Suggested Readings for Breakout Session 4

"Why We Still Matter in a Tech-Saturated World: The Differences Humanities' Courses and Degrees Make."

This topic will consider if students who take courses in the humanities or receive liberal arts degrees can make unique and meaningful contributions to businesses and tech companies. Participants are invited to reflect upon the popular notion that studying the humanities and receiving liberal arts degrees are irrelevant in a society that requires workers for its business and tech sectors and that frequently views technology as the solution to all problems. Participants could also examine whether thinking about courses and degrees in terms of their practicality for employment is necessarily a good idea.

Participants are encouraged to use this session to help them create panels/presentations for the next CCHA conference.

Questions to ponder:

- 1. What is the history behind the United States' higher educational system, in which the humanities are considered foundational?
- 2. Should we dispense with this model in order to graduate students more quickly in their chosen majors?
- 3. What exactly do people with humanities' degrees end up doing in "the real world?"
- 4. What does knowledge of the humanities add to major tech companies such as Facebook, Amazon, Apple, and Google?
- 5. What is divergent thinking? Why might we need mental "explorers?"
- 6. How do the humanities foster creativity and critical thinking in the business world? Do we need humanists to remind us of the unintended consequences that can occur if a new technology is embraced? Examples of this?
- 7. Is the division between STEM and the liberal arts over-stated?
- 8. What other valuable skills for the "real world" do students learn from the humanities (for example, enhancing their relationships, dealing with suffering, contributing to society as citizens and volunteers, finding joy and meaning in life)?

Books

Anders, George. You Can Do Anything: The Surprising Power of a 'Useless' Liberal Arts Education, August 2017

Stross, Randall. A Practical Education: Why Liberal Arts Majors Make Great Employees, September 2018

Hartley, Scott. *The Fuzzy and the Techie: Why the Liberal Arts Will Rule the Digital World.* Houghton Mifflin Harcourt, 2017.

Articles (see below)

"Why we still need to study the humanities in a STEM world" by Gerald Greenberg (intro by Valerie Strauss), *The Washington Post*, October 18, 2017.

"The Tao of the liberal arts" by Gerald Greenberg (intro by Valerie Strauss), *The Washington Post*, Jan 7, 2015.

"Why STEM Students Need Humanities Courses" by John Horgan, *Cross-Check* blog, Scientific American.com, August 16, 2018.

"Liberal Arts in the Data Age" by J. M. Olejarz, July-August 2017 issue, *Harvard Business Review*.

"The Unexpected Value of the Liberal Arts" by George Anders, website of The Atlantic, August 2017.

"Why Top Tech CEOs Want Employees with Liberal Arts Degrees" by Elizabeth Segran, website of *Fast Company*, August 2014.

"Don't Panic, Liberal Arts Majors. The Tech World Wants You." by Timothy Aubry, *The New York Times*, August 26, 2017.

Why we still need to study the humanities in a STEM world

washingtonpost.com/news/answer-sheet/wp/2017/10/18/why-we-still-need-to-study-the-humanities-in-a-stem-world/

October 18, 2017

It is common to hear today, in the era of big data and STEM — science, technology, engineering and mathematics — that liberal arts degrees are, well, relatively worthless. What is someone with a degree in English literature going to do with it, besides teach?

The question isn't new. A decade ago, a U.S. Bureau of Labor Statistics magazine published an article titled "What Can I Do With My Liberal Arts Degree?" which starts with this: "What are you going to do with a degree in *that*? Do you want to be a teacher?"

Since then, private and public pushes to increase STEM education have given rise to new concerns about the value of a liberal arts education — as well as arguments about why it is incredibly valuable, even to people going into STEM fields. A new book by <u>George Anders</u> titled "<u>You Can Do Anything: The Surprising Power of a 'Useless' Liberal Arts Education</u>," says:

Curiosity, creativity, and empathy aren't unruly traits that must be reined in to ensure success. Just the opposite. The human touch has never been more essential in the workplace than it is today. You don't have to mask your true identity to get paid for your strengths. You don't need to apologize for the supposedly impractical classes you took in college or the so-called soft skills you have acquired. The job market is quietly creating thousands of openings a week for people who can bring a humanist's grace to our rapidly evolving high-tech future.

And it makes this point:

The more we automate the routine stuff, the more we create a constant low-level hum of digital connectivity, the more we get tangled up in the vastness and blind spots of big data, the more essential it is to bring human judgment into the junctions of our digital lives.

Yet fewer students are studying the liberal arts than they did a few decades ago. A recent study by the American Academy of Arts & Sciences, <u>through its Humanities Indicators project</u>, found that the number of bachelor's degrees in the humanities that were earned in 2015, the last year for which there is data, was down nearly 10 percent from three years earlier.

Here's a new piece on the humanities — what they are and why they are important — by Gerald Greenberg, senior associate dean of academic affairs; humanities; and curriculum, instruction and programs in the College of Arts and Sciences at Syracuse University. Greenberg is a linguistics expert who teaches courses in Russian and whose interests include Russian and Slavic linguistics as

well as syntactic theory. He has published many articles and essays on a variety of topics, including areas such as stress placement, the syntax of various non-finite constructions, case marking and language change.

By Gerald Greenberg

The value of a college education has long been debated. Some question an education that doesn't explicitly provide training in a job skill — a criticism aimed at the humanities — while others push back, noting that employers increasingly are seeking the problem-solving and critical-thinking abilities that these majors bring to their jobs. Yet there are more important reasons for studying subjects within the humanities — such as philosophy, history, literature, religion, art, music, and language — and we ignore them at our own peril.

A liberal education is a cohesive collection of experiences, each providing its own unique contribution to the enlightenment of its practitioners. Typically, a liberal arts education involves the study of the natural sciences (including mathematics), the social sciences, and the humanities. (The natural sciences and math are frequently associated with STEM — science, technology, engineering, mathematics — and not considered to be part of a liberal education, even though they are.)

A typical college curriculum requires students to sample fields in each subject. Within the sciences, one can learn about what happens when tiny particles collide, which can open the window into the universe. Within the social sciences, one can learn about how resources are used by people and companies, which can lead to an understanding of how the economy might develop. Within the humanities, one can learn another language, which can open the window into a new culture, a new worldview.

Many other examples exist, but the point is that it is only through engaging in the thinking processes practiced in these areas that one can be exposed to various ways of thinking, analyzing, and questioning. The experiences gained from studying in different fields may be qualitatively different, but they are all vital pieces of the <u>Tao of the liberal arts</u>, and are all equally important.

What is the Tao of the liberal arts? As I wrote in this piece, understanding the liberal arts is comparable to understanding the Tao, the source of everything in Taoism, an ancient Chinese philosophical system that explains why things are the way they are and why things happen the way they do. The liberal arts offer knowledge and the cultivation of habits of mind that allow graduates to mature into successful, productive members of society who can appreciate others, experience and embrace the notion of empathy, and seek lifelong learning.

Yet while popularity in areas such as economics or neuroscience continues to grow, interest in humanistic topics is moving just as quickly in the opposite direction. Many assert the primacy of the STEM fields, while for humanistic studies, politicians belittle them, parents urge their children to avoid them, and students choose them as majors less and less.

Many defenders of the humanities emphasize the pragmatic or practical value of studying the humanities disciplines, and their arguments are good ones. Articles and studies describe how employers seek graduates who can think critically and write clearly, both by-products of studying the humanities.

Nevertheless, while there seems to be little problem defining or identifying fields in the areas of science and technology, both supporters and detractors of the humanities have difficulty defining the humanities or agreeing on a definition that encompasses them all.

One approach to defining the humanities involves lists: literature, philosophy, foreign language, etc. However, this not only fails to provide a definition but sometimes sparks disagreements about which areas fall within the humanities. More general definitions provide further insight into what the humanities are, but they can be confusing and lead people to conclude they are irrelevant, overly simple, not valuable, and not worthy of serious study. Some definitions indicate the humanities are disciplines that study human culture or examine the human condition. Such terms, too, become open to broad and varied interpretations, which can easily lead to confusion.

Rather than defining the fields within humanities, we can try to explain what study in the humanities does. We might say fields within the humanities study and analyze artifacts that are created by human beings, such as literature, music, art, etc. We might say the humanities help us to analyze and grapple with complex moral issues, help us understand what goes on inside of us, that is, show us what it means to be a human being. In reaction to such definitions, however, the nonbelievers reject the need to study the humanities; after all, they are human beings, they grapple with complex issues pretty much on a daily basis.

Through studying the humanities, one has the opportunity to get to know oneself and others better, the opportunity to become better able to understand and grapple with complex moral issues, the complexities and intricacies of humanity.

When you take courses in any humanities discipline, you are using different methods to learn about individuals, including yourself, and groups of peoples. You examine relationships and feelings, the feelings of others, as well as your own feelings. You develop empathy and an appreciation for others that can help address difficult situations, personal and professional.

The ability to process information and to deal with difficult situations is important to everyone just to get through everyday life. It is also important for helping to deal with contemporary global issues at local, national, and international levels. Mathematics, the sciences, engineering, and technology are certainly useful, but the humanities provide another way of viewing issues, and better decisions are made when diverse opinions and ideas are considered.

Leaders and decision-makers who are able to employ a broader, more diverse range of ideas and knowledge will be better able to run businesses and governments and react to difficult situations as they develop and arise. We see time and time again, however, that a lack of appreciation of the humanity involved in any situation can lead to undesirable results.

The value of the humanities can only be fully appreciated by experiencing and knowing them. In response to the question: "What are the humanities?" University of Amsterdam Professor Rens Bod noted, "It is like the notion of 'time' in St. Augustine: if you don't ask, we know, but if you ask, we are left empty-handed."

Therefore, it isn't so important to define the humanities, or what field is or isn't part of the humanities; what's important is what studying a humanities discipline does for the person experiencing it. Studying a humanities field involves moving beyond the search for the immediate

and pragmatic; it opens one to the examination of the entirety of the human condition and encourages one to grapple with complex moral issues ever-present in life. It encourages reflection and provides one with an appreciation and empathy for humanity. This is why critical thinking done in the humanities goes beyond problem solving.

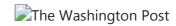
Even if we cannot agree on what they are, the humanities are an important part of the way. Given the state of the country and the world today, they are more important than ever.

The Tao of the liberal arts

washingtonpost.com/news/answer-sheet/wp/2015/01/07/the-tao-of-the-liberal-arts/

January 7, 2015

In this era when you can't turn around in the education world without someone talking about science, technology, engineering and math, the liberal arts often get short shrift. Part of the reason is that people don't fully understand what the liberal arts are and why they



remain foundational to a real education. This post helps explain all of that. It was written by Gerald Greenberg, senior associate dean of academic affairs; humanities; curriculum, instruction, and programs in the College of Arts and Sciences at Syracuse University. Greenberg is a linguistics expert who teaches courses in Russian and whose interests include Russian and Slavic linguistics as well as syntactic theory. He has published many articles and essays on a variety of topics, including areas such as stress placement, the syntax of various non-finite constructions, case marking, and language change.

By Gerald Greenberg

Anybody with any relation to higher education knows what the liberal arts are and how they work — or, rather, they think they do.

In fact, there is not a single definition. All liberal arts degrees from all those liberal arts colleges are not the same; earning a liberal arts education at Syracuse University does not entail the exact same experience as earning a liberal arts degree at Harvard University, and neither of those entail the exact same experience as earning one at Carleton College. But that doesn't mean the liberal arts are not foundational to an educated mind.

Indeed it is fair to say that understanding the liberal arts is comparable to understanding the Tao, the source of everything in Taoism, an ancient Chinese philosophical system that explains why things are the way they are and why things happen the way they do.[1] The Tao is formless; the Tao is endless; and everything is part of The Tao. Wisdom comes from knowing the Tao, being one with the Tao. One cannot know The Tao; one experiences The Tao. "Tao cannot be defined, because it applies to everything."[2]

So, what is the Tao of the liberal arts?

Through my work at Syracuse University and with the Council of Colleges of Arts and Sciences, I've come to realize that when James David Dickson writes, "The tao of liberal arts education has led some people to believe that all college degrees are created equally," the people to whom he is referring are misconstruing the issue. [3] We know that not all college degrees are created equally and not all liberal arts degrees are created equally — but the point is that while liberal arts colleges come in many shapes and sizes across the country, they all provide students with a liberal arts education.

It doesn't matter where you get your liberal arts education. What matters is that the school provides a liberal arts education that produces the appropriate result. What is that result? The transfer or creation of knowledge and the cultivation of the habits of the mind so graduates can develop and mature into successful, productive members of society who can appreciate others, experience and embrace the notion of empathy, and come to understand the joys and benefits of lifelong learning.

It might be difficult to define precisely *the exact* courses and components that comprise a liberal arts education. Some schools, for example, may require a study abroad experience for a degree, while others may not; some may require a course on sustainability or the environment, while others may not. But people who understand the liberal arts can recognize a liberal arts education when they see one.

A successful liberal arts education can be provided in various ways. The modes, methods, and emphases through which it is delivered are determined by the school that provides it. While the exact components and emphases of a liberal education provided by each institution will be influenced by the school's mission, as it should be, the heart and soul of the liberal arts will be provided at each school. Different students acquire knowledge and expertise differently, and different schools have different systems, programs, and opportunities to engage their students in the liberal arts.

This typically entails students completing a liberal arts CORE or a set of general education requirements that include courses in writing, languages, mathematics, the humanities, the social sciences, and the natural sciences. These requirements ensure that each student receives exposure to different academic areas and disciplines. They expose students to the variety of questions posed in these areas and to the modes of thought used to analyze and address those questions. Schools may also require learning experiences through service learning, study abroad, internships, and sustained independent research projects. These experiences, just like courses in the liberal arts CORE, play an important role in providing a liberal arts education.

All components of the liberal arts CORE contribute fundamentally and equally to provide students the CORE of their liberal arts education. It is the CORE that prepares them to complete their majors and minors in a critical way with a liberal arts perspective, regardless of the field. It is the CORE that prepares each student for his or her future, regardless of the direction of his or her current ideas and plans.

In a world where people will change jobs multiple times in a lifetime and may hold jobs in the future that don't even exist today, the knowledge they obtain in college and the writing, communicating, critical thinking, and analytic skills they acquire through a strong liberal arts CORE and liberal education will provide the foundation for a successful life, both professionally and personally.

With the understanding that the successful completion of a liberal arts education involves the completion of a wide range of requirements as determined by the mission of each individual school, the Tao of The Liberal Arts becomes unveiled. Understanding the liberal arts is comparable to understanding the Tao.

The Tao cannot be defined: the Liberal Arts cannot be defined.

The Tao is the source of everything; the liberal arts are the source of everything.

One experiences the Tao; one experiences the liberal arts.

The word *tao* is sometimes translated as way or path. The Tao is the source of everything; everything is part of the Tao. Each of those liberal arts requirements are part of the liberal arts; each is crucial to the success of an institution's liberal arts education. They are all part of a liberal arts education, regardless of a student's major. [4]

Have you ever heard students say they need to get some requirement "out of the way," so they can take courses they really want or courses that are really important? That is because they do not understand the Tao of the liberal arts. You cannot get those requirements "out of the way" because they are all "part of the way," part of the liberal arts CORE, part of a liberal arts education. In a liberal arts education, everything is part of the way. It is the way.

- [1] Thanks to my colleague, Gareth Fisher, for helping me with some of my comments about Taoism and The Tao.
- [2] Heider, John. *The Tao of Leadership: Lao Tzu's Tao Te Ching Adapted for a New Age* (1985; reprint, Atlanta, Ga: Humanics New Age, 1997) 14.
- [3] Dickson, James D. "HOMEFRONT COLUMN: Obama Student Loan Gambit Rewards the Real Risk-takers College Students." The Daily Tribune, 31 Oct. 2011. Web.
- [4] Hayes, Sam. "Study Says Liberal Arts Gains Similar Across Majors." U.S. News University Directory. N.p., 06 Dec. 2014. Web.

Why STEM Students Need Humanities Courses

SA blogs.scientificamerican.com/cross-check/why-stem-students-need-humanities-courses

By John Horgan

What's the point of the humanities? Of studying philosophy, history, literature and "soft" sciences like psychology and political science? This question has become increasingly urgent lately, as enrollment in the humanities continues to plummet. <u>According to one analysis</u>, the number of American students majoring in humanities has fallen from almost 20 percent in the 1960s to less than 5 percent today. One governor recently applauded the trend, saying that state schools should "produce more electrical engineers and less French literature scholars."

Some defenses of the humanities leave me cold. <u>New York Times columnist Ross Douthat, a Catholic</u>, proposes that the humanities can be revived by "a return of serious academic interest in the possible (I would say likely) truth of religious claims." With friends like this...

This week an LA-based public radio station, WUTC, asked me to join a discussion about the plight of the humanities. To listen, go to "In Defense of the (Liberal) Arts." I couldn't say everything I wanted to, so here's an updated pitch for the humanities I posted in 2013.

I started teaching a required freshman humanities course at Stevens Institute of Technology a decade ago. The syllabus included Sophocles, Plato, Shakespeare, Descartes, Kant, Marx, Nietzsche, William James, Freud, Mead—you know, Western Civilization's Greatest Hits.

I love teaching the class, but I don't assume students love taking it. So on the first day I ask, "How many of you would skip this course if it wasn't required?" After I assure the students they won't hurt my feelings, almost all raise their hands.

They say they came to Stevens for engineering, computer science, math, physics, pre-med, finance, digital music production, etc. They don't see the point of reading all this old impractical stuff that has nothing to do with their careers. When I ask them to guess why Stevens inflicts this course on them, someone usually says, smirking, To make us well-rounded.

Whenever I get the "well-rounded" response, I want to reply, "Does 'well-rounded' mean, like, chubby?" But I don't want to offend overweight students. Instead I say, "I don't really know what 'well-rounded' means. Does it mean being able to chitchat about Hamlet at cocktail parties? I don't care about that." Then I give them my pitch for the course, which goes like this:

We live in a world increasingly dominated by science. And that's fine. I became a science writer because I think science is the most exciting, dynamic, consequential part of human culture, and I wanted to be a part of that.

But it is precisely because science is so powerful that we need the humanities now more than ever. In your science, mathematics and engineering classes, you're given facts, answers, knowledge, truth. Your professors say, "This is how things are." They give you certainty. The humanities, at least the way I teach them, give you uncertainty, doubt, skepticism.

The humanities are subversive. They undermine the claims of all authorities, whether political, religious or scientific. This skepticism is especially important when it comes to claims about humanity, about what we are, where we came from, and even what we can be and should be. Science has replaced religion as our main source of answers to these questions. Science has told us a lot about ourselves, and we're learning more every day.

But the humanities remind us that we have an enormous capacity for deluding ourselves. They also tell us that every single human is unique, different than every other human, and each of us keeps changing in unpredictable ways. The societies we live in also keep changing--in part because of science and technology! So in certain important ways, humans resist the kind of explanations that science gives us.

The humanities are more about questions than answers, and we're going to wrestle with some ridiculously big questions in this class. Like, What is truth anyway? How do we know something is true? Or rather, why do we believe certain things are true and other things aren't? And how do we decide whether something is wrong or right to do, for us personally or for society as a whole?

Also, what is the meaning of life? What is the point of life? Should happiness be our goal? Well, what the hell is happiness? And should happiness be an end in itself or just a side effect of some other more important goal? Like gaining knowledge, or reducing suffering?

Each of you has to find your own answer to these questions. Socrates, one of the philosophers we're going to read, said wisdom means knowing how little you know. Socrates was a pompous ass, but there is wisdom in what he says about wisdom.

If I do my job, by the end of this course you'll question all authorities, including me. You'll question what you've been told about the nature of reality, about the purpose of life, about what it means to be a good person. Because that, for me, is the point of the humanities: they keep us from being trapped by our own desire for certainty.

Liberal Arts in the Data Age

hbr.org/2017/07/liberal-arts-in-the-data-age

June 30, 2017

JM Olejarz

From the July-August 2017 Issue

College students who major in the humanities always get asked a certain question. They're asked it so often—and by so many people—that it should come printed on their diplomas. That question, posed by friends, career counselors, and family, is "What are you planning to do with your degree?" But it might as well be "What are the humanities good for?"

According to three new books, the answer is "Quite a lot." From Silicon Valley to the Pentagon, people are beginning to realize that to effectively tackle today's biggest social and technological challenges, we need to think critically about their human context—something humanities graduates happen to be well trained to do. Call it the revenge of the film, history, and philosophy nerds.

In <u>The Fuzzy and the Techie</u>, venture capitalist Scott Hartley takes aim at the "false dichotomy" between the humanities and computer science. Some tech industry leaders have proclaimed that studying anything besides the STEM fields is a mistake if you want a job in the digital economy. Here's a typical dictum, from Sun Microsystems cofounder Vinod Khosla: "Little of the material taught in Liberal Arts programs today is relevant to the future."

Hartley believes that this STEM-only mindset is all wrong. The main problem is that it encourages students to approach their education vocationally—to think just in terms of the jobs they're preparing for. But the barriers to entry for technical roles are dropping. Many tasks that once required specialized training can now be done with simple tools and the internet. For example, a novice programmer can get a project off the ground with chunks of code from GitHub and help from Stack Overflow.

If we want to prepare students to solve large-scale human problems, Hartley argues, we must push them to widen, not narrow, their education and interests. He ticks off a long list of successful tech leaders who hold degrees in the humanities. To mention just a few CEOs: Stewart Butterfield, Slack, philosophy; Jack Ma, Alibaba, English; Susan Wojcicki, YouTube, history and literature; Brian Chesky, Airbnb, fine arts. Of course, we need technical experts, Hartley says, but we also need people who grasp the whys and hows of human behavior.

What matters now is not the skills you have but how you think. Can you ask the right questions? Do you know what problem you're trying to solve in the first place? Hartley argues for a true "liberal arts" education—one that includes both hard sciences and "softer" subjects. A well-rounded learning experience, he says, opens people up to new opportunities and helps them develop products that respond to real human needs.

The human context is also the focus of <u>Cents and Sensibility</u>, by Gary Saul Morson and Morton Schapiro, professors of the humanities and economics, respectively, at Northwestern University. They argue that when economic models fall short, they do so for want of human understanding. Economics tends to ignore three things: culture's effect on decision making, the usefulness of stories in explaining people's actions, and ethical considerations. People don't exist in a vacuum, and treating them as if they do is both reductive and potentially harmful.

Morson and Schapiro's solution is literature. They suggest that economists could gain wisdom from reading great novelists, who have a deeper insight into people than social scientists do. Whereas economists tend to treat people as abstractions, novelists dig into the specifics. To illustrate the point, Morson and Schapiro ask, When has a scientist's model or case study drawn a person as vividly as Tolstoy drew Anna Karenina?

Novels can also help us develop empathy. Stories, after all, steep us in characters' lives, forcing us to see the world as other people do. (Morson and Schapiro add that although many fields of study tell their practitioners to empathize, only literature offers practice in doing it.)

<u>Sensemaking</u>, by strategy consultant Christian Madsbjerg, picks up the thread from Morson and Schapiro and carries it back to Hartley. Madsbjerg argues that unless companies take pains to understand the human beings represented in their data sets, they risk losing touch with the markets they're serving. He says the deep cultural knowledge businesses need comes not from numbers-driven market research but from a humanities-driven study of texts, languages, and people.

Madsbjerg cites Lincoln, Ford's luxury brand, which just a few years ago lagged so far behind BMW and Mercedes that the company nearly killed it off. Executives knew that becoming competitive again would mean selling more cars outside the United States, especially in China, the next big luxury market. So they began to carefully examine how customers around the world experience, not just drive, cars. Over the course of a year, Lincoln representatives talked to customers about their daily lives and what "luxury" meant to them. They discovered that in many countries transportation isn't drivers' top priority: Cars are instead seen as social spaces or places to entertain business clients. Though well engineered, Lincolns needed to be reconceived to address the customers' human context. Subsequent design efforts have paid off: In 2016 sales in China tripled.

What these three books converge on is the idea that choosing a field of study is less important than finding ways to expand our thinking, an idea echoed by yet another set of new releases: A Practical Education, by business professor Randall Stross, and You Can Do Anything, by journalist George Anders. STEM students can care about human beings, just as English majors (including this one, who started college studying computer science) can investigate things scientifically. We should be careful not to let interdisciplinary jockeying make us cling to what we know best. Everything looks like a nail when you have a hammer, as the saying goes. Similarly, at how great a disadvantage might we put ourselves—and the world—if we force our minds to approach all problems the same way?

A version of this article appeared in the <u>July–August 2017</u> issue (pp.144–145) of *Harvard Business Review*.

JM Olejarz is an assistant editor at Harvard Business Review.

The Unexpected Value of the Liberal Arts

A theatlantic.com/education/archive/2017/08/the-unexpected-value-of-the-liberal-arts/535482/

August 1, 2017

Growing up in Southern California, Mai-Ling Garcia's grades were ragged; her long-term plans nonexistent. At age 20, she was living with her in-laws halfway between Los Angeles and the Mojave Desert, while her husband was stationed abroad. Tired of working subsistence jobs, she decided in 2001 to try a few classes at Mount San Jacinto community college.

Nobody pegged her for greatness at first. A psychology professor, Maria Lopez-Moreno recalls Garcia sitting in the midst of a lecture hall, fiddling constantly with a cream-colored scarf. Then something started to catch. After a spirited discussion about the basis for criminal behavior, Lopez-Moreno took this newcomer aside after class and asked: "Why are you here?"

Garcia blurted out a tangled story of marrying a Marine right after high school, seeing him head off to Iraq, and not knowing what to do next. Lopez-Moreno couldn't walk away. "I said to myself: 'Uh-oh. I've got to suggest something to her.'" At her professor's urging, Garcia applied for a place in Mt. San Jacinto's honors program—and began to thrive.

Nourished by smaller classes and motivated peers, Garcia earned straight-A grades for the first time. She emerged as a leader in diversity initiatives, too, drawing on her own multicultural heritage (Filipino and Irish). Shortly before graduation, she won admission to the University of California, Berkeley, campus, where she could pursue a bachelor's degree.

Today, Garcia is a leading digital strategist for the city of Oakland, California. Rather than rely on an M.B.A. or a technical major, she has capitalized on a seldom-appreciated liberal-arts discipline—sociology—to power her career forward. Now, she describes herself as a "bureaucratic ninja" who

You

Can Do

Anything

The Surprising Power of a "Useless"

Liberal Arts Education

doesn't hide her stormy journey. Instead, she recognizes it as a valuable asset.

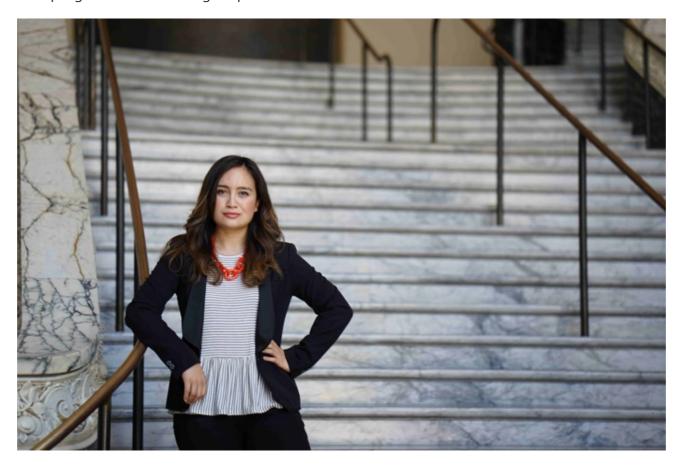
"I know what it's like to be too poor to own a computer," Garcia told me recently. "I'm the one in meetings who asks: 'Never mind how well this new app works on an iPhone. Will it run on an old, public-library computer, because that's the only way some of our residents will get to use it?'"

By its very name, the liberal-arts pathway is tinged with privilege. Blame this on Cicero, the ancient Roman orator, who championed the arts *quae libero sunt dignae* (cerebral studies suited for freemen), as opposed to the practical, servile arts suited for lower-class tradespeople. Even today,

liberal-arts majors in the humanities and social sciences often are portrayed as pursuing elitist specialties that only affluent, well-connected students can afford.

Look more closely, though, and this old stereotype is starting to crumble. In 2016, the National Association of Colleges and Employers <u>surveyed</u> 5,013 graduating seniors about their family backgrounds and academic paths. The students most likely to major in the humanities or social sciences—33.8 percent of them—were those who were the first generation in their family ever to have earned college degrees. By contrast, students whose parents or other forbears had completed college chose the humanities or social sciences 30.4 percent of the time.

Pursuing the liberal-arts track isn't a quick path to riches. First-job salaries tend to be lower than what's available with vocational degrees in fields such as nursing, accounting, or computer science. That's especially true for first-generation students, who aren't as likely to enjoy family-aided access to top employers. NACE found that first-generation students on average received post-graduation starting salaries of \$43,320, about 12 percent below the pay packages being landed by peers with multiple generations of college experience.



Mai-Ling Garcia (Elizabeth Corcoran)

Yet over time, liberal-arts graduates' earnings often surge, especially for students pursuing advanced degrees. History majors often become well-paid lawyers or judges after completing law degrees, a recent <u>analysis</u> by the Brookings Institution's Hamilton Project has found. Many philosophy majors put their analytical and argumentative skills to work on Wall Street. International-relations majors thrive as overseas executives for big corporations, and so on.

For college leaders, the liberal arts' appeal across the socioeconomic spectrum is both exciting and daunting. As Dan Porterfield, the president of Pennsylvania's Franklin and Marshall College, points out, first-generation students "may come to college thinking: 'I want to be a doctor. I want to help people.' Then they discover anthropology, earth sciences, and many other new fields. They start to fall in love with the idea of being a writer or an entrepreneur. They realize: 'I just didn't have a broad enough vision of how to be a difference maker in society.'"

A close look at the career trajectories of liberal-arts graduates highlights five factors—beyond traditional classroom academics—that can spur long-term success for anyone from a non-elite background. Strong support from a faculty mentor is a powerful early propellant. In <u>a survey</u> of about 1,000 college graduates, Richard Detweiler, president of the Great Lakes Colleges Association, found that students who sought out faculty mentors were nearly twice as likely to end up in leadership positions later in life.

Other positive factors include a commitment to keep learning after college; a willingness to move to major U.S. job hubs such as Seattle, Silicon Valley, or the greater Washington, D.C., area; and the audacity to dream big. Finally, students who enter college without well-connected relatives—the sorts who can tell you what classes to take or how to win a choice summer internship—benefit from programs designed to build up professional networks and social capital.

Among the groups offering career-readiness programs on campus is Braven, a nonprofit founded by Aimée Eubanks Davis, a former Teach for America executive. Making its debut in 2014, Braven already has reached about 1,000 students at Rutgers University-Newark in New Jersey and San Jose State University in California. Expansion into the Midwest is on tap. Braven mixes students majoring in the liberal arts and those pursuing vocational degrees in each cohort, the theory being that all can learn from one another.

One of Braven's Newark enrollees in 2015 was Dyllan Brown-Bramble, a transfer student earning strong grades in psychology, who didn't feel at all connected to the New Jersey campus. Commuting from his parents' home, he usually arrived at Rutgers just a few minutes before 10 a.m. classes started. Once afternoon courses were done, he'd retreat to Parking Lot B and rev up his 2003 Sentra. By 3:50 p.m., he'd be gone.

Brown-Bramble's parents are immigrants from Dominica. His father runs a small construction business; his mother, a Baruch College graduate, manages a tourism office. Privately, the Rutgers student is quite proud of them, but it seemed pointless to explain his Caribbean origins to strangers. They typically reacted inappropriately. Some imagined him to be the son of dirt-poor refugees struggling to rise above a shabby past. Others assumed he was a world-class genius: "an astrophysicist who could fly." There wasn't any room for him to be himself.

When Brown-Bramble encountered a campus flier urging students to enroll in small evening workshops called the Braven Career Accelerator, he took the bait. "I knew I was supposed to be networking in college," he later told me. "I thought: Okay, here's a chance to do something."

Suddenly, Rutgers became more compelling. For nine weeks, Brown-Bramble and four other students of color became evening allies. They met in an empty classroom each Tuesday at six to construct LinkedIn profiles and practice mock interviews. They picked up tips about local internships, aided by a volunteer coach whose life and background was much like theirs. They

united as a group, discussing each person's weekly highs and lows while encouraging one another to keep trying for internships and better grades. "We had a saying," Brown-Bramble recalled. "If one of us succeeds, all of us succeed."

Most of the volunteer coaches came from minority backgrounds, too. Among them: Josmar Tejeda, who had graduated from the New Jersey Institute of Technology five years earlier with an architecture degree. Since graduating, Tejeda had worked at everything from social-media jobs to being an asbestos inspector. As the coach for Brown-Bramble's group, Tejeda combined relentless optimism with an acknowledgment that getting ahead wasn't easy.

"Keep it real," Tejeda kept telling his students as they talked through case studies and their own goals. Everyone did so. That feeling of being the only black or Latino person in the room? The awkwardness of always being asked: Where are you from? The strains of always trying to be the "model minority"? Familiar territory for everyone.

"It was liberating," Brown-Bramble told me. Surrounded by sympathetic peers, Brown-Bramble discovered new ways to share his heritage in job interviews. Yes, some of his Caribbean relatives had arrived in the United States not knowing how to fill out government forms. As a boy, he had needed to help them. But that was all right. In fact, it was a hidden strength. "I could create a culture story that worked for me," Brown-Bramble said. "I can relate to people with different backgrounds. There's nothing about me that I have to rise above."

This summer, with the support of <u>Inroads</u>, a nonprofit that promotes workforce diversity, Brown-Bramble is interning in the compliance department of Novo Nordisk, a pharmaceutical maker. Riding the strength of a 3.8 grade-point average, he plans to get a law degree and work in a corporate setting for a few years to pay off his student loans. Then he hopes to set up his own law firm, specializing in start-up formation. "I'd like to help other entrepreneurs do things in Newark," he told me.

Organizations like Braven draw on "the power of the cohort," said Shirley Collado, the president of Ithaca College and a former top administrator at Rutgers-Newark. When students settle into small groups with trustworthy peers, she explained, candor takes hold. The sterile dynamic of large lectures and solo homework assignments gives way to a motivation-boosting alliance among seat mates and coaches. "You build social capital where it didn't exist before," Collado said.

For Mai-Ling Garcia, the leap from community college to Berkeley was perilous. Arriving at the famous university's campus, she and her then-husband were so short on cash that they subsisted most days on bowls of ramen. Scraping by on partial scholarships, neither knew how to get the maximum available financial aid. To cover expenses, Garcia took a part-time job teaching art at a grade-school recreation center in Oakland.

Finishing college can become impossible in such circumstances. During her second semester, Garcia began tracking down what she now refers to as "a series of odd little foundations with funky scholarships." People wanted to help her. Before long, she was attending Berkeley on a full ride. Her money problems abated. What she couldn't forget was that initial feeling of being in trouble and ill-prepared. Her travails were pulling her into sociology's most pressing issues: how vulnerable people fare in a world they don't understand, and what can be done to improve their lives.

Simultaneously, Berkeley's professors were arming Garcia with tools that would define her career. She spent a year learning the fine points of ethnography from a Vietnam-era Marine, Martin Sanchez-Jankowski, who taught students how to conduct field research. He sent Garcia into the Oakland courthouse to watch judges in action, advising her to heed the ways racial differences tinged courtroom conduct. She learned to take careful notes, to be explicit about her theories and assumptions, and to operate with a rigor that could withstand peer-review scrutiny. Her professors would stay in academia; she was being trained to have an impact in the wider world.

What can one do with a sociology degree? Garcia tried a lot of different jobs in her first few years after graduation. She spent two years at a nonprofit trying to untangle Veterans Administration bureaucracy. After that, she dedicated three years to a position at the Department of Labor, winning many small battles related to veterans' employment. She had found job security, but she couldn't shake the feeling that a technology revolution was racing through the private sector—and leaving government far behind.

Companies like Lyft, Airbnb, and Instagram were putting new powers in the public's hands, giving them handy tools to hail a ride, find lodging, or share photos. By comparison, trying to change a jury-duty date remained a clumsy slog through outdated websites. Instead of bemoaning this tech gap, Garcia decided to gain vital tech skills herself. She signed up for evening classes in digital marketing and refined that knowledge during an 18-month stint at a startup. Then she began hunting for a government job with impact.

In 2014, Garcia joined the City of Oakland as a bridge builder who could amp up online government services on behalf of the city's 400,000 residents. This wasn't just an exercise in technology upgrading; it required a fundamental rethinking of the way that Oakland delivered services. Buffers between city workers and an impatient public would come down. The social structures of power would change. To make this transition, it helped to have a digitally savvy sociologist in the house.

Over coffee one afternoon, Garcia told me excitedly about the progress that she and the city communications manager were achieving with their initiative. If street-art creators want more recognition for their work, Garcia can drum up interest on social media. If garbage is piling up, new digital tools let citizens visit the city's Facebook page and summon services within seconds.

Looking ahead, Garcia envisions a day when landing a municipal job becomes vastly easier, with cities' Twitter feeds posting each new opening. Other aspects of digital technology ought to help residents connect quickly with whatever part of government matters to them—whether that means signing up for summer camp or giving the mayor a piece of one's mind.

This article has been adapted from George Anders's new book, You Can Do Anything.

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• 08.28.14

Why Top Tech CEOs Want Employees With Liberal Arts Degrees

[Photo: Flickr user]
By Elizabeth Segran

Venture capitalist <u>Marc Andreessen once said</u> that the average English degree holder is fated to become a shoe salesman, hawking wares to former classmates who were lucky enough to have majored in math. Meanwhile, PayPal cofounder <u>Peter Thiel</u>, who studied <u>philosophy at Stanford</u>, refers to degrees like his as "antiquated debt-fueled luxury goods." Faced with such attacks on the liberal arts, it's no wonder that interest in the humanities is <u>waning</u>. As the college year begins, many students are likely to take <u>President Obama's advice</u> and forgo an art history degree for a certificate in skilled manufacturing or some other trade.

Not to be outdone, defenders of the liberal arts are jumping into the fray. Among them are *New York Times* columnist <u>Nicholas Kristof</u>, liberal arts <u>consortiums</u> and even a pair of cartoon crusaders called <u>Libby and Art</u> (get it?) who are quick to respond to people besmirching the humanities on Twitter. But joining this chorus are some unexpected voices: CEOs of technology companies.

"It's a horrible irony that at the very moment the world has become more complex, we're encouraging our young people to be highly specialized in one task."

While the tech boom is partly responsible for the spike in students majoring in science, technology, engineering and math, many tech CEOs still believe employees trained in the liberal arts add value to their companies. In 2010, Steve Jobs famously mused that for technology to be truly brilliant, it must be coupled with artistry. "It's in Apple's DNA that technology alone is not enough," he said. "It's technology married with liberal arts, married with the humanities, that yields the results that make our hearts sing." Other tech CEOs across the country agree that liberal arts training—with its emphasis on creativity and critical thinking—is vital to the success of their business.

So how exactly do the humanities translate into positive results for tech companies? Steve Yi, CEO of web advertising platform MediaAlpha, says that the liberal arts train students to thrive in subjectivity and ambiguity, a necessary skill in the tech world where few things are black and white. "In the dynamic environment of the technology sector, there is not typically one right answer when you make decisions," he says. "There are just different shades of how correct you might be," he says.

Yi says his interdisciplinary degree in East Asian Studies at Harvard taught him to see every issue from multiple perspectives: in college, he studied Asian literature in one class, then Asian politics or economics in the next. "It's awfully similar to viewing our organization and our marketplace from different points of view, quickly shifting gears from sales to technology to marketing," he says. "I need to synthesize these perspectives to decide where we need to go as a company."

Danielle Sheer, a vice president at <u>Carbonite</u>, a cloud backup service, feels similarly. She studied existential philosophy at George Washington University, which sets her apart from her technically trained colleagues. She tells me that her academic background gives her an edge at a company where employees are trained to assume there is always a correct solution. "I don't believe there is one answer for anything," she tells me. "That makes me a very unusual member of the team. I always consider a plethora of different options and outcomes in every situation."

Both Yi and Sheer recognize that the scientific method is valuable, with its emphasis on logic and reason, especially when dealing with data or engineering problems. But they believe this approach can sometimes be limiting. "When I collaborate with people who have a strictly technical background," says Yi, "the perspective I find most lacking is an understanding of what motivates people and how to balance multiple factors that are at work outside the realm of technology."

Employees trained in the liberal arts bring an alternative point of view in day-to-day decision-making in the tech workplace, but Vince Broady, CEO of content marketing platform Thismoment, argues that they also think differently about bigger questions, such as the impact a company should have on an industry. As a student at Brown, Broady studied religion, a field that emphasizes long-term goals, rather than quick gains. "You study people who dedicate their lifetime to their faith," he says. "Their impact is measured across hundreds and thousands of years." His academic background shapes how he thinks about his work: he wants to stay committed to building a company of lasting value, even during difficult times. This goes against the grain of tech culture, where entrepreneurs are encouraged to take risks but quickly move to new ideas when things don't pan out. Broady questions whether "failing fast" is really the best way to do business.

Broady's study of religion has also convinced him that leaps of faith are important in one's career. If students are inclined towards the humanities, he encourages them to pursue what they love, even when others claim these fields are worthless. "There is always a story about a wasted education, about someone who paid so much for a degree and is now driving a taxi," he says. "But you have to have some faith that your education will not be wasted on you. This is about you and your specific situation; you need to make sure that what you learn serves you."

Ultimately, Broady believes that people who are passionate about their work are better poised to succeed. "If you don't personally care about what you are doing, you are not going to be competitive at it," he says.

For women in tech, a humanities background can be an added liability, since there is already a perception that they are less competent at science and math. Danielle Sheer says that when she joined Carbonite, her first impulse was to hide her lack of knowledge and retreat at meetings. However, she quickly changed strategy, deciding it was more important for her to ask questions to fully grasp the technology. She's spent hours tinkering with the software and working with engineering teams to learn about it. She says her colleagues are supportive, even if she sometimes slows them down. "By articulating complicated technical or strategic ideas in plain English, you'd be amazed at how much progress we've made solving problems," she says. "We've become very good at assuming that we don't have the same definition."

While women have more biases to overcome, all the humanities-trained tech leaders I spoke with emphasized the importance of understanding their company's technology inside and out. Once they have this knowledge under their belt, they have the unique ability to translate complex

technical processes into clear, simple language—an important skill when dealing with investors and buyers. "The ability to quickly synthesize information and structure it in a way that is comprehensible to non-technical people is powerful," says MediaAlpha's Steve Yi.

But perhaps most importantly, liberal arts training allows people to think about technology itself in fundamentally different ways. <u>David Rose</u>, CEO of photo analytics company <u>Ditto</u>, is pushing for companies to reimagine the role that technology plays in our lives. His recently published book, *Enchanted Objects*, is peppered with ideas from literature, fine arts and philosophy to prompt the reader to think about technology as the kind of magic that humans have always been longing after. "I'm so glad that no one asked me to pick my career as an undergrad," he tells me, remembering his years at St. Olaf, a liberal arts college. "It allowed me to take a broad range of courses and do things like study in Scandinavia. For a young mind, that is the very best thing you can do, because it allows you to come at questions about the world and new technologies from radically different perspectives."

Tech CEOs are generally keen to hire people trained in the humanities, partly because a large proportion of them have similar backgrounds themselves. (A third of all Fortune 500 CEOs have liberal arts degrees.) But for students coming out of liberal arts colleges, it can still be difficult to find work in the tech sector. Georgia Nugent, the former president of Kenyon College who is currently a senior fellow at the Council of Independent Colleges, says that top executives are not responsible for hiring entry level staff. Instead, recruiters and HR managers on the hiring front lines often use systems that pick candidates for tech jobs based on key terms like "coding" and "programming," which many liberal arts graduates will not have on their resumes.

Nugent is concerned about this trend because she thinks that training students for very specific tasks seems shortsighted when technology and business is evolving at such a fast rate. "It's a horrible irony that at the very moment the world has become more complex, we're encouraging our young people to be highly specialized in one task," she says. "We are doing a disservice to young people by telling them that life is a straight path. The liberal arts are still relevant because they prepare students to be flexible and adaptable to changing circumstances."

Don't Panic, Liberal Arts Majors. The Tech World Wants You.

The Example 2017/08/21/books/review/you-can-do-anything-george-anders-liberal-arts-education.html

By Timothy Aubry August 21, 2017

YOU CAN DO ANYTHING

The Surprising Power of a "Useless" Liberal Arts Education By George Anders 342 pp. Little, Brown & Company. \$27.

A PRACTICAL EDUCATION

Why Liberal Arts Majors Make Great Employees

By Randall Stross 291 pp. Redwood Press. \$25.

Surely one day the ability to interface directly with the nanomachinery connected to our brains will render computer science as we know it obsolete. When experts start arguing for its continued relevance, undergraduates choosing a major will begin to realize that the obscure art of manually punching arcane symbols into keyboards is no longer a safe bet. At the present moment, however, it is only liberal arts majors who have to wonder whether all of the articles and books promoting the marketability of their chosen discipline should make them more or less uneasy about the future. Two additions to this growing field have appeared just in time to try to soothe the post-graduation panic that some within the class of 2017 may be experiencing: George Anders's "You Can Do Anything: The Surprising Power of a 'Useless' Liberal Arts Education" and Randall Stross's "A Practical Education: Why Liberal Arts Majors Make Great Employees."

According to both Anders and Stross, the ever-expanding tech sector is now producing career opportunities in fields — project management, recruitment, human relations, branding, data analysis, market research, design, fund-raising and sourcing, to name some — that specifically require the skills taught in the humanities. To thrive in these areas, one must be able to communicate effectively, read subtle social and emotional cues, make persuasive arguments, adapt quickly to fluid environments, interpret new forms of information while translating them into a compelling narrative and anticipate obstacles and opportunities before they arise. Programs like English or history represent better preparation, the two authors argue, for the demands of the newly emerging "rapport sector" than vocationally oriented disciplines like engineering or finance. Though it does not automatically land one in a particular career, training in the humanities, when pitched correctly, will ultimately lead to gainful and fulfilling employment. Indeed, by the time they reach what Stross terms the "peak earning ages," 56-60, liberal arts majors earn on average \$2,000 more per year than those with preprofessional degrees (if advanced degrees in both categories are included).

While "You Can Do Anything" and "A Practical Education" supply useful talking points in support of the financial viability of studying the liberal arts, they may arouse more fear than hope. Both feature myriad anecdotes of job searches, all with happy endings, but the journey there invariably proves daunting, circuitous and chancy. Moreover, the reality that apparently favors liberal arts majors is precisely what makes the current job market so forbidding: extreme precariousness. Trained to be flexible and adaptable, these students are well equipped, according to Anders, to navigate an unstable job market, where companies, fields and sometimes whole industries rise and fall at a nauseating clip, where automation is rendering once coveted skills redundant and where provisional short-term jobs, freelance assignments, part-time gigs, unpaid internships and self-employment are replacing long-term, full-time salaried positions that include rights and benefits protected by unions. While Anders, a contributing writer at Forbes magazine, clearly wants the best for recent liberal arts graduates, his pep talk often consists of rebranding the treacherous market conditions of the 21st century as part of a thrilling new frontier. Instability can promote "quirky-job-hopping" and greater "autonomy." Recent

liberal arts graduates who find these conditions less than inviting, Anders says, simply need to discover the proper spirit of adventure — the same spirit that led them to their chosen field of study. But somehow it seems unlikely that his analogy to white-water rafting will get them excited to send out yet another batch of cover letters and résumés.

The two books also raise hard questions about who exactly can turn a liberal arts degree into a successful career. In almost all of the stories, job candidates must survive a significant lag time before finding a position that pays the bills, during which they are often forced to pursue additional training or accept poorly compensated work while relying on financial support from their parents. Moreover, in just about every case, they end up tapping into an extensive network of family and friends. Ominously, Stross, a professor of business at San Jose State University, chooses to restrict his study to Stanford graduates in order to ensure that he has a sufficient number of success stories. And even these individuals end up struggling along the way. How much harder must it be for those with fewer connections and with B.A.s from less prestigious schools? No wonder first-generation, working-class and foreign students are so often drawn to technology and business majors, which appear to provide a more direct line between credentials earned and career opportunities secured. When Anders observes that Etsy wants employees who can "banter about Jenny Holzer's conceptual artwork and turn theory into praxis," this sounds like code for people who can speak the language of privilege. It is possible, of course, for a B.A. in the liberal arts to help working-class students acquire the cultural fluency that generally develops out of being raised amid the affluent and the highly educated, but it also seems likely that an elite background, not a degree in theater or art history, is the most reliable gateway into the career fields Anders is plugging. Anders does cite a 2015 study indicating that students with liberal arts degrees from lower-ranked schools entered the tech sector at only a slightly reduced rate compared with students from highly ranked schools (7.5 percent to 9.9 percent). But his summary does not indicate exactly what jobs these different types of students got or what they were paid, and Anders himself admits that extra career guidance may be necessary to help students at second-tier universities make their liberal arts education work for them in the way he thinks it should.

Advocates of the liberal arts will maintain that the intellectual experiences fostered in these disciplines ought to be available to everyone. If the trust-fund kids don't have to weigh the practicality of studying feminist philosophy when registering for classes, why should the scholarship students? Moreover many academics dismiss the now widespread tendency to assess fields of study in terms of their marketability, viewing it as a sign of the American university's capitulation to a corporatist, neoliberal ideology. The goal of the liberal arts, they would say, is to impart knowledge, promote the capacity for serious intellectual inquiry and encourage critical perspectives on prevailing norms and assumptions, whether or not such training attracts prospective employers. But then what professors don't want their students to get good jobs after college, particularly those saddled with debts accrued to pay their tuition? Indeed, in the face of what looks like permanent budget austerity within higher education, the future of many humanities disciplines probably depends on their perceived ability to open doors to professional opportunities. Thus true believers in liberal arts degrees may find themselves rejecting the criteria that Anders and Stross use to assert their value and viability while secretly, desperately hoping that the two authors' prognosis is correct.