreeing may differ. The Christian may agree in virtue of their belief that we are all equal in the eyes of God while the Kantian may agree on grounds that we are autonomous human beings capable of making decisions about how to live. The difference is consequential because the Christian may place limits on what is acceptable insofar as it is condoned by God, which the Kantian is unwilling to place insofar as one's conduct does not violate the autonomy and dignity of others. Reasonable disagreements may create unresolved challenges even for philosophers and ethicists, making it difficult to justify the teaching of such ethical debates as settled.

[7] We understand reasonable disagreement to entail the natural divergence of opinions regarding matters of value that occurs in pluralistic societies between people "thinking and conversing in good faith and applying, as best as one can, the general capacities of reason that belong to every domain of inquiry" (Larmore 1994, p. 74).

To be sure, explicit instruction on ethical conduct in the university and profession is appropriate when it involves generally acceptable moral rules—e.g., prohibition of plagiarism or data fabrication, prohibition of discrimination, conflict disclosures, protection of experimental subject welfare, etc. It is also appropriate for the university to enforce those rules and assign penalties for their violation given the importance of avoiding harm and treating people fairly. Michael Hand (2018) calls this approach to ethics instruction moral formation. As Hand describes it, moral formation entails fostering a tendency in students to comply with moral standards they find agreeable and to feel good about and be habituated in complying with moral standards (pp. 30–37).[8] Moral formation in the ethical commitments of the university and profession is important because it inclines students to act morally and to avoid punishable moral violations. Moral formation also involves instruction in moral deliberation that is necessary when it is unclear how to apply an agreeable moral rule to a particular situation or context.

While deliberation resolves the problem of reasonable disagreement at the level of rule application, it does not resolve it at the level of normative and metaethical justification. In fact, teaching about unsettled moral questions as if they are settled or there are correct answers which we must unquestioningly accept may amount to indoctrination.[9] A professor's professional, epistemic, or moral authority may convince a student that the professor's opinion is right if it is presented as a moral truth beyond dispute. Acquiring this belief through an otherwise credible

[8] While Hand intends his theory to apply to children who, unlike adults, do not yet have fully formed ethical dispositions, it also applies to adults to the extent that they are becoming enculturated within the ethical norms of a profession that cannot be fully understood by outsiders.

[9] Our concern here is only with *reasonable* disagreement. We do not subscribe to moral relativism that holds any moral belief to be as good as any other. There are moral beliefs that are better grounded in reason and hold greater moral force than others. There are also beliefs that are morally reprehensible, as are beliefs about the inherent superiority of some persons over others that have been used to justify exploitation, harm, and unjust treatment. The disagreement of people who hold morally unjustifiable and/or objectionable beliefs with morally justifiable beliefs is, therefore, *unreasonable* and ought not be treated as reasonable in instructional contexts. Professors ought not remain agnostic about the epistemic and moral status of such beliefs.

source may also dispose the student to be close-minded toward arguments that challenge it, a sign of being indoctrinated and holding one's beliefs irrationally. Teaching an unsettled question as settled can be wrongful even if a student disagrees with a professor's claims. The professor's institutional power may feel coercive to a student and compel them to espouse a moral belief in professional contexts to advance professionally. While the worry here is not indoctrination per se, the student is wronged by being coerced to embrace a belief that they ought not be coerced to embrace. Teaching about ethically open questions as settled may also lead to structural wrongs by fostering a culture that is insufficiently other-regarding and compromises the service obligations of the profession to the public.

To avoid such wrongs, Hand (2018) suggests that moral formation be supplemented by moral inquiry. While the former instills attitudes and dispositions to act morally, the latter provides justifications for moral action. Moral inquiry involves evenhanded presentation of all reasons in favor of and against supporting a moral belief. It allows an instructor to present moral questions for which reasonable disagreement ensues in a way that acknowledges the force of all relevant arguments. Moral inquiry can be directive or nondirective, with the difference being whether the instructor tries to steer the students toward what they believe to be the right view, while relying on rational arguments to do so (pp. 37–40). Since developing professionals are adults there is little worry that directive moral inquiry will result in indoctrination. Both approaches seem permissible depending on the instructor's confidence on the correctness of the belief in question. As long as an instructor presents an argument neutrally and provides all relevant information, they have done their best to avoid indoctrination and undue coercion. University ethics centers can play a central role in moral inquiry, by acting as conceptual stewards (Beever 2021) who clarify the parameters of ethical debates and reveal underlying

assumptions to avoid oversimplifications that impede us from fully grasping the essence of ethical controversies.

Moral Limit 2: Moral Neglect in Training within the Profession

A second moral limit of ethics enculturation concerns training within the profession (quadrant 2 of Figure 1). While university ethics education initiates students within the space of moral considerations of a discipline and profession, professional ethics training extends students' ethical awareness to moral problems that arise within professional contexts. Such training is offered through professional development opportunities in the workplace or through conferences, external workshops, and disciplinary codes of conduct.

The ubiquity of ethical problems in professional life makes it impossible for formal education to cover everything practicing professionals ought to be aware of. Contextual or unforeseeable ethical conflicts and dilemmas arise regarding workplace relations, client relations, the industry in general, the impact of new technologies and products on society, the impact of new legislation on the profession, professional obligations that arise as the profession evolves, and more. Professions that fail to provide continuing ethics education to practitioners abdicate their responsibility to serve the public good.

Training may take the form of moral formation. Codes of ethical conduct may prevent foreseeable harm to those impacted by the profession and new developments therein. Yet moral formation alone is insufficient. At best it addresses only a portion of ethical problems. At worst it is reduced to box ticking that shields the profession from liability. Partial or superficial treatment of ethical challenges is objectionable because it may amount to moral neglect: failure to prepare professionals to deal with serious ethical implications of their work.

Ethical challenges may be broad in scope—they may concern internal professional practices, relations with external stakeholders like the public and social institutions, downstream consequences of professional practices, and more[10]—and their status and potential solutions may be unclear. This creates a need for moral inquiry to supplement moral formation. Moral inquiry can occur on a small scale through professional development and workshops or a large scale through professional conferences that showcase ethics research. Professional societies ought to facilitate small scale moral inquiry. They may also develop ad hoc committees to address salient ethical problems, provide opportunities for mentorship about ethical conduct, and offer ethics consultation services to practitioners and organizations facing novel or unique situations (cf. Rosenberg 1998). Universities ought to facilitate large scale moral inquiry, making professional ethics research production and dissemination a priority. Importantly, while professional ethics training typically falls within the purview of professions and not universities, universities can provide support. Strengthening connections between universities and industry can expose developing professionals to moral problems in particular industries, provide opportunities to practice moral reasoning in diverse contexts, and encourage collaborations so that academic ethicists can advise and support industry people dealing with novel problems.

Moral Limit 3: Moral Negligence and Corruption in the Hidden Curriculum of Education

A third moral limit of ethics enculturation concerns the hidden curriculum of education (quadrant 3 of Figure 1). Scholarship examining the role of the university hidden curriculum on professional ethics has been booming since the mid-1990s (e.g., Buyx et al. 2008; Coulehan and Williams 2003; Hafferty and Franks 1994; Hafferty 1998; West and Chur-Hansen 2004; White et al. 2009). A frequently identified problem in this body of literature is that the hidden curriculum

[10] For a detailed account of what this typology entails see Ashurst et al. (2022).

often undermines what is taught explicitly through ethics instruction. There are many ways of interpreting the hidden curriculum, and by extension its impact, but here we focus on two: institutional knowledge and the modelling of conduct.

Philip Jackson (1990) coined the term hidden curriculum to denote institutional knowledge. The hidden curriculum's main lesson is learning "to comply with institutional expectations" (p. 35). Institutional knowledge, like what is expected of students, need not be implicit. Explicit codes of conduct outline rules with which students ought to abide and expectations that students ought to meet. Students are often explicitly instructed about these rules and the severe repercussions of failure to comply—think of plagiarism policies on syllabi and academic integrity training. Insofar as institutional rules are explicitly communicated, they are part of the explicit university curriculum.

Yet not all rules are explicitly communicated and here is where the hidden curriculum may create morally objectionable outcomes. This can happen in at least two ways. First, lack of a sufficient presence of ethics in the official curriculum may communicate to students that ethics is unimportant. When not embedded within the core curriculum of a discipline but appended as an additional (sometimes elective) requirement, ethics can be viewed as peripheral to foundational knowledge and technical skills. Tokenistic ethics coursework fails to ingrain ethics within professional culture, not as an appendage but as pervading every aspect of the discipline and profession. Second, an extensive focus on compliance may communicate that following explicit rules fulfills one's moral obligations, a tendency exacerbated by a lack of substantive ethics content in the curriculum. Ethics may be viewed as preventing liability for the university, profession, or professional and not as a foundation component of professional conduct.

The twin tendency to minimize ethics in the curriculum and emphasize compliance fosters a professional culture insufficiently reflective about the role that personal and institutional values play in professional conduct and decision-making. It enables moral negligence about professions' negative social impact and contributions to systemic injustices by, among other ways, underserving certain populations, rejecting marginalized epistemic contributions, and failing to disrupt the impact of implicit biases that privileges some groups at the expense of others.

The second aspect of the hidden curriculum that we focus on is modelling of professional conduct. When professors tend to act morally and to avoid morally unacceptable conduct they exert a positive influence on students' moral formation (Hand 2018). Professors must not only tell students what the right thing to do is and punish them when they fail to do it (this falls under the formal curriculum of education) but also model morally acceptable professional conduct. When facing morally significant decision points that can either be resolved easily, by ignoring their moral implications, or arduously, by grappling with them and deciding to do what morality demands despite challenges, professors who choose the arduous path model morally courageous behavior in the face of adversity. They model perseverance in doing the right thing even when doing so is burdensome. Instead of giving license to students to take the easy way out, exposing them to virtuous conduct teaches students to emulate it and to act in morally justifiable ways.

Conversely, professors who model unethical conduct communicate its appropriateness even when unethical conduct conflicts with students' moral intuitions or explicit ethics instruction. A clinical professor who disrespects or diminishes their clients or patients models client or patient mistreatment. A research professor who does sloppy work to expedite paper publications or grant proposals models insufficient regard for one's research output and its

impact on those who use it to develop their own research and applications. In such circumstances the moral formation of professional students counteracts explicit ethics lessons, leaving students perplexed. More worrisomely, students may come to believe that unethical conduct is acceptable, or even required, in such circumstances (e.g., West and Chur-Hansen 2004) leading to a form of moral corruption that harms both developing professionals and those whom the profession serves.[11]

To avoid these pitfalls, we must cultivate university cultures where ethics permeates every part of institutional life and faculty dispositions that incline and motivate ethical conduct. For both conditions to obtain, universities must remove individual and structural barriers.

Moral Limit 4: Mismanaged Perceptions and Moral Corruption in Exposure to the Profession

The fourth moral limit of ethics enculturation concerns exposure to the profession (quadrant 4 of Figure 1). This mode of enculturation creates unique problems because exposure to the profession cannot be fully controlled by universities and professions. Professions have little control over how lawyers are portrayed in crime shows, physicians are portrayed in medical dramas, engineers are portrayed by school guidance counselors, businesspersons are portrayed in the news, or paleontologists are portrayed in film. Yet, for many aspiring and developing professionals, this exposure precedes formal education and shapes cultural expectations regarding professional life.

Professional associations can exercise control over their members as arbiters of good professionalism and licensure. Insofar as a profession has control over its practitioners, it can

[11] The term moral corruption is the moral equivalent of what Kidd (2019) calls "epistemic corruption." Accordingly, "an educational system is epistemically [or morally] corrupting insofar as it tends to create conditions that are conducive to the development and exercise of epistemic [or moral] vice(s) by agents whose formation and agency is shaped by those conditions" (p. 224), where moral vice is a tendency to "systematically produce bad states of affairs" (Cassam 2018, p. 11).

ensure that practitioner interactions with the public meet professional standards. Should a physician fail to do their due diligence in diagnosing a patient's illness despite their best knowledge, a lawyer fail to protect attorney-client privilege, a researcher fail to safeguard their research participants' wellbeing, or a public official fail to disclose a conflict of interest while profiting off of the public purse, their professional board may reprimand them for not adhering to professional standards and undermining the profession's credibility.

Perceptions about professional ethics standards are not just important for maintaining a profession's legitimacy in the public's eyes. They also ensure that ethics enculturation promotes the right values and encourages people with high moral standards to enter the profession. It would be unsurprising if an openly corrupt profession attracted people with questionable morals or repelled people with a strong sense of integrity. Since ethics enculturation starts before one enters the profession and impacts professional recruitment, public ethicality facilitates the ability of professions to ensure that practitioners conduct themselves ethically.

Another important factor is professional socialization. Working for an employer who disregards ethical conduct, may cut against university ethics instruction. A supervisor who bends the rules to expedite production and cut costs models moral indifference. So does a researcher who fabricates data to secure grant funding or a bonus. Being socialized in professional spaces where unethical conduct is normalized can morally corrupt developing professionals just like with modelling of unethical conduct in universities. Moral corruption is morally harmful to those who are corrupted but also materially harmful to those impacted by the profession. It also inflicts moral injuries to and creates a stressful environment for professionals with high moral standards who are forced to engage in conduct which they consider unethical or must endure the distress of

remaining complicit in unethical practices which they likely have limited power to change (Shay, 2014).

It can be more difficult for the profession to intervene here than it is in contexts where the profession has direct control. Lack of information and transparency, sometimes associated with justified protections for client privacy, proprietary technologies, or otherwise, make it difficult to monitor that high ethical standards are met. Nonetheless, professions can support those facing important moral dilemmas, including potential whistleblowers who might face backlash for speaking out. They can also maintain oversight to ensure that moral violations are noticed. Beyond protecting whistleblowers and increasing transparency, such mechanisms communicate that the profession takes seriously its ethical obligations and does not tolerate ethical misconduct. It, therefore, contributes to moral formation that keeps unethical professional conduct in check. Similarly, professors can represent their profession ethically to ensure that students who attend universities—and through introductory classes or fellow students become introduced to new disciplines and professionals—associate their profession with both high technical skills required to do one's job well and high ethical standards required to do good through one's job.

Moral Limits Pertaining to the Dialectical Nature of Ethics Enculturation

We move on to moral limits that pertain to the dialectical nature of ethics enculturation: the mutually influential relationship between developing professionals and the profession. Impermissible forms of enculturation here pertain to imbalances between, on one hand, the influence that a profession exerts on the personal dispositions of developing professionals, and on the other, the influence that developing professionals exert on the values and norms of a profession. Ideally, a balance should be struck so that developing professionals embrace core

ethical commitments that define the profession while the profession gradually changes to better represent the values of new generations of professionals and, by extension, of society as a whole.

Moral Limit 5: Wrongful Transformation in the Profession's Influence on Developing Professionals

The fifth moral limit of ethics enculturation concerns its transformative potential as regards the influence the profession exerts on developing professionals (inward looking arrows of Figure 1). Much has been written about transformative education, with proponents arguing for its desirability or inevitability and critics highlighting important limitations (Yacek 2020). Similar points can be extended to enculturation.

Drawing from L. A. Paul's account of transformative experience we argue that the process which developing professionals undergo to become enculturated within the values of their profession is transformative. According to Paul (2014), transformative experiences involve epistemic and practical transformation. Epistemic transformation refers to learning something that one could not have known without undergoing the transformation. Practical transformation refers to experiencing a change in preferences related to the transformation.

Ethics enculturation can be transformative because developing professionals entering a professional culture internalize values and norms that were previously not part of their value system—their personal dispositions change. They learn to see the world as professionals which they previously, lacking professional knowledge, were unable to do or comprehend doing (epistemic transformation). They also experience a change in preferences as they develop their new professional identity. They may have higher epistemic standards due to their extensive knowledge or become partial to values that align with their profession—justice for lawyers, care

for physicians, innovation for engineers, efficiency for economists, and so on (practical transformation).

The transformation that developing professionals undergo is not intrinsically problematic. In fact, acquiring new knowledge, enriching one's perspective, finding fulfillment through one's profession, gaining professional security, and building a professional network—some among many benefits of entering a profession—are important advantages that come with professional enculturation. Nonetheless, problems with transformation may arise that are disproportionately likely to impact disadvantaged students. We briefly mention three of these.

First, the person undergoing enculturation is unable to consent to having their values transformed. The reason is that one cannot consent to become someone whose motivations and worldview are different from one's own and which motivations and worldview one cannot understand (Paul 2014; Yacek 2020). This problem of consent impacts aspects of life beyond one's occupational status, such as having one's relationship to one's family and friends transformed since close relationships are often based on shared values. Transformation can incur ethical costs by distancing one from one's family, friends, and community (Morton 2019). Marginalized students who are socioeconomically disadvantaged are more likely to experience these ethical costs because they come from working class, rather than middle or professional class, backgrounds. Marginalized students may also experience a degree of coerciveness in undergoing such transformation if they pursue a professional education as a means of upward mobility.

Another concern is that transformative experiences can be traumatic and destructive, especially when enculturation is not adequately reparative and constructive (Burbules 1990; Yacek 2020). One can imagine a religious biology student having their faith in God as creator of

humans shattered by studying within a paradigm that exclusively embraces evolution. Scientific explanations may provide insufficient existential meaning about the purpose of one's life to be equivalent to the worldview that was challenged. This problem worsens when one considers the potential distancing from a community bonded by religion. Since non-college educated people are more likely to be religious than college educated people (Pew Research Center 2017),[12] first generation students who are often marginalized are more likely to experience transformative trauma because they are more likely to come from religious families.

Finally, transforming students' meaning-making and inferential processes can result in epistemic injustice. When biases are embedded within professional epistemic resources, as they sometimes are, education may transform students' epistemic resources in ways that impede their understanding of the experiences of marginalized groups, or even of themselves when they are members of marginalized groups (Fairbairn 2020, 2023). In transforming students epistemically, ethics enculturation may prompt them to associate ethically relevant problems with solutions that, while favored by the profession, may be biased. This is especially of concern when students are marginalized, and thus underrepresented in a profession, and less likely to shape professional values and norms. Enculturation may therefore epistemically harm marginalized students and maintain social injustice by making it more difficult to challenge professional biases. This is a qualitatively different concern from the traumatic experiences discussed above, because, though trauma may be unavoidable due to the discomforting nature of having one's worldview challenged, the biases present in professional epistemic resources are the result of systemic discrimination and therefore are both unjust and inaccurate representations of reality.

[12] This pattern does not hold for Christians (Pew Research Center 2017).

The three problems with wrongful transformation highlighted above are especially important to consider when it comes to recruitment and retention of marginalized students. Perspectival diversity—and demographic diversity which often drives perspectival diversity—is necessary for professions which depend on accurate knowledge to operate (Anderson 1995). Yet if the influence between professions and developing professionals is insufficiently bidirectional, we risk wrongfully transforming developing professionals and minimizing the impact of epistemic diversification. Marginalized students whose values are less likely to align with professional values disproportionately incur relevant ethical costs.

Maintaining bidirectional influence so that students can sufficiently impact enculturation enables professions to reduce unnecessary costs. Where reduction of costs is not possible due to unavoidable transformation, moreover, input from students may help professions to at least minimize the impact of those costs on students by providing students with necessary support. Such influence, of course, need not entail that each and every student produce substantive changes within the profession—an impossible, and likely undesirable, outcome. Large scale influence occurs cumulatively as novel concerns brought forth by developing professionals gain prominence. Yet, even at a micro level, the individual interactions between professors and students or between experienced and developing professionals are dynamic and exert subtle influence on the ways in which professionals view their profession, the ethical problems professionals find important to address, and the values that professionals prioritize. Listening to developing professionals and heeding their concerns is an important step for improving their enculturation in the day to day and enabling the profession to evolve and progress. Conversely, failure to do so is morally unacceptable and more likely to yield morally unjustifiable outcomes.

Moral Limit 6: Resistance to Change in Developing Professionals' Influence on the Profession

The sixth and final moral limit of ethics enculturation concerns the influence that developing professionals exert on professional values (outward looking arrows of Figure 1). Here the worry is the inverse from above: not that the profession's influence on developing professionals is too much but that developing professionals' influence on the profession is too little. The personal dispositions of those entering a profession are likely to influence the profession in ways that enable the profession to evolve and professional values to align with those of society which are also evolving. An example of positive influence is the focus on equity over the past few decades which has led to important initiatives that reduce the impact of implicit bias and workplace discrimination and increase representation of marginalized groups like women and people of color. Such changes ensure that professions maintain their public legitimacy and are not elitist institutions insulated from the general population, indifferent to urgent social problems, and maintaining an occupational monopoly that confers benefits to their members (Freidson 2001).

The morally unacceptable practice that pertains to enculturation is, in this case, the profession's resistance to morally and epistemically justified changes—a resistance that preserves an unjust status quo in the profession and society. The qualifier *morally and epistemically justified* is key here. Professions are large institutions whose independence is crucial to performing their social purposes. As such, they ought to be somewhat insulated from extraneous influence. The institutional structures in place in most professions serve important purposes, so reforming these structures ought to meet a high standard of justification and not be done haphazardly. Yet, when it comes to morally and epistemically justified changes, resistance out of cautious conservatism can operate as a mechanism for avoiding justified change and may

therefore be itself unjust. Resistance to change may involve compromising just processes of student recruitment and retention that often drive change and professional progress.

In regard to student recruitment, the problem is when insufficient attention is paid to epistemic diversity. Like universities in general, academic disciplines and the professions with jurisdiction over those disciplines need epistemic diversity to flourish. Grounded in the pursuit of knowledge, professions rely on diverse perspectives to overcome cognitive biases that compromise knowledge. Feminist philosophers of science have long shown the social nature of knowledge and how social location matters for knowledge production (e.g., Harding 1991; Longino 1990). The introduction of women in the sciences dispelled many misconceptions that had been held true by their male counterparts. To mitigate biases that distort the pursuit of knowledge, professions must recruit members from all social locations to improve epistemic processes and actualize professional ideals.

In regard to student retention, the problem is when developing professionals cannot participate as equals in a profession. Equality of participation does not reduce the importance of expertise, nor must experienced professionals regularly defer to the opinions of developing professionals. Nonetheless, developing professionals must be able to provide their insights and pursue domains of inquiry that they consider important, even if the scientific consensus is against them. It also remains important for professions to ensure that marginalized groups are not pushed out or silenced because their perspectives are necessary for knowledge production in universities (Anderson 1995). Take the example of unduly molding one's mentees in one's image. While selecting students according to faculty strengths is necessary for providing appropriate academic support, forcing them to fully conform to one's standards and norms without regard for how their unique perspectives can enrich the discipline is both epistemically and ethically questionable.

Neither knowledge nor values are set in stone, and the moment professions consider them to be they risk becoming ossified and disregarding important epistemic and moral considerations.

While ethics enculturation transforms developing professionals to instill in them values of the profession and a motivation to abide by professional standards and norms, transformation ought not be wrongful. It is crucial to balance the mutual influence between developing professionals and the profession. When mutual influence is balanced, developing professionals embrace core moral commitments of their profession while the profession is accepting of their unique contributions and insights that lead to epistemic and moral progress. One might observe that the need to avoid overburdening marginalized groups through dispositional transformation is somewhat in tension with the need to recruit marginalized groups to diversify participation, insofar as marginalized groups are more likely to be underrepresented and first-generation students and thus to experience value dissonance. Nonetheless, if mutual influence obtains, professional communities may mitigate the burden on marginalized groups and in the process become places where people from all social locations feel like they belong. The key to maintaining this balance is making sure that enculturation remains as dialectical as possible by facilitating the mutual influence between developing professionals and the profession.

Conclusion

In this paper we address a need identified in scholarship on professional ethics education to ensure that when instilling ethical sensitivity and dispositions in professionals we do so in ways that are also morally permissible. In doing so, we extend this discussion to issues of ethics enculturation and offer a general framework for theorizing the moral permissibility of ethics enculturation based on the impact that it has on professionals undergoing enculturation and the public more generally. Accordingly, we identify moral limits to enculturation that are established

as a result of the need to avoid impermissible forms of enculturation. Based on the framework we presented, we identified six such limits and discussed ways to avoid succumbing to perils they pose. The limits presented in this paper are of course not exhaustive. They are simply intended to demonstrate that a focus on ethics enculturation as a holistic process can guide decision-making regarding ethics education to better promote the moral and epistemic aims of higher education and the professions more broadly.

References

Abbott, A. (1983). Professional ethics. *American Journal of Sociology*, *88*(5), 855–885. https://doi.org/10.1086/227762

Adams, T. L. (2020). 'This happens all the time': Organizations, rationalization and ethical dilemmas in engineering. *Work, Employment and Society*, *34*(6), 985–1003. https://doi.org/10.1177/0950017020902968

Anderson, E. S. (1995). The democratic university: The role of justice in the production of knowledge. *Social Philosophy and Policy*, *12*(2), 186–219. https://doi.org/10.1017/S0265052500004726

Ashurst, C., Barocas, S., Campbell, R., & Raji, D. (2022). Disentangling the components of ethical research in machine learning. In *Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency* (pp. 2057–2068). Association for Computing Machinery. https://doi.org/10.1145/3531146.3533781

Authors. (2024).

Avci, E. (2017). A normative analysis to determine the goals of ethics education through utilizing three approaches: rational moral education, ethical acculturation, and learning throughout

life. *International Journal of Ethics Education*, *2*(2), 125–145. https://doi.org/10.1007/s40889-017-0032-4

Beever, J. (2021). Conceptual Stewardship and Ethics Centers: The Case of Integrity. *Teaching Ethics*, *21*(2), 225–237. https://doi.org/10.5840/tej2022317106

Beever, J., Kuebler, S. M., & Collins, J. (2021). Where ethics is taught: An institutional epidemiology. *International Journal of Ethics Education*, *6*(2), 215–238. https://doi.org/10.1007/s40889-021-00121-7

Bowman, J. S. (2021). From codes of conduct to codes of ethics: The ASPA case. In T. L. Cooper (Ed.), *Handbook of Administrative Ethics*, 2nd ed. (pp. 335–353). Marcel Dekker.

Brown, N., Xie, B., Sarder, E., Fiesler, C., & Wiese, E. S. (2023). Teaching ethics in computing: A systematic literature review of ACM computer science education publications. *ACM Transactions on Computing Education*, *24*(1), 1–36. https://doi.org/10.1145/3634685

Burbules, N. C. (1990). The tragic sense of education. *Teachers College Record*, *91*(4), 469–479. https://doi.org/10.1177/016146819009100406

Buyx, A. M., Maxwell, B., & Schöne-Seifert, B. (2008). Challenges of educating for medical professionalism: Who should step up to the line? *Medical Education*, *42*(8), 758–764. https://doi.org/10.1111/j.1365-2923.2008.03112.x

Callahan, D., & Bok, S. (Eds.). (1980). *Ethics teaching in higher education*. Plenum Press. https://doi.org/10.1007/978-1-4613-3138-4

Cassam, Q. (2018). *Vices of the mind: From the intellectual to the political*. Oxford University Press. https://doi.org/10.1093/oso/9780198826903.001.0001

Coulehan, J., & Williams, P. C. (2003). Conflicting professional values in medical education. *Cambridge Quarterly of Healthcare Ethics*, *12*(1), 7–20. https://doi.org/10.1017/s0963180103121032

Davis, M. (1999). *Ethics and the university*. Routledge.

Elliott, D., & June, K. (2018). The evolution of ethics education: 1980–2015. In E. E. Englehardt & M. S. Pritchard (Eds.), *Ethics across the curriculum: Pedagogical perspectives* (pp. 11–37). Springer. https://doi.org/10.1007/978-3-319-78939-2_2

Emmerich, N. (2015). Bourdieu's collective enterprise of inculcation: The moral socialisation and ethical enculturation of medical students. *British Journal of Sociology of Education*, *36*(7), 1054–1072. https://doi.org/10.1080/01425692.2014.886939

Fairbairn, F. (2020). Injustice in the spaces between concepts. *The Southern Journal of Philosophy*, *58*(1), 102–136. https://doi.org/10.1111/sjp.12349

Fairbairn, F. (2023). Epistemic injustice through transformative learning. *Journal of Philosophy of Education*, *57*(4-5), 964–982. https://doi.org/10.1093/jopedu/qhad082

Franeta, D. (2019). Taking ethics seriously: Toward comprehensive education in ethics and human rights for psychologists. *European Psychologist*, *24*(2), 125–135. https://psycnet.apa.org/doi/10.1027/1016-9040/a000377

Freidson, E. (2001). *Professionalism: The third logic*. The University of Chicago Press.

Gupta, M., Forlini, C., & Laneuville, L. (2020). The hidden curriculum in ethics and its relationship to professional identity formation: A qualitative study of two Canadian psychiatry residency programs. *Canadian Journal of Bioethics*, *3*(2), 80–92. https://doi.org/10.7202/1073550ar

Gutmann, A. (2015). What makes a university education worthwhile? In H. Brighouse & M. McPherson (Eds.), *The aims of higher education: Problems of morality and justice* (pp. 7–25). The University of Chicago Press.

Hafferty, F. W. (1998). Beyond curriculum reform: Confronting medicine's hidden curriculum. *Academic Medicine*, *73*(4), 403–407. https://doi.org/10.1097/00001888-199804000-00013

Hafferty, F. W., & Franks, R. (1994). The hidden curriculum, ethics teaching, and the structure of medical education. *Academic Medicine*, *69*(11), 861–871. https://doi.org/10.1097/00001888-199411000-00001

Hand, M. (2018). *A theory of moral education*. Routledge.

Handelsman, M. M., Gottlieb, M. C., & Knapp, S. (2005). Training ethical psychologists: An acculturation model. *Professional Psychology: Research and Practice*, *36*(1), 59–65. https://psycnet.apa.org/doi/10.1037/0735-7028.36.1.59

Harding, S. (1991). *Whose science? Whose knowledge? Thinking from women's lives*. Cornell University Press.

Hastings Center Staff. (1980). The teaching of ethics in American higher education: An empirical synopsis. In D. Callahan & S. Bok (Eds.), *Ethics teaching in higher education* (pp. 153–169). Plenum Press. https://doi.org/10.1007/978-1-4613-3138-4_6

Hess, J. L., & Fore, G. (2018). A systematic literature review of US engineering ethics interventions. *Science and Engineering Ethics*, *24*(2), 551–583. https://doi.org/10.1007/s11948-017-9910-6

Hui, J. C. K. (2013). Teaching ethics in architecture: Contexts, issues and strategies. *Journal of the NUS Teaching Academy*, *3*(3), 85–99.

Jackson, P. W. (1990). *Life in classrooms*. Teachers College Press.

Jaganjac, B., Abrahamsen, L. M., Olsen, T. S., & Hunnes, J. A. (2024). Is it time to reclaim the 'ethics' in business ethics education? *Journal of Business Ethics*, *190*(1), 1–22. https://doi.org/10.1007/s10551-023-05400-5

Jarvis, P. (1983). *Professional education*. Croom Helm

Kidd, D., Miner, J., Schein, M., Blauw, M., & Allen, D. (2020). Ethics across the curriculum: Detecting and describing emergent trends in ethics education. *Studies in Educational Evaluation*, *67*, 100914. https://doi.org/10.1016/j.stueduc.2020.100914

Kidd, I. J. (2019). Epistemic corruption and education. *Episteme*, *16*(2), 220–235. https://doi.org/10.1017/epi.2018.3

Kim, D., Hess, J. L., & Fila, N. D. (2020). Applying critical incident technique to investigate changes in ways of experiencing ethical engineering practice. In *ASEE Annual Conference & Exposition*. American Society for Engineering Education. http://dx.doi.org/10.18260/1-2--34632

Kimball, B. A. (1996). *The "true professional ideal" in America: A history*. Rowman & Littlefield.

Larmore, C. (1994). Pluralism and reasonable disagreement. *Social Philosophy & Policy*, *11*(1), 61–79. https://doi.org/10.1017/S0265052500004295

Longino, H. E. (1990). *Science as social knowledge: Values and objectivity in scientific inquiry*. Princeton University Press.

Martin, C. (2016). Education and moral respect for the medical student. *Ethics and Education, 11*(1), 91–103. https://doi.org/10.1080/17449642.2016.1145494

Maxwell, B., & Schwimmer, M. (2016). Professional ethics education for future teachers: A narrative review of the scholarly writings. *Journal of Moral Education*, *45*(3), 354–371. https://doi.org/10.1080/03057240.2016.1204271

May, W. F. (1980). Professional ethics: Setting, terrain, and teacher. In D. Callahan & S. Bok (Eds.), *Ethics teaching in higher education* (pp. 205–241). Plenum Press. https://doi.org/10.1007/978-1-4613-3138-4_9

Morton, J. (2019). *Moving up without losing your way: The ethical costs of upward mobility*. Princeton University Press.

Nicolae, M. (2015). Legal education, legal practice and ethics. *Legal Education Review*, *25*(1), 237–250. https://doi.org/10.53300/001c.6304

Nieusma, D., & Cieminski, M. (2018). Ethics education as enculturation: Student learning of personal, social, and professional responsibility. In *2018 ASEE Annual Conference & Exposition*. American Society for Engineering Education. https://doi.org/10.18260/1-2--30443

Ongis, M., Kidd, D., & Miner, J. (2023). Ethics incognito: Detecting ethically relevant courses across curricula in higher education. *Journal of Academic Ethics*. Advance online publication. https://doi.org/10.1007/s10805-023-09482-8

Parsons, S., & Khuri, N. (2020). Discovery of research trends in computer science education on ethics using topic modeling. In *2020 International Conference on Computational Science and Computational Intelligence (CSCI)* (pp. 885–891). IEEE. https://doi.org/10.1109/CSCI51800.2020.00166

Paul, L. A. (2014). *Transformative experience*. Oxford University Press.

Pew Research Center. (2017, April 26). In America, does more education equal less religion? https://www.pewresearch.org/religion/2017/04/26/in-america-does-more-education-equal-less-religion/

Pinkert, L., Beever, J., Kuebler, S., Taylor, L. E., Vazquez, E., & Milanes, V. (2023). Responsibility and accountability: Faculty leaders, ethics frameworks, and disciplinary enculturation. In *2023 ASEE Annual Conference & Exposition*. American Society for Engineering Education. https://doi.org/10.18260/1-2--42341

Poje, T., & Zaman Groff, M. (2022). Mapping ethics education in accounting research: A bibliometric analysis. *Journal of Business Ethics*, *179*(2), 451–472. https://doi.org/10.1007/s10551-021-04846-9

Polmear, M., Bielefeldt, A. R., Knight, D., Swan, C., & Canney, N. E. (2019). Hidden curriculum perspective on the importance of ethics and societal impacts in engineering education. In *2019 ASEE Annual Conference & Exposition*. American Society for Engineering Education. https://doi.org/10.18260/1-2--32887

Prior, P., & Bilbro, R. (2012). Academic enculturation: Developing literate practices and disciplinary identities. In M. Castelló & C. Donahue (Eds.), *University writing: Selves and texts in academic societies*, *vol. 24* (pp. 19–31). https://doi.org/10.1163/9781780523873_003

Raadschelders, J. C., & Chitiga, M. M. (2021). Ethics education in the study of public administration: Anchoring to civility, civics, social justice, and understanding government in democracy. *Journal of Public Affairs Education*, *27*(4), 398–415. https://doi.org/10.1080/15236803.2021.1954468

Rosenberg, R. S. (1998). Beyond the code of ethics: The responsibility of professional societies. In *Proceedings of the ethics and social impact component on Shaping policy in the information age* (pp. 18–25). Association for Computing Machinery. https://doi.org/10.1145/276755.276768

Santoro, D. A. (2013). "I was becoming increasingly uneasy about the profession and what was being asked of me": Preserving integrity in teaching. *Curriculum Inquiry*, *43*(5), 563–587. https://doi.org/10.1111/curi.12027

Shay, J. (2014). Moral injury. *Psychoanalytic Psychology, 31*(2), 182–191. https://psycnet.apa.org/doi/10.1037/a0036090

Sloan, D. (1980). The teaching of ethics in the American undergraduate curriculum, 1876–1976. In D. Callahan & S. Bok (Eds.), *Ethics teaching in higher education* (pp. 1–57). Plenum Press. https://doi.org/10.1007/978-1-4613-3138-4_1

Smith, S. M. (2001). Ethical enculturation: A nursing concept for the education of baccalaureate nursing students. Academic Forum Online, Henderson State University. https://hsu.edu/site/assets/files/4544/2001-2afethical_enculturation.pdf

Taylor, B. J., & Cantwell, B. (2019). *Unequal higher education: Wealth, status, and student opportunity*. Rutgers University Press.

Weidman, J. C., Twale D. J., & Stein, E. L. (2001). *Socialization of graduate and professional students in higher education: A perilous passage?* Jossey-Bass.

West, C., & Chur-Hansen, A. (2004). Ethical enculturation: The informal and hidden ethics curricula at an Australian medical school. *Focus on Health Professional Education: A Multi-Disciplinary Journal*, *6*(1), 85–99.

White, C. B., Kumagai, Arno, K., Ross, P. T., & Fantone, J. C. (2009). A qualitative exploration of how the conflict between the formal and informal curriculum influences student values and behaviors. *Academic Medicine*, *84*(5), 597–603. https://doi.org/10.1097/ACM.0b013e31819fba36

Wong, M. K., Hong, D. Z. H., Wu, J., Ting, J. J. Q., Goh, J. L., Ong, Z. Y., Toh, R. Q. E., Chiang, C. L. L., Ng, C. W. H., Ng, J. C. K., Cheong, C. W. S., Tay, K. T., Tan, L. H. S., Ong, Y. T., Chiam, M., Chin, A. M. C., Mason, S., & Radha Krishna, L. K. (2022). A systematic scoping review of undergraduate medical ethics education programs from 1990 to 2020. *Medical Teacher*, *44*(2), 167–186. https://doi.org/10.1080/0142159X.2021.1970729

Yacek, D. W. (2020). Should education be transformative? *Journal of Moral Education*, *49*(2), 257–274. https://doi.org/10.1080/03057240.2019.1589434