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# HONORS EDUCATION: A NATURAL LABORATORY FOR INTERDISCIPLINARY EXPLORATION OF THE ARTS, HUMANITIES, SOCIAL SCIENCES, AND EDUCATION



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## **Honors Education: A Natural Laboratory for Interdisciplinary Exploration of the Arts, Humanities, Social Sciences, and Education**

### **Synopsis:**

Honors colleges and programs bring substantial benefits to their host institutions and the students they serve, including increased awareness of and appreciation for the arts, humanities, social sciences, and education. In this analysis, honors leaders from a range of higher education institutions across the US provide practical rationales for how honors pedagogy and institutional agility help advance student learning within the arts, humanities, social sciences, and education.

### **Abstract:**

The benefits of honors education are broad and compelling, but these contributions may enjoy more recognition in the sciences and comparatively less in other areas. In this analysis, authors from universities across the US examine myriad advantages of honors to students, staff, faculty, and host institutions, focusing especially on the arts, humanities, social sciences, and education. Overarching institutional benefits include attractiveness in recruiting high-achieving students, increased retention and graduation rates, promotion of interdisciplinary approaches, considerable campus and community engagement, and enhanced faculty and staff development. The intellectual curiosity of honors students provides a springboard for transdisciplinary work imbued with knowledge from seemingly diverse disciplines, steeped in systems thinking, and positioned to broaden the perspectives of future leaders and problem solvers. Scaling siloed structures, honors education is invitational—encouraging collaborative thinking and teaching, merging the academic and the applied, engaging classroom and community concerns, and cultivating recognition of the intricate and interlinked nature of problems. Given their very nature, honors curricula are uniquely positioned to bring valuable perspectives from the arts, humanities, social sciences, and education together with those from engineering, agriculture, the sciences, and beyond. Through this interwoven approach, students, staff, faculty, host institutions, communities, and ultimately society overall benefit.

## **Honors Education: A Natural Laboratory for Interdisciplinary Exploration of the Arts, Humanities, Social Sciences, and Education**

The arts, humanities, social sciences, and education are vibrant areas of research in US colleges and universities. And, through instruction of undergraduate and graduate students, they provide critical perspectives for the fields of science, technology, engineering, and math (STEM) (National Academies of Sciences, Engineering, and Medicine, 2018; Yamada, 2018).

Conversely, just as the arts, humanities, social sciences, and education inform students majoring in STEM disciplines, STEM coursework also provides important perspectives for students majoring in the arts, humanities, social sciences, and education. These reciprocal relationships are important ones, but they have been altered by recent shifts in the higher education landscape.

The number of STEM graduates has increased sharply in the last decade, largely due to students earning degrees in the health sciences; as a result, non-STEM fields have watched their proportion of undergraduate students decline, led by decreases in education, business, and humanities (American Academy of Arts & Sciences, 2017). The proportional declines in non-STEM majors, coupled with demographic declines in the number of high school graduates, make for a challenging fiscal environment in higher education. Honors education can help to sustain institutional investment in non-STEM disciplines through its institution-level benefits as well as specific benefits to the arts, humanities, social sciences, and education as arenas for experimentation and innovation. We begin below by examining the overarching institutional benefits of honors colleges and programs. Then, we explore how honors education partners with the arts, humanities, social sciences, and education to transcend current educational structures and enhance student understanding and preparation.

## **Benefit of Honors to Higher Education Institutions**

Honors education has significant benefits to the institution, many of which extend to the non-honors student population. If we strip away labels such as *elite* and *elitist* to examine the impact of honors at the institutional level, we find the benefits to be far more wide-ranging than exclusive. Institutions of higher education enjoy myriad benefits as a direct result of honors colleges and programs. These benefits include advantages in student recruitment, interdisciplinary (integrative) learning, innovations in pedagogy, contributions to faculty research, and community engagement (Herron, 2021).

### **Student Recruitment**

A nationwide decline in undergraduate enrollment began in 2011, and by the fall of 2019, prior to the start of the pandemic, the number of undergraduates had shrunk by more than 1.5 million students (June, 2022b). Since the COVID-19 pandemic began, undergraduate enrollments have dropped by nearly 1.4 million students (June, 2022a). In fact, data regarding US college enrollments for the spring 2022 semester reveal that this troubling trend persists. Undergraduate enrollment fell 4.7 percent from the previous year, a shortfall of more than 662,000 students. Enrollment in the arts, humanities, and social sciences is also declining. In just one year (from Spring 2021 to Spring 2022), the decline in liberal arts and sciences, general studies, and humanities was 4.2% and in social sciences 2.3% (Nietzel, 2022). The number of college graduates in the humanities dropped for the eighth consecutive year with an enrollment decline of more than 30 percent in English and history majors (Barshay, 2021). However, research from the past two decades has revealed that honors colleges and programs have more favorable enrollment yields, retention rates, and graduation rates than the general college

population. Among comparably prepared honors-qualified students, persistence from first to second year, as well as six-year graduation rates, are higher among those who choose to pursue honors than those who do not (Keller & Lacy, 2013).

### **Interdisciplinary Approach**

Honors education returns benefits well beyond the recruitment of superior students or revenue generation, although neither of these is insubstantial. An honors college or program offers unique opportunities for high-achieving students to grow academically and prepare for lives as productive citizens while providing a space for professional development for faculty and staff. Honors courses are generally interdisciplinary. This approach is possible due to the combination of aptitude and curiosity that characterizes the typical honors student, reflected in a desire to reach beyond the boundaries of particular subjects, and a tendency to question conventional categories. One of the marks of honors education is a critical stance toward boundaries that are accepted as given elsewhere on campus. A course in an honors college or program, more so than an honors-level class in a department, will have students with a range of majors and interests, seeking more than an introduction to a single discipline; as a result, an honors course has its own objectives (King & Herrmann, 2015). The inquisitiveness of honors students prompts the honors professor to question structures and methods that their discipline may regard as dogma, stimulating critical reflection that may yield new insights and approaches in their field of research. The faculty member who designs an honors course intended to appeal to students' critical inclinations will view their own field with fresh eyes, and in many cases will be able to translate insights from the classroom space to their research agenda as well as the other way around. In honors education, the boundary between teaching and research is not as

fixed as it tends to be when teaching within an academic department (National Collegiate Honors Council, 2022).

### **Innovations in Pedagogy**

Honors courses often serve as platforms for instructional innovation, making the honors college or program an incubator for creative pedagogy (Corley & Zubizarreta, 2012). In many cases, it provides an opportunity for the faculty member to teach new or differently conceptualized subjects and test innovative pedagogical approaches with a class receptive to new ideas. An honors curriculum is a platform for courses that a professor might not be able to teach in their home department, particularly when the topic reaches beyond the limits of a given field, such as one fusing mathematics and music (Hughes, 2014), theater and human rights (Szasz, 2017), or science and religion (Shane, 2019). Innovative teaching techniques that are discussed campuswide in a Center for Teaching have a natural laboratory in the honors setting. New ideas that arise from academic conferences can take shape in an experimental course with inquisitive undergraduates. In their creativity, these courses showcase the quality of instruction at a university and thus are a magnet for high-achieving applicants (Kotschevar et al., 2018).

### **Contributions to Faculty Research**

Many honors colleges and programs require students to complete capstone projects, providing students with a high-impact experience (Lanning & Brown, 2019) and faculty with opportunities to recruit talented students into their research programs. In some cases, the presence of honors students desiring (or required) to do research under faculty supervision may lead faculty to consider including undergraduates in their research program for the first time. One of the benefits of being a “third space” for faculty is the freedom to test and cross

boundaries (Stoller, 2021). Honors projects may be disciplinary or interdisciplinary research, creative achievements, and/or applied research in practicums and internships. As described above for honors teaching, honors research projects can provide faculty with a platform to explore new ideas within or between disciplines, solely or with colleagues (Killinger & Mares, 2010). In addition, the fresh perspectives brought to research by individuals with strong thinking skills and less disciplinary bias can bring new insights to projects (Guimerà et al., 2005). Many of these honors projects reach the level of those completed by graduate students pursuing Masters degrees, resulting in publications and sometimes co-authorship.

### **Community Engagement**

The work of honors pedagogy in preparing students to assume roles as engaged citizens demonstrates, perhaps, the ideal liberal education (Kotinek, 2017) and “liberal learning has always been rooted in the spirit of breadth and shaped by the practice of depth” (Braid, 2000, p. 56). Within honors, this outcome is accomplished in several ways, through the civil discourse inherent to discussion-based honors courses, specific honors courses focused on community engagement, and the honors expectation to engage in community service (Dunbar et al., 2013; Fine et al., 2018; Bott-Knutson et al., 2019). In addition, a focus on community-engaged learning can help to attract students and retain them through the high-impact practice of service learning (Kuh, 2008). All of these activities enhance the visibility of an institution within its broader community and can positively influence the town-gown relationship.



## **Benefits of Honors to the Arts, Humanities, Social Sciences and Education**

### **Transcending Siloes in Higher Education**

The siloed nature of academia can too easily work against preparing students to understand complex, real-world problems ranging in nature from environmental to health, social justice, economics, and beyond. In the past, most disciplines have contributed to understanding such multifaceted issues by increasing specialization in teaching, but disciplinary expertise can take us only so far when the issues in question cross disciplinary lines. Gibbons et al. (1994) characterize the siloed character of academia as producing “Mode 1” knowledge created within the context of a traditional academic discipline. Macfarlane (2006) notes that in addition to such disciplinary rigidities the silos of academia are framed by sector (e.g., humanities versus social sciences; applied sciences versus pure sciences), scale of analysis, methodology, ideology (e.g., structuralist versus neoliberal), and regional focus. All of these divisions may be helpful for advancing knowledge in specific ways but can easily work to confound the need to bridge disciplinary siloes to work on complex problems.

As a result, students often lack a good understanding of the complexity of real-world systems and the relationships among intricately connected, interdependent, multidimensional factors. All too often, even multidisciplinary efforts are lost in a Bermuda Triangle of tacit disciplinary hierarchies (with the arts and humanities at the bottom on most campuses), departmental silos, and institutional barriers (Association of American Colleges and Universities, 2002; National Academy of Engineering, 2005). More to the point, the importance of the arts, humanities, social sciences, and education in understanding many contemporary issues tends to be lost when these issues are framed as fundamentally scientific, engineering, or agricultural problems. Non-STEM disciplines are often relegated to secondary status when considering

thorny problems such as climate change and water security. Even when non-STEM disciplines are acknowledged as important components of general education, they are still most often framed as edifices upon which more serious scientific expertise can be built (National Academies of Science, Engineering, and Medicine, 2018). However, all wicked problems require students who have the capacity to think critically and creatively, armed with ethical and historical perspectives. All scientific disciplines function inside of normative landscapes, with which students should have more than a passing familiarity if they are to be the change makers that complex world problems require them to be.

### **Application of the Arts, Humanities, Social Sciences, and Education within Honors**

Honors curricula are uniquely positioned to bring valuable perspectives from the arts, humanities, social sciences, and education together with those from engineering, agriculture, and the sciences—and beyond. They can accomplish this leveraging in several ways: by convening multidisciplinary groups of students in advanced coursework, by engaging faculty from across university campuses in collaborative teaching, and by developing honors curricula that are carefully and deliberately framed to provide an interdisciplinary or even transdisciplinary approach to complex problems (e.g., Velez et al., 2022). Whereas interdisciplinarity involves the integration of knowledge and methods from different disciplines, transdisciplinarity provides a holistic intellectual framework for understanding issues and the interdependence between them. In this way, honors programs can provide the kind of transformative curricular and pedagogical experiences that students will need to be successful after graduation—whether as scholars, professionals, or simply as informed citizens (Bailey, 2020).

For students graduating in the arts, humanities, social sciences, and education to understand the complex challenges they will face after graduation, they must learn how to work effectively with others who may have fundamentally different ways of approaching, talking about, and responding to professional and public issues. Transdisciplinarity intersects with systems thinking, which recognizes the interconnectedness of academic disciplines and prioritizes epistemic openness rather than rigidity. “The conceptual basis of complex systems ideas reflects a dramatic change in perspective that is increasingly important for students to develop as it opens up new intellectual horizons, new explanatory frameworks, and new methodologies that are becoming of central importance in scientific and professional environments” (Jacobson & Wilensky, 2006, p. 12). Transdisciplinary and systems-thinking approaches to undergraduate education have been recognized as effective in the arts, humanities, and social sciences (Bellamy et al., 2013; Mobus, 2018; Nurius & Kemp, 2014; Seiler & Kowalsky, 2014; Sevaldson, 2017; Szasz, 2017) as well as in agriculture (Bawden et al., 1984), chemistry (Nagarajan et al., 2019), ecology (Connell, 2012), engineering (Ertas et al., 2003; Zou 2015), public health (Barrett et al., 2019; Lawlor et al., 2015) and hydrology (Lee, 2019).

Honors curricula can provide a way to transcend not only disciplinary silos but also the binary distinction between academic and applied approaches (Appel et al., in press; Stoller, 2021). They can do so by focusing on knowledge that is integrative, applied, and socially accountable, “committed to innovative and exploratory applications of the disciplines that directly bridge and integrate diverse forms of understanding in the service of engaging complex, real-world problems” (Stoller, 2021, p. 49). A distinctive strength of honors programs in this context is community-based pedagogy, which as Dunbar et al. (2013) observed is an important element of integrative learning, defined as activities and courses that “foster students’ abilities to

integrate learning—over time, across courses, and between academic, personal, and community life” (p. 131). One way of framing honors pedagogy, viewed through this lens, is that it employs transdisciplinarity in the service of bridging academic and applied subjects, contextualizing it all within the lived experiences of real community.

Transdisciplinary or integrative education spanning the sciences, arts, and humanities is regarded by many as critical to effective higher education in the science, social science, policy, and sustainable development realms (Brom, 2019; Marcone, 2020; National Academies of Sciences, Engineering, and Medicine, 2018). This view places high value on providing opportunities for students to make explicit connections among disciplines as they consider complex systems. From the perspective of the humanities, this kind of transdisciplinary approach is sometimes referred to as the “new” humanities or “applied” humanities. Distinct from traditional research in the arts and humanities, this approach addresses questions like the value of the arts and humanities to human well-being (Eekhof et al., 2022; Shim et al., 2021). Gleason (2020) described multiple levels of engagement of the humanities with the STEM fields. As noted by Williams (2019), transdisciplinarity works best when there is parity among the disciplines, and one is not seen as service to another. Achieving this balance is an exciting opportunity that can be readily explored through the flexible pedagogy of honors programs and colleges.

## **Conclusion**

Honors colleges and programs benefit institutions in myriad ways across the educational spectrum from enrollment to graduation. Of course, a primary benefit is in the experiences of the students that they serve and the positive effects these students have not only on their institutions

and the surrounding communities while they are undergraduates, but also ultimately in their professional and civic lives. As discussed above, because honors curricula embrace transdisciplinarity and systems thinking, honors students gain appreciation for interwoven lenses and solutions crafted from multiple perspectives. Although general education works to ensure understanding of approaches common in the natural sciences, social sciences, arts, and humanities, many students would prefer to focus primarily in their areas of interest, and, even when students appreciate the opportunity to study in several general areas, siloed coursework often does not foreground broad interlinkages. However, the intellectual curiosity of honors students combined with curricular innovations possible within honors colleges and programs can transcend typical course structures and result in unique growth opportunities for honors students, faculty, and staff. Honors education cultivates students, as well as faculty and staff, to dig deeply into systems, identify inextricable linkages, bring multiple perspectives to bear, and collaborate across areas. Such abilities are not informed solely by the work of one discipline—no matter what it may be. Instead, embracing perspectives from the arts, humanities, social sciences, and education is imperative in transdisciplinary work to understand complex problems. This mutually beneficial bidirectional relationship (i.e., the contribution of the arts, humanities, social sciences, and education to the honors student experience and honors coursework elevating engagement in the arts, humanities, social sciences, and education) serves an array of institutional objectives, but, perhaps most importantly, it spurs intellectual growth and skill development necessary for living well.

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