



The Knowledge Mission

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Abstract

A core mission of colleges and universities is to help their undergraduate students engage with knowledge. However, while universities get explicit about their role in developing certain values and skills, few propose explicit institution-level knowledge outcomes. This is an effect both of a system in which departmental expertise defines undergraduate degrees as well a mindset that universities both cannot and should not propose what all their graduates need to know.

I propose a new paradigm for higher education that would have colleges and universities develop undergraduate “knowledge missions,” explicit affirmations of what all graduates should know now and why. Universities, both individually and collectively, would convene diverse groups of faculty and other stakeholders to identify how to frame the knowledge they seek to impart in ways that serve to strengthen their value propositions.

A handful of factors are currently advancing this paradigm shift away from the oblique treatment of knowledge. First, erosion of public discourse and outright attacks on knowledge and reason put the current paradigm at odds with many universities’ espoused values about duty to community and civic life. Second, deteriorating public faith in higher education demands a response in terms of knowledge. And third, most compelling recently, as artificial intelligence (AI) changes our relationship with knowledge, universities more than ever must adapt their educational missions as stewards of knowledge.

Good university knowledge missions would not become boilerplate platitudes but living declarations intended to inspire active learning that meaningfully connects to the future lives of all graduates. By adopting knowledge missions, universities would better reinforce their own value, perceived and actual, in the lives of Americans as well as strengthen the relevance of the knowledge they deem critical for the health of the societies in which they operate.

Knowledge and its role in higher education

Learning sits at the core of the college experience. But learning what?

Academic frameworks for breaking down learning outcomes propose combinations of knowledge, skills, abilities, attitudes, beliefs, competencies, and values (Alexander et al., 1991; Perkins, 2014). A common thread among these frameworks, indeed a backbone, is knowledge. On one hand knowledge is a slippery concept whose definition has been the subject of intellectual analysis and debate stretching back millennia. On the other hand, for the purposes of practical consideration in the context of higher education, knowledge can be considered a “body of concepts and factual information (data), including their interrelated structures and patterns” (*Knowledge*, 2016). To further simplify, it’s stuff you understand. Knowledge suggests simple concepts like names for things and people, dates, facts, and formulas, but more critically it includes complex notions of explanatory mechanisms, narratives, and relationships. Much knowledge is meta-knowledge, or what we know about what we know (e.g., why one explanation is more accurate than others, how we know a relationship exists) (Carson, 2021).

Knowledge is related to, but distinct from, other outcomes above such as skills and values—two outcomes that universities do tend to discuss when getting explicit about their educational missions. Skills, in contrast to knowledge, are behaviors you can perform to affect desired outcomes with reliability (Groves, 2019; Vitello et al., 2021). In other words, skills are things you do. Skills don’t apply only in academic domains; gardening, critical thinking, piano performance, and creative writing all count as skills. Values are things held to be good or desirable, generally for their own sake (Gregory et al., 2009; Zimmerman & Bradley, 2019). In the college context values might include institutional aims (e.g., diversity, discovery, inclusion, truth), desirable traits in the individual (e.g., empathy, integrity, honesty, responsibility), or social standards (e.g., justice, community engagement, freedom, democracy).

As parts of larger competency frameworks, terms like knowledge, skills, and values are interconnected. Skills draw upon knowledge, and knowledge is developed through

skills (Carson, 2021). Values can determine how we frame knowledge, and vice-versa. In fact, many values (e.g., freedom or discovery) can be reflected in skills (e.g., “to develop public policy that protects individual freedom” or “to conduct research to discover the origins of the cosmos”) or statements of knowledge (“individual freedoms can stand at odds with the public good” or “discovery of fundamental properties of the universe demands reconciling phenomena that are seemingly continuous and deterministic with those that are quantized and probabilistic”).

“Knowledge” is elevated by most universities as a central value. They have both built and been built around knowledge going back hundreds of years. Many have the word “knowledge” or “truth” (i.e., something we know) in their mottoes, often carved in stone on their buildings (*Leaders for a Better World | For Humanity*, n.d.; “List of University and College Mottos,” 2023; Nicar, 2017; Writer, 2015). However, a concept of college as only serving to impart information to know doesn’t dutifully acknowledge many of the intellectual skills required to learn and interact with knowledge: reading critically, writing with clarity, editing with precision, justifying assertions with evidence, identifying logical implications and fallacies, giving verbal presentations, moderating arguments, etc. How to learn is itself a skill to develop, and effective uptake of information requires adoption of many of the skills above.

Thus, modern colleges and universities have a role in developing skills *and* values *and* knowledge. The pertinent question for universities is *what* skills, *what* values, and *what* knowledge?

How colleges and universities talk about knowledge

Colleges and universities communicate their intended student outcomes with *explicit* statements about values and skills and *implicit* statements about knowledge.

Looking at university mission statements, one would expect them to focus on values—that’s what mission statements are. But both the specificity of values and skills as well as a focus on values pertaining to civic duty shed light on how knowledge fits into the bigger picture.

Consider Harvard College, which states that its mission is “to educate the citizens and citizen-leaders for our society” (*Mission, Vision, & History*, n.d.). “[B]efore students can help change the world, they need to understand it. The liberal arts & sciences offer a broad intellectual foundation for the tools to think critically, reason analytically and write clearly” (*Liberal Arts & Sciences*, n.d.). The values here are clear: empowering citizenship, understanding the world, changing the world (ostensibly for the better). And the mission speaks of skills: leadership, critical thinking, analytical reasoning, and clear writing. It’s also clear that Harvard is in the business of knowledge; understanding the world is a core value. But what are students to understand about the world?

On the other side of the country, Stanford has a “vision” that is based on “four themes inspired by the ideas of our community... Woven throughout those themes is a commitment to ensuring equity and inclusion in our research and on our campus, embedding ethics across research and education and engaging with partners beyond our walls to learn from and give back to our local and global community” (*Our Vision*, n.d.). On a sub-page appropriately titled “Living Our Values,” Stanford unpacks its four values-- Sustaining Life, Accelerating Solutions, Catalyzing Discovery and Preparing Citizens. Regarding the last theme, Stanford “embeds inclusion, civic engagement and a respect for robust discourse in education...preparing students for lives of active citizenship” and “to engage more deeply in intellectual debate and in their role as citizens”. Skills: active citizenship, robust discourse, intellectual debate. Values: equity, inclusion, community (local and global), discovery, citizenship. But what do students need to know to live out these values and skills?

I turn next to my alma mater, the University of Texas at Austin. “The university contributes to the advancement of society through research, creative activity, scholarly inquiry and the development and dissemination of new knowledge” (*Mission & Values*, n.d.). The university mission page even includes a “Values” section that includes Learning, Discovery, Freedom, Leadership, Individual Opportunity, and Responsibility. Skills, values, and duty to society are accounted for; knowledge, however, is assumed.

Turning to a different institutional tier, consider my hometown’s community college. Houston Community College offers “academic advancement, workforce training,

career development, and lifelong learning to prepare individuals in our diverse communities for life and work in a global and technological society” (*Mission Statement*, n.d.). What might an individual need to know to thrive in a global and technological society?

I’m currently in graduate school at Georgetown University, whose mission includes “sustained discourse among people of different faiths, cultures, and beliefs” and “intellectual, ethical and spiritual understanding.” Values include “the diversity of our students, faculty and staff, our commitment to justice and the common good, our intellectual openness and our international character.” Georgetown desires “[a]n academic community dedicated to creating and communicating knowledge,” and it “educates women and men to be reflective lifelong learners, to be responsible and active participants in civic life and to live generously in service to others” (*University Mission Statement*, n.d.). Values are quite clear, and knowledge is both part of “intellectual understanding” and a value unto itself. Ironically, “communicating knowledge” is part of the mission but the university itself doesn’t communicate anything specific about what knowledge.

The above samples of university missions reflect some national trendsetters as well as colleges at different tiers with personal relevance for me. Try reading the mission statement of your alma mater, or of a college or university in your community. You will almost certainly note the same thing—robust expositions about values including a duty to society, frequent inclusion of specific skills, and knowledge as an assumed centerpiece.

The issue here isn’t that mission statements don’t inventory specific knowledge outcomes. We wouldn’t expect to find them in mission statements. The issue is mission statements’ values implicitly call for knowledge outcomes but the institutions themselves remain silent in terms of specifics.

The American Association of Colleges and Universities (AAC&U), perhaps the preeminent organization advocating for liberal education in the U.S., asserts that “the use of the knowledge and skills gained in college will be directed according to the habits of heart and mind developed there as graduates enter into relationship with others through their personal and professional lives, through their participation in the civic life of democracy, and through their engagements in the proximate and global communities of

which they are a part” (*What Liberal Education Looks Like*, 2020, p. 12). This echoes what we saw in some of the mission statement examples: knowledge and skills apply in work and civic life. Just a few pages back in the same report, AAC&U states that a liberal education will have students “develop intellectual and practical skills—inquiry and analysis; critical and creative thinking; written and oral communication; teamwork and problem solving; quantitative, information, scientific, and technological literacies. What matters for liberal education is that these skills be practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance” (p. 9). Skills get explicit treatment; knowledge does not.

Even in its guidelines for how to evaluate student learning in liberal education, AAC&U shies away from suggesting specifics for knowledge. Their Valid Assessment of Learning in Undergraduate Education (VALUE) initiative, “an authentic approach to assessment designed to articulate and measure the skills, abilities, and dispositions that students need and that parents, policymakers, and employers demand,” presents “rubrics to evaluate student performance reliably and verifiably across sixteen broad, cross-cutting learning outcomes” (*Valid Assessment of Learning in Undergraduate Education (VALUE)*, 2009). To their due credit, the VALUE Rubrics present very useful ways of evaluating the level of mastery that students demonstrate on a variety of dimensions within each of the 16 topics. For example, within the “Civic Engagement” rubric there’s a measure for “Civic Identity and Commitment,” which implies that students would be engaging with notions of themselves as participating members of pluralistic society. But VALUE stops short of suggesting *what* narratives about individual identity in society most merit study. AAC&U’s separate Essential Learning Outcomes “define the knowledge and skills gained from a liberal education, providing a framework to guide students’ cumulative progress” (*Essential Learning Outcomes*, n.d.). Here, the outcomes read like class distribution suggestions, not critical knowledge. For example, under “Knowledge of Human Cultures and the Physical and Natural World,” the suggested outcomes are “focused on engagement with big questions, both contemporary and enduring” in Science and mathematics, Social sciences, Humanities, Histories, Languages, and The Arts. What, specifically, all graduates might need to know that pertains to these areas is not noted.

Even a more practically oriented organization like the National Association of Colleges and Employers (NACE) follows the same blueprint of emphasizing the importance of knowledge and skills for employability, then gets specific about skills but not about knowledge. In their 2022 report *Development and Validation of the NACE Career Readiness Competencies*, NACE cites numerous frameworks for competencies needed for modern employment, including how to “use knowledge, facts, and data to solve workplace problems; apply math and science concepts to problem solving” (p. 11) and “basic skills and knowledge, e.g., reading, writing, and arithmetic; applied skills, e.g., teamwork, critical thinking; and emerging content areas, e.g., career management” (p. 9). As an intention of the report is to establish a common framework for colleges and employers to understand the skills and knowledge needed for jobs today (*What Is Career Readiness?*, n.d.), we are left wondering what specifically future workers need to know to ensure their success.

As we have seen, colleges comfortably tout *specific* skills and values, but not *specific* knowledge. Knowledge is treated as a cornerstone value, but specific knowledge within an undergraduate education is assumed on the part of the university. As we will see, this is both a cause and effect of a paradigm in which the undergraduate experience prioritizes each student engaging with disciplinary content, methods, and theories over more universal, cross-disciplinary points of reference for non-specialists.

A paradigm of implicit knowledge

This paradigm in which colleges and universities do not publish explicit institutional knowledge outcomes stems from a mindset in American higher education that universities both cannot and should not propose what their graduates need to know. But it is also the effect of a system in which students are expected to train in the foundations of discrete academic areas of scholarship.

Cannot and should not

An argument that universities cannot and should not propose knowledge outcomes for all students:

The modern world is tremendously complex and the amount of knowledge that any one person might need in life is practically beyond tallying. As Harvard professor of education David Perkins notes in *Future Wise*, “one of the most challenging aspects of big understandings: there are far too many to cover in any reasonable sense. There is no ideal curriculum” (Perkins, 2014, p. 55). In the case of universities, which deal in just a subset of the world’s knowledge, fields are awash in ever-growing amounts of information (Blair, 2010). There are numerous departments and numerous classes within each department. Within any given discipline there is a mountain of foundational knowledge, history of the discipline, current research, and more. Faculty dedicate their careers to understanding and creating knowledge in their fields. No one student, even the most voracious intellect, will graduate with anything close to a comprehensive level of knowledge that spans everything a person might need to know in life. It is unreasonable, therefore, to suggest that the university can undertake the task of prioritizing knowledge for everyone.

Furthermore, the university doesn’t know what all its students will go on to do after college. A student’s life will be affected by issues in all sorts of domains, including those that one *doesn’t* study in college. Even the best-intentioned and well-reasoned synthesis of critical knowledge on the part of the university would second guess that which each student will “need” to know in life. Any attempt at universal knowledge outcomes is bound to fall short for most people, if not everyone.

Finally, even if we could identify things that constitute critical knowledge and for good reason, it’s not the place of the university to dictate such outcomes. Suggesting that the opinions of a select group within the university apply to all students would be an overreach (Macfarlane, 2012). To the extent that universities embody American democratic ideals including freedom of thought and expression, it is not the place of the university as a monolithic institution to decree what diverse individuals should hold to be true. The job of the university is not to curate but to provide a place for students to explore and decide for themselves.

Can and do

Before exploring external factors that put this dominant paradigm under pressure, let's explore internal inconsistencies with this "cannot and should not" mindset.

The issue of feasibility, or the fact that universities *can* make a knowledge mission, is an issue of bounding the problem. If we take the task as trying to anticipate every point of knowledge that a graduate might recall or rely upon during a (hopefully long) lifetime, then indeed the task seems unfeasible. And for people becoming experts in specific fields, we can reasonably argue that the set of knowledge needed to operate in those fields is practically unbounded and growing. But it's worth considering that all students end up going through college attending classes and engaging with *some* knowledge. By graduation time, a student will have amassed a finite body of learning experiences—and from this standpoint we can consider that colleges already *do* sanction what turn out to be definitive sets of learning outcomes; they just don't define them from the outset. The traditional four-year college experience bounds the amount of knowledge that a student learns one way or another. So if the university isn't explicitly making statements about what its students should learn, then a combination of departmental requirements, individual professors, and happenstance will end up shaping that list.

Entertain, for a moment, the notion that *nothing* is universally worth knowing for a college graduate, that what a student needs to know boils down to the circumstances of personal interests. In this world it's conceivable that groups of students might graduate without having ever engaged with similar points of knowledge. Any itching sense of concepts, narratives, or frameworks about the world that these graduates are missing suggests that colleges can propose such things. Furthermore, logically this claim that no claim to knowledge is sufficiently universal itself then becomes a universal claim. While this makes for interesting fodder in the study of paradoxes, it also seems to strip universities of the ability to claim that knowledge is a bedrock value.

Regarding the issue of propriety, or whether universities *should* propose knowledge missions, I note that universities already make all sorts of value judgments both explicitly and implicitly. When universities put forth mission statements, they assert values and

choose some over others. When they propose core course requirements, they feel on some level that a student's engagement with the course is worth its commitment of time and money. As Leon Botstein, president of Bard College, notes, "one needs to dispense with the self-serving claim that there is something akin to an apolitical, or nonpoliticized, curriculum" (Botstein, 1996, p. 52). When colleges propose the skills they aim to cultivate in students, they do so with a sense of the relative importance of those skills over others. If universities are confident in prescribing required topics or classes, why not get explicit about what, exactly, the university hopes students will come to know through engaging with them?

If the notion of the university proposing what a student needs to know still makes some uncomfortable, it is worth considering what we mean by "need." Need needs an "or else." A student doesn't "need" to value living in a free and democratic society. They don't "need" to value personal responsibility. They don't "need" to write well or express themselves clearly. When we talk about "need" in these cases, we're talking about a mixture of things that are either proposed as valuable for their own sake or valuable because of demonstrable consequences. Universities hold freedom, personal responsibility, and duty to society as goods for their own sake. They hold critical thinking, oral communication, and quantitative problem solving to be valuable because lack thereof puts individuals at a demonstrable loss. There are consequences that the university observes as critical, even if students don't necessarily agree. Colleges are already in the business of proposing student outcomes based on a combination of self-justified and demonstrably consequential rationales. Suggesting things that all graduates need to know falls squarely within the lines of how universities already operate.

Effects of a system of subject matter expertise

Colleges organize their degree offerings, and thus the bulk of the content that a student experiences as an undergraduate, to mirror scholarship in domains of knowledge. This is for good reason. Departments are not arbitrary divisions; subject matter expertise is real and distinct across disciplines. Respect for subject matter expertise is a core component of knowledge. And as the American Association of University Professors (AAUP)

notes in their 2020 treatise *In Defense of Knowledge and Higher Education*, knowledge can be defined as “those understandings of the world upon which we rely because they are produced by the best methods at our disposal” (p. 2). Thus, isn’t it appropriate that students engaging with disciplines end up with different knowledge outcomes? Of course! The issue is whether a system in which people engage deeply within disciplines is a good pathway for all students.

Before we consider that question in more depth, we can see that the current system shifts knowledge outcomes for students to individual faculty or departments. Core distribution requirements are the closest that institutions get to suggesting universal learning outcomes for all students. However, these requirements are generally for classes, not knowledge outcomes.

So what would an alternative look like?

A new paradigm: the knowledge mission

A new paradigm for higher education would have colleges and universities develop undergraduate “knowledge missions,” explicit affirmations of what all graduates should know now and why. Universities, both individually and collectively, would work to identify how to frame the knowledge they seek to impart. Ultimately knowledge missions would vary from institution to institution and not only serve to guide a restructuring of the undergraduate learning experience but a reframing of the objectives, requirements, and meaning of a bachelor’s degree.

Defining a knowledge mission

A knowledge mission answers the question “what do all graduates need to know now and why?” But what would a knowledge mission look like? A list of courses and subjects? Facts and figures? Seminal sources like books, papers, films, plays, and artwork? Is it even possible to define a knowledge mission, and furthermore is it possible to construct one?

As a knowledge mission is a speculative concept, its creation is a design exercise. Therefore, design principles can inform not just how to create one but help refine its definition in the process.

Defining who

As with any good human-centered design project, first we want to understand the person for whom we are designing. Though the intention is to come up with things to know, we are first asking what all graduates need. Since good design happens when we can be specific about users (Gibbons, 2016), “all graduates” might seem like a bad starting point for design because it sounds a lot like “everyone.” But “all graduates” does not mean everyone. Any institution of higher education in the United States, from scientific and technical institutes to the smallest liberal arts colleges to the largest public research universities, will have diverse student populations in terms of where they come from, what they’re engaging with intellectually, and where they are heading post-college. But we can assume that a common thread is a desire to learn. Individual colleges can develop deeper profiles of their students based on what they know of their student body (i.e., gender, age, socioeconomic profile, religious orientation, historical mission, and more). Furthermore, in viewing students as people with a desire to learn, we should be sure to expand our understanding of them not just as students today but as colleagues and citizens tomorrow. This is key. The person who goes to college should be viewed not just as today’s student but tomorrow’s member of society. In fact, given most people spend (hopefully) most of their adult lives *not* in college, we should be thinking about future doctors, engineers, lawyers, professors, scientists, business leaders, civic leaders, managers, accountants, philanthropists, teachers, bankers, stay-at-home parents, bureaucrats, and more. These are people ready to learn, who can and will learn for the rest of their lives, and who will interact with each other in a variety of ways as they get older—sometimes as colleagues and co-workers, sometimes as strangers, sometimes as ideological adversaries. We are designing not just for what each individual needs, but for what groups of diverse people need to interact reasonably (Marks, 2021).

Defining why

Once we have in mind who students are, and the fact that we are designing for their current and future social interactions, we can start to consider *why*, which is the pivotal part of a knowledge mission. First, why needs to be compelling because faculty and students need to understand it as consequential. Second, whys are shared understandings that address specific values or transitional forces that the university deems important.

The following are examples of reasons for a knowledge mission:

- To have a common language with other college-educated people when evaluating matters of social importance like government, economics, public health, medicine, infrastructure, law, arts, language, sexuality, education, race, and technology
- To understand how the effects of your actions intersect with the complexities of diverse groups of people outside of groups with which you identify
- To understand the strengths and limitations of how abstractions can model the world
- To understand the role of expertise in the modern world, including the limits of expertise
- To understand the effects of technology, positive and negative, on people and social systems
- To understand the types of people, institutions, and resources to trust and consult to understand that which is unknown to you

I developed this list by considering the kinds of decisions we make for ourselves, our families, our communities, our places of employment, and our broader society. This list is by no means exhaustive and it's open for discussion. The charge for a group creating a knowledge mission within a university is to start by identifying and refining such overall "whys."

Note that the list above is not based on disciplines. Most of these statements are intentionally broad understandings that span disciplines.

Each why should correspond to at least one compelling statement about the real consequences of ignorance. That consequence is what will help convince people that the knowledge mission is worth knowing. What undesirable things happen if people don't have a firm, shared understanding of what's proposed? Going back to the examples above:

- Not having common terminology can lead to confusion, misunderstanding, and conflict in situations where people share ideology but describe their positions in mutually unintelligible ways.
- Assuming (incorrectly) that other people are less complex and more homogenous in their attitudes than your own community contributes to inter-group conflict.
- Believing that all statistics are lies can lead to rejecting valuable insights. Or believing that big data mining will solve most large social problems can lead to overreach of technology surveillance.
- Not knowing to trust health experts on matters for which they are uniquely qualified to address can lead to preventable death or suffering. Also trusting experts in one domain in matters outside their area of expertise can lead to preventable death or suffering.
- Rejecting technology out of outright fear can lead to undue hardship, and blindly submitting to technology can lead to abuse.
- Encountering concepts that people have studied and about which people have built a base of deep understanding and to not know it, recognize it, or engage with it can lead to suffering or hardship. Being unaware or dismissive of one's own ignorance, asserting that well-founded knowledge does not exist, cannot exist, or should be disregarded, again leads to suffering or hardship.

Even better, we would have concrete examples of ignorance in action. Where, when, and how do we see the negative effects of people lacking knowledge play out in the world around us?

As we can see, from a set of whys we can start to formulate a list of things to know. The above list contains a starter rationale of a knowledge mission. However, I believe robust knowledge missions can and should go one step further and propose corollary statements of specific things to know. I call these "knowledge nuggets" (but I welcome

suggestions for different terminology). One nugget for the point of illustration: debates within fields of expertise do not imply a lack of expertise within the field. This nugget applies to at least the last three “whys” above. For example, if doctors can’t agree on whether X is healthy for you, it’s not necessarily because medicine fundamentally doesn’t have the tools to weigh in on the matter. Not understanding this point can lead to mistrust of medicine, rejection of sound health advice, rationalization of poor health choices, and erosion of understanding of the nature of expertise. The same nugget could also apply to civil engineering, economics, computer science, or any other field of expertise.

Another knowledge nugget might take a step back and propose: there is a difference between what we know and how we know what we know, and both have advanced over the course of human history. While this notion does not directly settle an issue, it can help us have more meaningful discussions about how, when, and why we should take expert advice. It alone doesn’t tell us all we need to know, but it is a critical point of knowledge that spans and can extend to almost any discipline. Consider for a moment how the nugget could inspire critical inquiry in history, philosophy, physics, mathematics, economics, medicine, education, political science, computer science, or biology. How much more robust could our public discourse be if we could talk collectively about these fundamental nuggets of knowledge in the context of decision making?

While a properly-formed university knowledge mission should include broad but meaningful statements about knowledge, it should also avoid first-order knowledge (things one can look up) at all costs. For example, someone might make the case that U.S. adults should know the U.S. population size (approximately 335 million people as of May 2023) (*Population Clock*, 2023). This is critical, after all, for estimating the effect of events given likelihood statistics, which in turn we use when discussing policies of all sorts. But is the population the thing to know? It is precisely the kind of fact that someone can look up handily. Perhaps a more generalized statement is in order, for example: “To make informed decisions at the population level, or to infer how population-level statistics affect people, you need to understand both the statistical likelihood of events as well as information about the population.” Again, moving from facts, figures, and first-order information into statements about how to know things in the first place. And going back to how good

knowledge nuggets should extend across disciplines, consider how this point about populations might invoke methods from and apply to economics, sociology, statistics, public health, transportation, climate, politics, or finance.

In conclusion, a knowledge mission would be a collection of broadly true unifying statements that help a person understand connections between ideas. I imagine something akin to the Bill of Rights. To the extent that themes within the Bill of Rights have been subject to debate and interpretation, the analogy is useful. The knowledge mission should be publicly searchable and accessible. Students, faculty, or any other stakeholder of the university should be able to access it. Anyone should be able to compare knowledge missions of different institutions.

How long should a knowledge mission be? Likely several dozen nuggets, probably no more than a hundred. Why several dozen? Because it seems that it's a reachable number. Why not more? Because it's helpful to have a target quantity for the sake of prioritizing. Anyone who finds themselves thinking a dozen is too high isn't digging deep enough. And anyone thinking that a hundred is too few both isn't sufficiently prioritizing but also is making a good case for the fact that a knowledge mission is possible. These knowledge nuggets then become a manageable set of objectives upon which to build a curriculum. This would look different than how a lot of curriculum looks now. But as Bard College's Botstein notes, "[c]urriculum, ultimately, is a strategy among possible strategies" (Botstein, 1996, p. 53).

Who defines the knowledge mission?

Above I have illustrated the steps in a framework for developing a knowledge mission. My answers are hypothetical, as I am not in a position to propose what constitutes critical knowledge across all the various departments that make up the modern university. But that very observation is a good starting place for considering how a university should construct its knowledge mission, because *nobody* is in such a position. We should not expect one or even a few subject matter experts to produce the list of what college graduates need to know. Good knowledge missions should be the product of conferences between many experts across the whole of the university.

Framers must keep in mind that a knowledge mission is *not* an inventory of foundational knowledge within disciplines. It is tempting to go subject-by-subject and enumerate fundamental principles or facts that a student must know to advance in the discipline, for example what happened at the Constitutional Convention of 1787, how to determine the slope of a line, how to use commas in English, and how to read the periodic table of elements. But none of these as knowledge outcomes per se rises to the challenges posed by AI, and none has clear corresponding whys for most students. Of course, for students electing to pursue specialization in American history, math, journalism, or chemical engineering, familiar knowledge of the above would be required. But the foundational reasons above just don't apply broadly.

Perhaps the most difficult task in constructing a knowledge mission is to walk the line between suggesting that *nothing* counts as universal critical knowledge for all college-educated graduates and that many *subject fundamentals* must count. Thus, the group of people that assembles to draft a knowledge mission must be large and diverse enough to both have representation of subject matter expertise but also allow for a diversity of subjects to keep one another in check. I imagine some schools only involve faculty on their knowledge mission councils, while others also include students, administrators, and alumni. Such a decision would reflect the school's values and priorities.

Finally, a knowledge mission should be revisited regularly. It is a living, dynamic document. Its tenets should be considered for revision as they are taught, and feedback should be welcomed from faculty, students, administrators, and alumni. Imperatives of a changing world should also factor. As we will see, the current radical leaps in the public's ability to engage with AI are emerging at a pace that demands responsiveness. I imagine a knowledge mission being reviewed and revised every two years, both because the frequency seems manageable but also because students will on average get to observe the process twice during their undergraduate tenure.

On students' relationships with knowledge

As people call for increased equity not only in access to education but also in what gets taught, how should universities consider what their graduates should know? For

example, some people might object to the concept of a knowledge mission based on concerns that they might impose “western-centric” perspectives. In response to this kind of criticism, a knowledge mission should be a university’s best attempt at framing critical knowledge at a level that allows for diverse reasonable interests and interpretations while elevating expertise over unfounded claims. This very issue is at the heart of much contest in our societies today, and as such it will prove to be a balancing act in some cases. But trying to balance this for the sake of a common knowledge mission will prove more beneficial than glossing over controversy and remaining silent.

As an example, should a knowledge mission at an American university suggest that all students need to know certain topics in the history of the United States? First, I imagine that different universities would take different positions on the matter. After all, some universities mandate core courses in American history while others do not. By extension, the knowledge missions of those universities that do mandate such courses might include propositions like “to understand balancing of rights of the individual, the interests of the state, and the interests of the federal government in the drafting of the Constitution and the execution of its laws.” But is that a knowledge outcome that we want to impose on all students? Some might claim it focuses too heavily on White, western history. Might there be a way to frame the intent more universally? Perhaps there’s something to be said about ways in which individual and group identities struggle within larger social systems and governments? A more refined notion of this concept could then become a candidate for a proposition on a knowledge mission. Imagine, then, how such a proposition could be fulfilled in terms of a learning engagement. Instead of the notion of individual or group struggle being a point within a class on American history, the paradigm is flipped: specifics from American history can become one of many points brought in by diverse students in a learning engagement (I don’t suggest each knowledge mission point correspond one-to-one with a class, per se) on the struggle between individuals, groups, and social systems. Such a class could have students propose topics that interest them, identify similarities and differences between their topics and those of their classmates, and map historical examples to current events. One can imagine a class in which each student researches a period in history that sparks personal interest, but within the framework above. Such a

class could have all students not only engaging with the knowledge mission but doing so by hearing about the drafting of the US constitution, the Nuremberg laws of Nazi Germany, Gandhi's campaigns against colonialism, Hawaiian queen Lili'uokalani's songs of resistance, the French Revolution, the Stonewall uprising, the Magna Carta, the death of Socrates, and the Truth and Reconciliation Commission in South Africa.

This is not to suggest that the knowledge mission is just about framing history through a wider lens. Consider a decidedly less political issue: feedback loops. Feedback loops affect system dynamics of all types, and recognizing their effects is key to understanding how systems work. We see the effects of feedback loops in economics (runs on banks), history (perpetuation of retributive violence), psychology (anxiety and panic attacks), computer science (recursive functions), and physics (mechanical resonance, as famously seen in the collapse of the Tacoma Narrows Bridge in 1940¹). We also see them in music (feedback of a microphone and a loudspeaker), art (the ouroboros, or snake eating its own tail), and social media (algorithms that feed users content that reflect the beliefs they have already expressed). Now consider if the implications of feedback loops became a knowledge mission concept, again where all the contexts above became points of entry for students with diverse interests and backgrounds.

The value here is not solely about diversity of subject matter. It's that when students leave college, all graduates are reasonably able to look back and directly see the value of what they studied. Gone is the sentiment of "I'll never use American history or physics once I graduate." Class topics are less likely to fade into disused disciplinary categories but will remain relevant to the ways that graduates will encounter the world.

Also, the way in which students engage with the knowledge mission would employ and develop the same critical skills currently valued. Students would be expected to explain their viewpoints in writing and orally, propose arguments that weaken or contradict their positions, lead discussions, work in groups, manage their time, make presentations, calculate basic statistics, participate in debates, etc.

¹ [https://en.wikipedia.org/wiki/Tacoma_Narrows_Bridge_\(1940\)](https://en.wikipedia.org/wiki/Tacoma_Narrows_Bridge_(1940))

All of this might seem like repackaging of best practices for pedagogy. Frameworks for structuring good classes propose identifying learning objectives and relevance before diving into content (Wiggins & McTighe, 2005). The difference with a knowledge mission is that the degree itself, the core unifying experience of undergraduate education, becomes the engagement with critical points of knowledge—not engagement with foundational classes. Foundational knowledge in specific subjects doesn't go away; professors would be charged with helping students identify the kind of foundational knowledge they would need to know to address each of the various examples above.

Why at the institutional level

Ostensibly, a knowledge mission could be adopted on a more granular level than the university itself. Departments or majors could adopt a knowledge mission. However, this would do much less to address the bigger goal of using the knowledge mission to enable cross-disciplinary thinking and conversation. Considering the wide variety of vocations that graduates will have, the more a university can impart ideas that span disciplines the better. Furthermore, universities are not organized around skills or values. They are organized around disciplinary knowledge. There's generally no department of critical thinking or empathy, although some colleges offer courses or programs in such topics. As noted earlier, colleges organize their scholarship in domains of knowledge for good reason. But *connections between these divisions* present the kind of knowledge that graduates will need to reason with each other in a democratic society. Thus the knowledge mission should transcend departments.

A knowledge mission will require not only statements about knowledge but consideration of a level of knowledge and a theory of knowledge. What universities need is not a theoretical sense of knowledge that we might expect from a paper on epistemology but an applied sense of knowledge that trickles down into curriculum. This task falls on universities. After all, what institutions in America should be positing applied theories of knowledge for American adults if not universities?

Finally, departments and courses do not issue bachelor's degrees; universities do. One of traditional universities' greatest strengths compared to emerging micro-credentials

is the total experience, the four-year span of learning that provides a kind of proving ground. After college everything on the student's transcript becomes almost irrelevant compared to the diploma itself ("Clear as Mud," 2018). It's the university's stamp that matters for the rest of the graduate's life (excepting those who do pursue academic or technical careers). It's one thing for colleges to offer classes. But to offer a degree, something with so many requirements and conferring so much value, it seems reasonable that the institution would assert the knowledge component that its mission begs for.

Applying the knowledge mission

The final purpose of the knowledge mission for the modern university is translating things to know into the student experience. At a minimum, themes from the knowledge mission could become integrated into the curriculum. As these topics come up in one context, professors and students would be encouraged to draw analogies to other disciplines. After all, a college's values should be reflected in how it teaches—including, if not especially, in its curriculum. But beyond serving to enhance how content is presented in class, an even more powerful and fundamental use of a knowledge mission would be to reconsider the structure of undergraduate education itself. The current structure wherein academic focus falls into department majors might transition to more interdisciplinary focuses that revolve around the knowledge mission itself.

This is to say, classes and whole tracks of undergraduate study could emerge based not on understanding some field and the corresponding nuggets in the field, but rather understanding nuggets of the knowledge mission, and the integration of subject matter could become supporting material.

A knowledge mission could fundamentally change the role of the university in imparting knowledge. It could shift the question of the curriculum from "what content should universities teach?" to "what frameworks for understanding do our graduates need?"

Though a good knowledge mission would guide a university, it would ultimately serve as a common reference point for faculty and students as they engage with a wide

variety of topics and subjects. In the same way that students (ideally) can look at their work and understand that they are developing transferable skills like critical thinking or leadership, they could look at components of the knowledge mission and see how they are building upon, challenging, and engaging with the ideas therein.

What becomes of disciplinary learning, then? In short, nothing. True, disciplinary education is subject to its own challenges in terms of how it's taught and who traditionally studies certain fields. But a knowledge mission doesn't mean that majors go away. On the contrary, any college student could elect for disciplinary study within a major. But in a higher education system driven by a knowledge mission, it's possible to conceive of an experience where fulfilling learning across the knowledge mission is the undergraduate degree. For most people, who go on to work in fields other than the academic discipline of their undergraduate major, this seems worth serious consideration.

Finally, many universities currently talk about fostering "lifelong learning" as part of their undergraduate mission. A knowledge mission's focus on trans-disciplinary knowledge, grounded in arching narratives of how we know what we know and why it's important, seems better equipped than siloed academic majors in setting the table for lifelong engagement with ideas, especially engagement with other people's ideas. Ideally, alumni could appeal to the narratives of their college knowledge missions long after graduation. Hopefully this would allow them to apply what they learned in college on scales ranging from interpersonal, to community, to the world at large.

Transitional pressures

A few key pressures are hastening the decline of the implicit knowledge paradigm. First, it is at odds with many universities' espoused values about duty to community and civic life, especially in a time of erosion of public discourse and attacks on knowledge and reason. Second, it provides a weak defense against declining public faith in higher education and calls for increased equity in learning. And most compellingly as of late, as artificial intelligence (AI) reshapes our relationship with knowledge, universities more than ever must adapt their educational missions as stewards of knowledge.

Conflict with values about civic life

Universities' explicit values about supporting civic life (e.g., statements about freedom, democracy, advancement of society, public service, and civic engagement) demand an education that responds to the problems facing society today. The identification of those challenges is a necessary part of the process. Today we see societal polarization, partisan political gridlock, misinformation and disinformation, and outright attacks on the value of reason itself (*In Defense of Knowledge and Higher Education*, 2020). Political factions and popular public figures decry the value of expertise (Nichols, 2017). Empowering civic engagement for a functional democracy is a noble goal, and skills such as critical thinking, leadership, and creativity are important. But is there some fundamental knowledge that people need to participate effectively in our democratic society, especially considering the information environment in which we now live? How do we want people to discuss and debate with each other? Does having reasoned, reasonable public discourse require common reference points, and how should we frame them?

Furthermore, is there something *about* values pertaining to democracy, civic engagement, or freedom that colleges believe students should understand? Is there a narrative about them, or a way of thinking about them, that makes them so valuable in the first place?

A convenient response from colleges, and one seen frequently, is a course requirement in something like government or history. This assumes that knowledge of the workings of government itself addresses the issue. But does knowledge of government or history give enough common knowledge for people to have meaningful conversations about climate change, homelessness, taxes, censorship, or public health? Does it provide a framework for people to understand the limits of the kinds of arguments they are equipped and informed enough to make? Perhaps there's an overarching narrative about history, economics, science, technology, or reason itself that might allow for more reasoned discussion. It seems half-considered for colleges and universities to claim that they value supporting democratic society and believe that knowledge is a key component of a

person's ability to participate...but not cite what, specifically, might be part of that knowledge.

Given declining faith in expertise and reason, colleges should ask: are there foundations to reason itself, and if so, might those count toward a knowledge mission?

Withering faith in college education

The public's confidence in higher education continues to decline. Polls indicate that increasingly, people find college not worth the cost (Belkin, 2023; Lederman, 2023). We observe decreasing faith in the value of traditional higher education (Belkin, 2023; *Varying Degrees* 2022, 2022). That low valuation is both economic (i.e., college is not worth the cost) as well as intellectual (i.e., "why do you need to know this anyway?"). We see an increase in the number and style of online educational offerings: free and paid, and credentialing and non-credentialing (*These 3 Charts Show the Global Growth in Online Learning*, 2022). And we see major employers dropping requirements for bachelor's degrees in jobs that traditionally have required them ("More Workers without Degrees Are Landing Jobs. Will It Last?," 2022). In all, these trends point to decreasing pressure for demand for college as it stands now.

Plenty of alternatives to traditional college are emerging. People can learn about any given subject in massive open online courses (MOOCs). Many platforms also offer certifications or micro-credentials. Values can be developed in any number of community service opportunities. And any of the skills touted in university missions can also be cultivated with a mix of online learning and work experience. If creation and dissemination of knowledge is a core value of traditional universities, what becomes their value proposition in terms of knowledge?

It seems that colleges and universities offer something unique in terms of knowledge. Their education experience is structured around departments and majors. Their diplomas speak to departmental achievements. But what about the connections between the experts in all those departments? Do universities have something overarching and synthesizing to say about how the knowledge they impart serves to equip students to

tackle the interdisciplinary nature of life's big challenges, over and above what job training or à-la-carte courses can do? If so, the knowledge mission is an opportunity to say that.

As for calls for increased diversity in subject matter at the university level, as noted in the discussion about students' relationships with the knowledge mission, the document would expressly invite a diversity of interests.

Finally, to revisit a thought experiment from earlier: is it the case that there's nothing universal that graduates should come away understanding? If not, the university can say something about common knowledge.

Technological disruption

Technological disruption might be the biggest current driving force behind the need for knowledge missions in higher education. For almost two decades we have been able to look things up online from smartphones in our pockets. Ubiquitous availability of online reference has created a kind of "just-in-time" learning, where people can reference information whenever and wherever without prior investment in subject matter. Universities should consider the kind of information that we need to have at the ready in our heads versus that which we can look up anywhere, at any time.

Since the explosion in late 2022 and early 2023 of publicly available generative artificial intelligence (AI) technologies like ChatGPT and Google Bard, we can now ask computers to provide us with synthesized information formatted as we want. AI is revealing a future in which on-demand information will not just be the "facts and figures" first-order information we've come to expect from computers but synthesis and summarization that to-date we believed only learned humans could create. As strikingly powerful as these technologies have been in their public debut, their capabilities will grow at an accelerated pace. In a world where this ability will only become more powerful, what will we need to know that we can't ask of computers?

As people increasingly use AI systems to answer questions to help inform their decisions, either by referencing AI-generated information or outright asking AI systems for answers, what knowledge remains in the realm of what college graduates should

understand as a baseline? Furthermore, do we need an informed code to advise how we should trust and integrate knowledge from AI when these systems sometimes seem to treat veracity as something to be generated (Lavis, 2023)? These are questions that force universities to question how their commitment to knowledge should adapt to technological challenges.

At the same time, how can AI help universities in their missions to cultivate specific knowledge outcomes? Can AI systems integrate diverse perspectives on knowledge that not even the most polymathic professors can provide? In this light, AI seems both to challenge current knowledge paradigms but also help deepen ways students interact with knowledge.

Overall, colleges are under increasing external pressures that threaten their relevance in society. As for knowledge, we see mounting challenges to notions of what we should know or even can know in the first place. If universities are invested in their relevance as places to generate and disseminate knowledge, or if they have interest in safeguarding society against ignorance, they should adapt to these transitional forces.

The challenges of change

It will be a challenge for universities to transition to a paradigm where they elucidate what all their graduates should know, and even more of a challenge for them to use knowledge missions to restructure how they deliver undergraduate education. Creating knowledge missions will prove difficult not just in drafting but because of structural challenges that make this paradigm shift a “wicked” problem (Rittel & Webber, 1973). But the transition is important, and there are indicators that change is possible.

Why change is hard

Though the question of “what a college-educated adult should know and why” is important for universities to address, answering that question presents complexities that make it a “wicked” problem as defined by Rittel and Webber in *Dilemmas in a General Theory of Planning* (1973). Such problems feature systemic complexities that make them

intractable (p. 161). Of note pertaining to college knowledge missions: “[e]very wicked problem can be considered to be a symptom of another problem” (p. 165). Some of the complexities that make the problem of creating knowledge missions wicked include:

Higher education has never had to justify its position as the preeminent postsecondary educational investment in America and globally. As the demand for college has increased in the past decades, and as the cost of undergraduate degrees has risen, colleges and universities have little needed to justify what they do in terms of knowledge. They have, however, had to justify how they serve students in other ways—such as increasing access to the benefits of college to traditionally underserved communities or addressing the ability of graduates to secure well-paying jobs. Both issues have put higher education at the center of ongoing social debates. Any re-framing of mission with values about specific knowledge is likewise an invitation for additional critique and debate.

The question of what’s valuable to know blurs easily with the question of why higher education is valuable. Touching on the previous point—how and why a bachelor’s degree became the preeminent postsecondary educational investment in America over the past century is complicated history. Politics, a booming US economy in the 20th century, prestige, expansion of civil rights and access, market signals, and the explosion of information technology all played a role. It is tempting to assume that since higher education has proven so valuable, and since knowledge is a cornerstone of the university’s mission, that the success of universities speaks to the success of their imparting of knowledge. But this reasoning is fallacious. It is possible to have an education system that is valuable by several objective metrics (e.g., higher lifetime earnings, utility as a sorting mechanism, skills development) but still falls short in terms of its purported goals. Any aspect of a successful or desirable social system is not necessarily in and of itself successful or desirable. (This point alone is a contender for something to know..) We can point to valuable knowledge learned in college, but this does not imply that there’s a well-established framework of what colleges should be imparting to all graduates in terms of retained knowledge. Pushing for colleges to account for such knowledge might put them on a defensive, rather than a constructive, path.

Examining and making explicit the knowledge mission of the university allows for non-college experiences to emerge as competing alternatives to the bachelor's degree.

An implicit knowledge mission keeps that which we learn in college as a kind of “secret sauce,” both impermeable to critique and immune to disruption. An explicit, open knowledge mission would allow alternative, competing systems to be built around the same knowledge mission—furthering the same knowledge goals, but in different ways. This is not a bad thing for universities, however. Knowledge missions don’t teach themselves. Just reading the knowledge mission doesn’t result in you understanding the concepts, or understanding the diverse ways in which other college students see their application. Universities have an opportunity here not only to claim that they have identified critical things for adults to know but that they have developed the best ways of engaging people around those topics. Furthermore, the demonstrable relevance of knowledge nuggets to the modern world might help make a better case for the flexibility of liberal college education over job-specific training.

Platitudes about values and skills are justifiable as ends in themselves, whereas value statements about knowledge need further justification. Few people argue with higher education goals such as critical thinking, creativity, problem solving, teamwork, community service, literacy, and leadership (values or skills that routinely appear in college mission statements). We find these to be valuable outcomes that don’t need empirical evidence or alternative consequences to grasp their relevance and importance. True, research might have something to say about how teamwork or leadership are best cultivated, but we don’t need to justify why they are important. However, our best understandings about tradeoffs in systems of government, or about what descriptive statistics allow us to infer about populations, are candidates for critical knowledge—but neither is on its face a self-evidently valuable thing to know. We must contextualize why each of these things is good to know, largely by illustrating the consequences of not knowing. Explicit knowledge missions are open for debate and attack in ways that implicit knowledge is not.

Important social structures connected to higher education, which in turn make the issue of explicit knowledge important, are themselves wicked problems. Consider the

many social factors that are deeply linked to higher education: access to jobs, socioeconomic mobility, civic engagement, affordability, student debt, diversity, inclusion, etc. Each is a wicked problem onto itself. Thus, this fundamental question of what knowledge a university seeks to promote ties up in the bigger snowball of each issue that seeks to address the benefits of a college education. It gets more complicated quickly.

Finally, it's harder to impose explicit objectives than to not impose them, but that doesn't mean that structure is undesirable. (That seems like something worth understanding.) The merits of a knowledge mission merit debate, even though it would be much easier to maintain status quo.

Why change is possible

Despite the thorniness that makes the issue of developing knowledge missions wicked, I believe there are at least three openings that make such a change possible.

The first is historical precedent. Going back to antiquity, academics proposed things that a learned person should know. The ancient Greeks had the trivium and quadrivium, or roughly language and mathematics (Bugliarello, 2003). As universities came to prominence in Europe, they had the classical liberal arts (Kahan, 2013). Apprenticeship models of education carried with them notions of what a craftsman should know (Elliott & Farnbauer, 2021). The need today is not to return to these older paradigms per se but to understand that education has historically carried with it notions of what an educated adult should know. Getting explicit about what educated graduates need to know would adhere to, not deviate from, historical precedent.

The second is the flexibility of American higher education. American colleges and universities have adapted to numerous challenges and growth spurts: land grant colleges in the 19th century, the GI bill expanding enrollments and an embracing of the liberal arts in the early 20th century, and a turn to science and technology in the face of the Cold War in the mid-20th century. Whether motivated by internal or external forces, American universities can be flexible.

The third is the potential of leadership by flagship institutions of higher education. As goes Harvard, so goes the educational nation. American universities tend to model the offerings of higher-tier institutions (Labaree, 2019). Should one, a few, or a consortium of prestigious, well-endowed universities elect to form a knowledge mission, it is conceivable that scores of other universities would follow suit, if not adapt the knowledge missions of the prestigious leaders.

Conclusions

This issue of knowledge missions might seem like an academic technicality. But I think it needs to be evaluated not only in light of what it means for undergraduate degrees but what it means for students as people and their relationship to knowledge.

For students, the knowledge mission is not meant to be a dictum or a list to memorize. It is meant to become a guide to inquiry and understanding for people who don't intend to dedicate themselves to vocations of professional inquiry and understanding. One of the overt goals of a knowledge mission is to strengthen the connection in people's minds between that which they observe in their day-to-day lives and that with which they engaged in college. This is not to be underestimated. The more that people concretely see how the college experience is expressly designed to help them understand and improve their own lives, the stronger that universities cement their relevance for future generations. A knowledge mission could further help shed the notion that college is the *end* of education. Increased perceived relevance of the college intellectual experience to everyday life should help usher in the death of the notion that you don't really use what you learned in college or that not working in the field in which you majored implies the experience was somehow worthless. This isn't just a branding issue. An affinity for universal ideas that college cultivates in an individual ideally translates into a deeper trust in finding intellectual common ground with others. In other words, shared understanding ideally breeds shared understanding.

On a bigger scale, a knowledge mission helps strengthen the relevance of the connection between universities and knowledge: the relevance of universities as

knowledge-disseminating institutions as well as the relevance of college-learned knowledge in broader society. We must take a step back from universities as they are today, and have been historically, if we want to make them relevant in the future. Not relevant as in they continue to exist, because it just might be the case that flagship universities are well-endowed enough and can persist on demand from a small subset of the population interested in and willing to pay for their cachet, that they don't really need to change to endure. But will the university as an institution continue to be widely relevant in America in terms of shaping how we think and act? Business is. Sports is. Entertainment is. But what about academia?

Ultimately, the knowledge mission of the modern American university is an extension of the knowledge imperatives of the modern American adult. We are extending the question "what do we need to know and why?" to the university. When we do so, we are not asking "what do universities need to *teach*?" This is not a content question. We are asking what role does the university play in what we need to *know*? This is fundamentally about equipping individuals and groups of people with tools for living more reasoned lives—which ideally means more productive, healthy, peaceful lives.

At the end of the day, the point is not just to get explicit per se. The point is that by getting explicit, universities can have an alternative way of structuring degrees for people who will not work in vocations that demand the knowledge cultivated in traditional college majors—that is to say, most people. Through knowledge missions, universities can strengthen the relevance of the knowledge they deem critical for the health of the societies in which they operate.

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