

The Importance of the Humanities in Education

A Quest Club Paper

Presented by Bruce R. Haines

1/18/2019

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January 18, 2019

Members of the Class of 1755 – welcome to Harvard College!

My name is Mr. Mayhew, one of the tutors on campus. I bring greetings on behalf of President Edward Holyoke and our governing boards. We’ve gathered here in our recently built Holden Chapel to continue the calling of Harvard as recorded in “New England’s First Fruits” in 1643; that is, “to advance Learning and perpetuate it to Posterity; dreading to leave an illiterate Ministry to the Churches, when our present Ministers shall lie in the Dust.”

Though you all are in your mid-teens, your mastery of Latin grammar, composition and reading the great Latin authors was essential to your admission here. You may be relieved to know that Latin is no longer the sole language of instruction in our classes. We remain committed, however, to the three learned tongues of Latin, Greek and Hebrew, as has been modeled by such trilingual colleges of the prior century at Cambridge and Oxford. Heed well the words of the great Renaissance scholar, Erasmus of Rotterdam, who said that, “without languages and polite learning, all branches of study are numb, speechless, almost blind; states languish and life loses its value; man is hardly man at all.”

It is the mission of this college, according to the Charter of 1650, to seek “the advancement of all good literature, artes, and Sciences.” Recall that both Plato and Aristotle described a basic education that comprised grounding in elementary grammar, literature, music, and arithmetic, and which prepared the way for the advanced study of mathematics and finally philosophy, whose object was wisdom, the supreme end of knowledge. It is with such wisdom that we can guide our lives by choice, not by mere instinct, to consciously direct and order our life, and to use these liberating skills, this artes liberalis, to use our liberty well.

At the center of the liberal arts are the humanities, the education of how to be a human being. Your curriculum here at Harvard begins with the Arts of the Word, the trivium, which is grammar, rhetoric,

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and logic. Grammar is used in logic, which is used in rhetoric - all of them move toward a proper presentation of the truth, which speaks to the mind and to the passions. There is also the Arts of Number or Quantity, represented by the quadrivium of arithmetic, astronomy, music, and geometry. Humans communicate with each other using words. Humans communicate with the natural order in numbers and in quantities. By discerning those natural relationships, we shall come to better understand the cosmos. It speaks to us, and we can talk to the greater universe. Think of it this way - grammar speaks, dialectic teaches truth, rhetoric adorns words, music sings, arithmetic counts, geometry measures, and astronomy studies stars.

Here at Harvard we maintain the essential principle that students pursue no more than one subject on a given day. Thus, looking ahead to next week, all of you begin Monday with lectures and disputations on Logic. This is an introduction to philosophy, ethics and politics, and to a method that will train you in the art of thinking and the use of reason. Remember – logic is the optic nerve of ideas!

You will have Greek and Hebrew grammar on Tuesday and Wednesday. Professor John Winthrop will oversee your studies of mathematics and natural philosophy on Thursday. Friday is that art of speaking and writing with elegance that we know as rhetoric. On Saturday, Professor Edward Wigglesworth will direct your catechetical, Biblical and scientific study of Theology. Sunday is set aside for worship, personal diligence and reflection.

A personal word – I have a note for John Adams of Braintree, Massachusetts...where are you? This is from your schoolmaster, who says he had promised to accompany you to your admissions exam with me earlier in the week. He regrets he was indisposed. I regret he will not hear me tell you that based on your class ranking, given your father’s standing as farmer, church deacon and town selectman, you

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have been awarded a scholarship to this institution. Congratulations, Mr. Adams! Between yourself and Harvard junior John Hancock, I'd say Braintree is more than just the name of your home town!

So class, be mindful that high conduct on campus should match the high curriculum before you. I've heard that sophomores are challenging freshmen to a wrestling tournament with the losers buying dinner. May it be never thus! Do not contribute to the reports I have from the faculty of 'drinking frolicks,' poultry-stealing, profane cursing and swearing, card-playing, live snakes in tutors' chambers, bringing 'Rhum' into college rooms, and 'shamefull and scandalous Routs and Noises for sundry nights in the College Yard.'“ Remember – It is candles out at 11 pm! Class dismissed!

As a new academic year began in the mid-18th century at Harvard College, similar educational commencements were underway across British North America. As the second oldest institution of higher education in the nation, the establishment of the College of William and Mary in Virginia was, in part, to provide ministers in the Colony for education and conversion of the Indians. The charter called for a center of higher education consisting of three schools: the Grammar School, the Philosophy School and the Divinity School. The Philosophy School instructed students in the advanced study of moral philosophy (logic, rhetoric, ethics) as well as natural philosophy (physics, metaphysics and mathematics); upon completion of this coursework, the Divinity School prepared these young men for ordination into the Church of England.

Yale College in Connecticut began with the liberal arts inherited from Harvard and from the universities of England and the Continent. Along with these arts went Christian ethics, divinity, and philosophy, to make good citizens or to lay the groundwork for further theological study. St John's College, originally founded as King William's School, was known as the Maryland colony's first 'free' school (free in this context meaning to free students through education). Meanwhile, Princeton, known

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then as the College of New Jersey, was founded in order to train ministers for “the Education of Youth in the Learned Languages and in the Liberal Arts and Sciences.”

The core of the curriculum at Harvard, William & Mary, Yale and Princeton was the liberal arts, the sum total of Western civilization from the Greeks through the Reformation. The word *liberal* in *liberal arts* does not stand in contrast with conservative. The word *liberal* comes from the Latin *liberalis*, associated with the meaning of *freedom*. Liberal, not as opposed to conservative, but liberal as in *freeing* - to possess the knowledge and abilities to become successful, productive members of a free society.

As for the word “arts,” this too comes from the Latin root *ars*, meaning “skill.” The word “arts” is meant to encompass the humanities, and the social sciences, and the natural and physical sciences, including mathematics. The concept of fine arts and performing arts as coherent fields understood as “The Arts” is a later development.

So then, what are the humanities? “It is like the notion of ‘time’ for Saint Augustine: if you don’t ask, we know, but if you ask, we are left empty handed,” so writes humanities historian Rens Bod. Since the nineteenth century, Bod says, the humanities have generally been defined as the disciplines that investigate the expressions of the human mind.” Such expressions include language, music, art, literature, theatre and poetry. Stanford University describes the humanities “as the study of how people process and document the human experience.”

The use of the term “humanities” began with the scholars and writers of the Italian Renaissance who derived the word “umanita” from the Latin “humanitas.” In the seventeenth century Francis Bacon wrote of the three philosophies or kinds of knowledge – divine, natural and humane, which gave the

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humanities its association with communication and arts of social living. Fast forward to a 1980 Report of the Commission on the Humanities and you find that the humanities “reveal how people have tried to make moral, spiritual and intellectual sense of a world in which irrationality, despair, loneliness and death are as conspicuous as birth, friendship, hope and reason.”

The American Academy of Arts and Sciences declares “the humanities are disciplines of memory and imagination, telling us where we have been and helping us envision where we are going.” The British Academy for the Humanities refines this: “humanities and social sciences teach us how people have created their world and how they in turn are created by it.” Or, to go even more basic, there’s this response from Justin Stover, a fellow at Oxford University: “most of us know the humanities when we see them.”

So, is it correct to suggest that “the humanities” is the same as “the liberal arts”? They are related, though not identical. Think back to geometry class for a moment: all squares are technically rectangles, but not all rectangles are squares. All humanities are part of liberal arts, but not all liberal arts subjects are in the humanities. Liberal arts can be broken down into four categories: humanities, social sciences, natural sciences, and mathematics. Liberal arts is overarching, it is the study of the human—including humanity’s history, the physical world we live in, and the natural laws of science we’re bound by. Further, the liberal arts are the disciplines that comprise a liberal education, an approach to college learning that empowers individuals and prepares them to deal with complexity, diversity, and change. The liberal arts teach critical thinking and give a well-rounded, broad education rather than a specific technical skill.

It is this lack of such specific, technical skills that would soon find its own voice in our nation:

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We occupy a new country. Our principle business should be to explore and apply its resources, all of which press us to enterprize [sic] and haste. Under these circumstances, to spend four or five years in learning two dead languages is to turn our backs upon a gold mine, in order to amuse ourselves catching butterflies.

This is not a quote from current news events, but words from 1783 written by physician, educator and Declaration of Independence Benjamin Rush. In 1779 Thomas Jefferson proposed reforming curriculum at William and Mary into eight broad divisions of which only one would be concerned with the classics. Being unable to carry out this plan, Jefferson turned to found a new school in Charlottesville, Virginia. Jefferson conceived of a system of state-controlled and supported education with a state university as its capstone. This institution, Jefferson wrote, would be one “in which all the branches of science useful to us, and at this day, should be taught in their highest degree. Utility would be the hallmark of genuine knowledge; man needed the useful and the here-and-now.”

Meanwhile, Ben Franklin circulated a pamphlet titled *Proposals for the Education of Youth in Pensilvania*, in which he advocated an innovative concept of higher education, one which simultaneously taught both the ornamental knowledge of the arts and the practical skills necessary for lives of business and public service. By 1824, the first college without Greek or Latin in the English-speaking world appeared at Geneva College in New York. Reform in course selections was coming to campuses such as Harvard and Amherst. The American writer Jacob Abbot declared, “in an age of universal improvements, and in a young free and prosperous country like ours, it is absurd to cling so tenaciously to the prescriptive forces of other centuries.”

To Yale College fell the burden of defending the old order. Yale’s *Faculty Report on the Course of Instruction of 1828* became a magna carta of American liberal education for the nineteenth century:

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Our object is not to teach that which is peculiar to any one of the professions; but to lay the foundation which is common to them all. In laying the foundation of a thorough education, it is necessary that all the important mental faculties be brought into exercise.... If the student exercises his reasoning powers only, he will be deficient in imagination and taste, in fervid and impressive eloquence... In the course of instruction in this college, it has been an object to maintain such a proportion between the different branches of literature and science, as to form in the student a proper balance of character.

Yale History Professor Emeritus George Pierson writes that “what Yale elders had in mind was not to bind the future generations to some narrow and outworn concept of leisure-class learning, but to hand on the rich heritage of the Classical - Christian tradition, and in the process also equip American youth with those tools of reasoning, measuring, communicating, and learning which would be the indispensable foundation for the learned professions and for an informed and cultivated citizenship.”

Writing in *History of Education Quarterly*, Melvin Urofsky notes that as a result of the report, Yale helped to found sixteen colleges in various sections of the United States prior to the Civil War. At the same time, John Henry Newman, a newly appointed rector of a new Catholic University in Dublin, Ireland, presented a set of lectures called *The Idea of the University*, suggesting that the liberal arts are justified for both the acquisition of general, overarching knowledge and the cultivation of the intellect; that being engaged in these things for their own sake tends to also be economically beneficial to oneself as well as good for society at large. “People capable of rational inquiry,” Newman wrote, “able to see vital connections, and accustomed to seeing how a wide array of things could fit together into a whole would be able to fulfill their professional duties afterward with ‘a power and a grace.’”

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Passage of the Morrill Act of 1862, also known as the Land Grant College Act, regained the initiative for curriculum reform. It established institutions in each state that would educate people in agriculture, home economics, mechanical arts, and other professions that were practical at the time.

Named for Vermont Congressman Justin Smith Morrill, he envisioned the financing of agricultural and mechanical education and wanted to assure that education would be available to those in all social classes. In 1865, the Indiana General Assembly voted to take advantage of the Morrill Land-Grant Colleges Act and began plans to establish an institution with a focus on agriculture and engineering. By 1869, Tippecanoe County submitted its offer that included \$150,000 from Lafayette business leader and philanthropist John Purdue, \$50,000 from the county, and 100 acres of land from local residents. On May 6, 1869, the General Assembly established the institution in Tippecanoe County as Purdue University, in the name of the principal benefactor. Classes began at Purdue on September 16, 1874, with six instructors and 39 students.

Emerson E. White, Purdue University’s president from 1876 to 1883, followed a strict interpretation of the Morrill Act. Rather than emulate the classical universities, White believed Purdue should be an “industrial college” and devote its resources toward a broad education with an emphasis on science, technology, and agriculture. In fact, America’s First Industrial Revolution of the late 1800s and its entrepreneurial innovations added validation to such curriculum changes taking place nationwide. Schools sought to emulate the German universities, dividing themselves into specialized disciplines and placing stress on expertise and the discovery of new knowledge. Moving into the 20th century, the humanities were being displaced with the argument that a new science was needed to replace the “old” science of the liberal arts, a new science that no longer sought merely to understand the world and its creatures but to transform them. The liberal arts as a good in themselves took on a diminished role, a direct link to the way that society was thinking about education and work.

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Did it make sense any longer to teach young people the challenging lessons of how to use freedom well when increasingly the scientific world seemed to make those lessons unnecessary? In an ever-evolving age of emphasis on technology, money, best practices, efficiency, and all the practical concerns, had the humanities become an irrelevant investment for schools to steward and an extraneous expense for students? These 200-year old questions would move into the 21st century where the importance of the humanities in education would find itself being evaluated along metrics of funding, utility and viability.

Consider New York: Facing the need in 2010 to cut \$640 million from its budget, The State University of New York announced the suspension of five humanities programs, including French, Italian, Russian, classics and theater.

Consider Florida: In 2012, a task force organized by Governor Rick Scott caused a national outcry with the recommendation that state universities charge higher tuition to students in fields — like anthropology or English — deemed less likely to lead to jobs. “Is it a vital interest of the state to have more anthropologists?” asked Governor Scott. “I don’t think so.”

Consider Wisconsin: The state’s public-university system was founded on a mission that professors and students “search for truth.” In 2015, Governor Scott Walker proposed removing “to search for truth” with a charge “to meet the state’s workforce needs.” Though this change to the Wisconsin Idea was ultimately scrapped, in November 2018 the university announced it would stop offering six liberal arts majors, including geography, geology, French, German, two- and three-dimensional art, and history. The plan would add majors in chemical engineering, computer-information systems, conservation-law enforcement, finance, fire science, graphic design, management, and marketing.

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Administrators were focused on academic areas that students were flocking to and that the state’s economy could use straightaway.

Consider Indiana: In 2016, a “University Strategic Alignment Process” report proposed restructuring 13 academic departments at Indiana-Purdue Fort Wayne. The suspended programs were nearly all in liberal arts and included the closing of the geology, women’s studies and philosophy departments.

Majors in French and German would be cut while some departments would merge. The USAP recommendations followed the findings of a Legislative Services Agency study that called for splitting IPFW into two schools based on Indiana and Purdue university strengths. Over the subsequent months, the Women’s Studies Program would be retained and a philosophy minor would emerge to complement other majors.

In May 2018, *The Hechinger Report* cited that of nearly 500 small private colleges studied over the last 50 years, most of them focused on the liberal arts, 28 percent have closed, merged or changed their missions. Recent closures include St. Gregory's University in Oklahoma, Atlantic Union College and Mount Ida College in Massachusetts and Trinity Lutheran in Washington. Marygrove College in Michigan is shuttering all of its undergraduate programs. Sweet Briar and Antioch colleges, both of which were famously rescued by alumni and donors after announcing they would shut down, remain disproportionately dependent on outside contributions to survive.

Liberal arts has through history become a synonym for “out of touch” with work-a-day problems...it is a luxury for a class who has the means and ability to affect the “big picture” as that class sees it...There is a strong case for discontinuing the reckless pursuit of “broad-based education” as such a pursuit will burden the student with a large debt and leave them with no means to repay that debt.

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Get a job that pays the rent then study the humanities as a hobby or when you retire. A History major with a Doctorate makes less than an Engineer with a BS. Of course, if Mom and Dad are wealthy and you're waiting for them to die so that you can take over their assets, liberal arts is the way to go.

These are comments to *Washington Post* stories by education writer Valerie Strauss. Supporting such thinking, a recent Harris Poll found that two-thirds of 14- to 23-year-old students want a degree to provide financial security, ranking it above all else when it comes to their motivation for going to college. At the same time, fewer students are majoring in the humanities, according to newly released government data. More flock toward science, technology, engineering and math majors — known collectively as STEM — that they think will burnish their employment prospects.

What can you say to the taxpayer who asks, “What good does a program in Byzantine art do me?” Nothing, says *New York Times* columnist Stanley Fish. He adds, “If your criteria are productivity, efficiency and consumer satisfaction, it makes perfect sense to withdraw funds and material support from the humanities — which do not earn their keep and often draw the ire of a public suspicious of what humanities teachers do in the classroom — and leave standing programs that have a more obvious relationship to a state’s economic prosperity and produce results the man or woman in the street can recognize and appreciate.” In 1967, one in five students enrolled in a U.S. university majored in the liberal arts. Today, that’s down to one in 20 students, according to the American Academy of Arts & Sciences. In 2012 Harvard University reported that only 20 percent of its undergraduates were majoring in the humanities, a drop from 36 percent in 1954.

Let’s put one of these statistics in the spotlight - since 2008, the number of students majoring in history in U.S. universities has dropped 30 percent, and history now accounts for a smaller share of all U.S. bachelor’s degrees than at any time since 1950. Why should this matter? As Hal Brands and Francis

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Gavin of Johns Hopkins University write, “Given the tragedy and suffering generated by conflict, given the centrality of politics and political power to every aspect of human life, historians until recent times understood the fundamental importance of political, diplomatic, and military history. The present marginalization of those fields is not simply hurting history enrollments. It is hurting the country’s ability to cope with pressing problems.”

Brands and Gavin also make an important connection: “(I)t hardly seems a coincidence that undergraduate interest in history has plummeted just as the discipline has stopped emphasizing subjects that are central to understanding national and international politics alike...Academic historians simply are not focusing their efforts on some of the issues that matter most to the fate of the United States and the international system today.”

The National Review’s Victor Hanson suggests that “that the fault of declining college interest in the liberal arts may be not in the stars of vocationalism or the wrong values of students but rather deep within the university faculty and administration themselves.”

This view looks at universities as science labs, innovation incubators, hospitals, research centers and professional schools, and suggests the humanities are providing cover for the economic engine that the institution has become. “What is fascinating and perverse about the current situation,” writes *The Chronicle Review’s* Justin Stover, “is that what was once peripheral to the university — engineering and technology — is now at its center and what was once its center has been reduced to the margins and forced to make a case for its continued existence.”

It is here that educators can be education’s toughest critics. Greg Summers, an environmental historian at the University of Wisconsin-Stevens Point, argues many colleges fail to give their STEM grads that broader understanding due in part to the general education curriculum. David Reingold, Dean of the

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College of Liberal Arts at Purdue University calls out “academics and administrators (who) have championed a soft and directionless core curriculum, one that fails to challenge or inspire students...Rather than functioning as on-ramps to dynamic areas of inquiry, the classes are cul-de-sacs with no path forward.” University of Michigan Professor William Paulson adds, “Scholars and teachers need to bring forth practices and institutions that will help make literary culture pertinent to articulating experience, knowledge, and desire in the world as it is today...(T)he highest and most central task of teaching in the humanities may thus be to help students encounter words, narratives and concepts that make it possible for them to think and communicate broadly and deeply about their life in the world in all its dimensions.”

Writing for *The New Atlantis*, Gilbert Meilaender observes that college and university liberal arts departments function largely as service organizations, offering courses that meet general education requirements for students, many whom do not really want to be in those classes and whose energies are focused mostly on other aspects of the curriculum. “If they are really thought-provoking courses in the liberal arts, they will draw the student into serious thinking about our humanity,” Meilaender writes, “no useful work of integration can take place if one is simply running from subject to subject, meeting requirements but not really thinking.”

Happily, there is abundant evidence to suggest that the modes of thinking associated with the humanities and the STEM areas can come together to the mutual benefit of both. In his October 2013 essay called “The Rift: Can STEM and the Humanities Get Along?” David Hollinger, professor emeritus of history at the University of California, Berkeley points out that the media noise about the supposed death of the humanities ignores “the deep kinship between humanistic scholarship and natural science.” The fragmentation in all areas of teaching, scholarship, and learning in the twentieth

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and twenty-first centuries, he writes, threaten “the ability of modern disciplines to provide—in the institutional context of universities—the services for which they have been designed.”

As president of Duke University in 2013, Richard Brodhead was co-chairman of “The Heart of the Matter,” produced by the American Academy of Arts and Sciences. The report acknowledged that while scientific advances have been critical to the extraordinary achievements of the past century, America must also invest resources in the humanities and social sciences, that all disciplines are essential for the inventiveness, competitiveness, security, and personal fulfillment of the American public.

In 2018, another major study, this one by the National Academy of Sciences, Engineering and Medicine added its validation to bringing the humanities and STEM closer together. Quoting Albert Einstein, who said “all religions, arts and sciences are branches from the same tree,” the report criticized higher education as having moved toward an approach heavily rooted in disciplinary “silos.” Whereas a more integrative model of higher education, “intentionally seeks to bridge the knowledge, modes of inquiry, and pedagogies from multiple disciplines—the humanities, arts, sciences, engineering, technology, mathematics, and medicine—within the context of a single course or program of study. Given that today’s challenges and opportunities are at once technical and human, addressing them calls for the full range of human knowledge and creativity.”

Life learning is not just job learning. The CEOs of American Express, Bank of America, General Dynamics Corp., Logitech, Pinterest, Slack Technologies, and YouTube all have arts and sciences educations. Researchers at Duke and Harvard in 2008 surveyed 652 U.S.-born chief executives and heads of product engineering at 502 technology companies. The findings: 92 percent held bachelor’s degrees and 47 percent holding higher degrees. Hardly 37 percent held degrees in engineering or

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computer technology, and 2 percent did in mathematics. The rest had degrees in fields as diverse as business, accounting, health care, and arts and the humanities.

(Show of hands – how many in this room have liberal arts degrees?)

The Association of America’s Colleges and Universities points to mental cross training as the reason why 90 percent of Nobel Laureates in the sciences say the arts should be part of every technologist’s education. Further, 80 percent of employers say that all students, regardless of their chosen field, should acquire broad knowledge in the arts and sciences. Steve Jobs touted the importance of liberal arts and humanities at the unveiling of the iPad 2: “It’s in Apple’s DNA that technology alone is not enough — it’s technology married with liberal arts, married with the humanities, that yields us the result that makes our heart sing, and nowhere is that more true than in these post-PC devices.”

Employers highlight the need for a workforce that knows how to be flexible and adapt. The future of work is less structured, less predictable they say. They note gaps in technical skills such as STEM subject degrees but also in soft skills such as communication, teamwork, and punctuality. Technology is encompassing ever more human work activities. New America CEO Anne-Marie Slaughter says, “It matters far less what they choose to study than the skills they build. I advise them to think about analytic skills, creative skills, human skills, the kind of self-presentation, being able to connect to others, being able to sell in the sense of persuade.”

Colleges and universities have picked up on these cues and have begun removing the binary, either-or idea that students must choose a liberal arts degree or a technology degree. It is the larger recognition that, to quote Penn State mathematician Kira Hamman, “both the sciences and the humanities require

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deep creativity and intellectualism, an ability and a desire to use reason, and a willingness to change your mind.”

Katherine Rowe, the new president of the College of William & Mary, is an entrepreneur, a technophile, a humanist and an educator. She maintains an undergraduate degree grounded in the liberal arts and sciences is the best preparation for the workforce of tomorrow. She offers this example:

The most critical issue on the horizon for every industry is how to tackle fundamental business challenges in a data-informed way using the next generation of artificial intelligence...and how will they navigate the emerging ethical and human challenges of using that data? A McKinsey Global Institute study on the U.S. workforce, “Competing in a Data Driven World,” identifies that we will need roughly 250,000 data scientists in the United States in the coming years. We know we will need even more computer scientists skilled in AI. What is more challenging is that McKinsey predicts we will need as many as 4 million “business translators” who can analyze rapidly evolving kinds of data and craft solutions aligned with organizational values and missions. Data- and tech-savvy, grounded in the breadth of arts and sciences, and with the wisdom to find value both in continuity and in change: These are the problem solvers that every industry and community will value most highly in the coming years.

Rutgers University has created a *School of Arts and Sciences Career Explorations Initiative*, pairing academics with internships and experiential learning. A similar program, *Prepare for Success*, is in place at the University of Minnesota. DePauw University announced a guarantee it will give a job to students who can’t find one within six months of graduating, or let them return for free for an additional semester. Kenyon College meticulously plots, for prospective students and their parents, the actual job trajectories of graduates from each of its majors to help address the concern or anxiety that a

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student will major in English and not be employable on the other side. Some schools, such as Emory University, are adding degree programs that combine applied mathematics and statistics with traditional liberal-arts majors. Others, such as the University of Utah, are giving seniors an opportunity to earn certificates before graduation in fields such as data analysis and instructional design.

Called “a research laboratory in contemporary arts and humanities,” *Platform* is a new, integrative initiative housed at Indiana University, Bloomington. It was created to allow arts and humanities scholars at every level of education to connect their research, via interdisciplinary collaboration, to units on campus that do not normally work with humanists. Since 2007, IU has overseen its Institute for Digital Arts and Humanities. Analyzing unprecedented amounts of data can reveal patterns and trends and can help arts and humanities practitioners craft new research questions and answer those questions.

At Purdue University, a new program, *Cornerstone Integrated Liberal Arts*, allows students to choose from a purposeful set of courses in the humanities and social sciences that explore the themes of science and technology, environment and sustainability, health care and medicine, management and organization, and conflict resolution and justice. *Cornerstone* features experience in oral and written communication using a Great Books curriculum taught by faculty members across disciplines.

Closer to home, at the University of Saint Francis, the humanities are at the core of all undergraduate education. According to Dr. Lance Richey, Vice President for Academic Affairs, the general education curriculum at the University of Saint Francis includes courses in literature, history, philosophy, and theology, and every major has a Capstone requirement where students integrate their major studies with the Franciscan values that guide the school. In addition, students take courses, whether in the humanities or not, which emphasize both Care for Creation and Social Justice in their content.

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Dr. Richey says the heart of a Catholic, Franciscan education lies not just in mastery of a certain body of facts or acquisition of technical expertise, but a development of the whole person that enables a student not just to have a productive career but to lead a productive and meaningful life.

At Huntington University, President Sherilyn Emberton points to the school’s missionary philosophy that is committed “to a strong liberal arts (humanities) emphasis, with general requirements in the arts, history, literature, philosophy, and natural and social sciences for all students, regardless of the vocation or profession for which they are preparing.” The university emphasizes the necessity for students to make a critical and personal response to the issues encountered in the various fields of study and challenge students to think through the relationship between their Christian faith, their academic pursuits, their career goals and their personal lives. These challenges should include unsolved problems and open questions, as well as issues for which satisfactory solutions have already been worked out.

Dr. Ron Friedman is Interim Dean of the College of Arts and Sciences at Purdue Fort Wayne. The college offers 13 majors. It also matches its strengths with students pursuing more technical degrees. There is an upper level English course that is a capstone class for engineering students involving technical writing and presentations. There is a public history class that highlights community engagement, such as creating a digital archive for the Fort Wayne Daisies, which shows students how to use a management online system to create such an archive. Ethics classes in the philosophy department are geared for students pursuing degrees in fields such as mechanical engineering and biology utilizing case studies to understand how to integrate ethics in decision making.

Conversely, technology is informing the humanities. In almost all the women’s studies classes at Purdue Fort Wayne there are discussions about technology that are central to the questions under

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examination; such as, the way social media has changed social movements, the way the developments in the camera change our understanding of our bodies, and regarding reproductive justice how artificial reproductive technology has changed how we understand notions of parenting, fertility, and gender roles. One Purdue Fort Wayne professor noted, “The university is a medieval institution founded on the notion of humanities and sciences operating together. There is no such thing as a university without humanities. Everything at a university is necessarily foregrounded by the humanities.”

Indiana Tech President Dr. Karl Einolf sees the humanities as vital to the success of those seeking a professional education, particularly at a time as artificial intelligence impacts the workforce. Dr. Einolf and his leadership team recently read the book *Robot-Proof*, written by Northeastern University president Joseph Aoun. *Robot-Proof* lays out the framework for a new discipline called humanics, which builds on our innate strengths and prepares students to compete in a labor market in which smart machines work alongside human professionals. Aoun’s humanics are comprised of *data literacy*, *technological literacy*, and *human literacy*. Students will need data literacy to manage the flow of big data, and technological literacy to know how their machines work, but human literacy—the humanities, communication, and design—to function as a human being. Life-long learning opportunities will support their ability to adapt to change.

These cross-disciplinary efforts between the sciences and the humanities prove themselves effective in life changing ways! Students aspiring to go to medical school must take the MCAT – Medical College Admission Test. The Association of American Medical Colleges revised the test in 2015 to include major new sections on concepts from the behavioral and social sciences. Administrators describe the MCAT as first and foremost a test of critical reasoning skills.

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Overseas, lawyers, philosophers, economists, social scientists and plant biologists have come together at the University of Copenhagen to create a think tank called Plants for a Changing World. The goal is to find new solutions for the future of industrial agriculture. The United Kingdom’s Arts and Humanities Research Council (AHRC) funded Historic Weather Network works across science and humanities fields to investigate the climate of the past. Then there is Opower, a clean energy software company that uses behavioral science and big data to change how utility companies and consumers manage and use energy. To the question of why interdisciplinary research matters the journal *Nature* concludes, “To solve the grand challenges facing society—energy, water, climate, food, health scientists and social scientists must work together.”

In a September 2018 piece for the World Economic Forum, Verizon Communications CEO Hans Vestberg states both science and the humanities are needed for the opportunities created by Fourth Industrial Revolution breakthroughs as digital, biological, and physical innovations converge.

He writes:

Our society’s growing focus on STEM has spawned an either/or mentality that undervalues the very subjects that might help us become the best stewards of technology. Those subjects include such core humanities as history, philosophy, literature and the arts. The idea here is to yank us out of the increasingly pointless dichotomy between sciences and humanities. To master this new epoch, we need both – and we need to integrate them as never before. What we really need, in short, are genetic engineers who have deeply absorbed Brave New World and historians who are capable of sophisticated data analysis. The sciences have ever more to give to the humanities and vice versa.

Meanwhile, there is long-term employment and career success for those who only pursue a humanities degree. In *How Liberal Arts and Sciences Majors Fare in Employment*, authors Debra Humphreys and

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Patrick Kelly found that at peak earnings ages (56-60 years) workers who majored as undergraduates in the humanities or social sciences earn annually on average about \$2,000 more than those who majored as undergraduates in professional or pre-professional fields.

The website Visual Capitalist highlights a survey of more than one million persons that graduated only with a bachelor degree, tracking their income growth over the first ten years work. Across the 50 degrees in the survey, the biggest increases in earning power go to Math, Philosophy, Economics, Marketing, Physics, Political Science, and International Relations majors. All these degrees see a 90% or higher increase from median starting salary to median mid-career salary.

Johns Hopkins University President Ronald Daniels writes that contrary to the widely held belief that humanities majors have a hard time getting jobs, recent studies show that those with humanities degrees are thriving in the workplace, experiencing low rates of unemployment and reporting high levels of job satisfaction. A recent analysis by the Brookings Institution’s Hamilton Project found liberal-arts graduates’ earnings often surge for students pursuing advanced degrees. Examples include history majors often becoming well-paid lawyers or judges after completing law degrees. Many philosophy majors put their analytical and argumentative skills to work on Wall Street, and international-relations majors thrive as executives for big corporations.

The importance of the humanities moves from classrooms and companies to communities and countries around the world. The United Nations Educational, Scientific and Cultural Organization passed a 1954 resolution to examine the humanities in the development of the cultural life of communities. Such a cultural environment, UNESCO stated, “must stimulate a sense of the truly human values...and above all, create the desire and means to reflect on themes and issues that

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transcend the immediate situation and create the kind of mind and mature judgment that is called for in the present crisis.”

UNESCO would continue to steward this call for international appreciation and integration of the humanities through a series of global gatherings. At its 2017 World Humanities Conference, attendees affirmed A New Humanities Agenda for the 21st Century, that, in part, “recognizes that the humanities have a specific competence and responsibility in fostering the freedom and diversity of thought and the transparency that are fundamental for all aspects of life in society.”

That being said, there is no consensus on the value of the humanities internationally. This past year, major reforms of higher education in Denmark could further cut the number of students pursuing humanities subjects. One of the key recommendations of a report drawn up by rectors, government officials, academics and business representatives is that the number of study places available in each discipline should be linked to labor market need, which critics say is the latest sign of utilitarian drift in Danish higher education.

At the same time, Asia has been turning towards the liberal arts. Harvard International Review cites that the Chinese University of Hong Kong, Seoul National University in South Korea, Waseda University in Japan, and the National University of Singapore, to name just a few, have recently made major investments in liberal arts education as an alternative to their traditionally highly specialized and technical university programs. “The biggest culprit of Japan’s waning international competitiveness in electronics is an accumulation of changes for the worse in university curriculums and entrance exam systems that encourage both undergraduate and postgraduate engineering students to shun the liberal arts, especially humanities,” says Takamitsu Sawa, distinguished professor of Shiga University, in the October 2016 *Japan Times*.

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The authors of the 1954 UNESCO resolution point out a general agreement that says, in effect, we have to know how we have lived in order to understand how we want to live. Otherwise, how can a person appreciate what constitutes concepts of fairness and human well-being? We need to be able to discern what is happening in that sphere called public says Columbia University professor Judith Butler. She observes “that engagement in public life is bound up from the start with the basics of a humanities education that address how we learn to think, to work with language and images, and to read, to make sense, to intervene, to take part, to formulate evaluative judgments and even to make the world anew.”

In an excerpt from his book entitled *Sapiens*, historian-turned-futurist Yuval Harari describes a world that, by 2050, is defined by “accelerating change,” a chaos of information and misinformation, and unforeseeable technological inventions. In such a world, Harari suggests education should be grounded in sense-making, the ability to combine many bits of information into a broad picture of the world, in the capacity to come to a “comprehensive view of the cosmos,” and, the search for self-knowledge.

Here in 2019, we continue to find ourselves defined by work—by the useful, the socially beneficial, and the functional. Everything must be undertaken in the name of “work,” and, in light of educational pressures to keep the focus on workforce development, there seems no space of inquiry distinct from and higher than the demands of work. In this worldview, work is indeed fundamental to “who you are and who you will become.”

The humanities help us remember that the overspecialized but uninformed citizen is not just a modern phenomenon. At the beginning of the nineteenth century English Romantic poet William Wordsworth wrote a sonnet that begins: *The world is too much with us; late and soon, Getting and spending, we lay waste our powers: Little we see in nature that is ours; We have given our hearts away.* Wordsworth

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was lamenting a materialist worldview while human life and experience were being reduced to a balance sheet, a double-entry ledger. It was the sort to which Charles Dickens’ Ebenezer Scrooge had sold his hard heart. Scrooge had lost his humanity in a world of business.

In an article for the Modern Language Association, Stephen Behrendt recalls how in 1821 Percy Bysshe Shelley wrote *A Defence of Poetry* in response to his friend Thomas Love Peacock’s satirical essay *The Four Ages of Poetry*. Peacock claimed that all the arts in the modern age are hopelessly and irreversibly deteriorated. What good is art, Peacock says, when technology, science, industry, and profit now gauge value? Shelley’s response addresses the growing cultural prioritizing of empirical data at the expense of something else:

We have more moral, political and historical wisdom, than we know how to reduce into practice; we have more scientific and economical knowledge than can be accommodated . . . by the accumulation of facts and calculating processes. . . . We want the creative faculty to imagine that which we know; we want the generous impulse to act that which we imagine; we want the poetry of life: our calculations have outrun conception; we have eaten more than we can digest. . . . [M]an, having enslaved the elements, remains himself a slave.

The liberating arts free us from such slavery. The humanities empower us to “imagine intensely and comprehensively,” as Shelley would describe it, and in the process the humanities make us not just better citizens but also more humane ones. In this time when we crave black-and-white certainty the humanities teach us how to live, thrive and find meaning in a world that is painted in multiple shades of grey. Or, in Steve Behrendt’s words, “Teaching us about our own and others’ humanity is a goal that is more worthwhile—indeed more essential—if we are to survive in a world whose ever-increasing fragility is in our hands.”

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