

The Liberal Arts: Providing a Flexible Workforce for Tennessee's Future¹

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Executive Summary

As the national dialogue on higher education has shifted toward the need to prepare students for the workforce, traditional Liberal Arts disciplines have often been cited as luxuries we can no longer afford. In reality, however, employers say they are looking for employees who can think creatively, communicate effectively, work well with other people, and adapt readily—just the skills fostered by a Liberal Arts education. Studies show that not only do Liberal Arts graduates find jobs, their lifetime earnings compare favorably with most other majors. The challenge for higher education leaders in Tennessee is how best to leverage Liberal Arts for the workforce while maintaining its place at the foundation of a university education.

“The reason that Apple is able to create products like the iPad is because we’ve always tried to be at the intersection of technology and the liberal arts.” –Steve Jobs

¹ Updated 23 September 2019.

Introduction

Tennessee stands at the forefront of higher education reform. Initiatives like outcomes-based funding, the *Drive to 55*, and the *Tennessee Promise* have made the state a national leader. A major impetus behind these changes is the desire to provide a better-prepared workforce. Thus, it is essential to evaluate the needs of businesses and to compare them to what our institutions of higher education offer.

In the past decade, political commentators, business leaders, and elected officials, including President Obama, have questioned the relevance of Liberal Arts disciplines. Ironically, many of these individuals were educated in the Liberal Arts themselves (Anders, pg. 23, 2017; Zakaria, pgs. 19-20, 2015). In recent years, as students have been urged into “practical” and STEM fields, both national and local surveys of employers have revealed that new college graduates often lack skills in written and oral communication, innovative and creative problem-solving approaches, and ethical decision-making (Selingo, pgs. 29-60, 2016). These, in fact, are the very skills that students have obtained from Liberal Arts education from the beginning of western civilization. Not only do Liberal Arts disciplines provide skills essential for the economic development of our state and nation, they also help students become responsible citizens who engage in life-long learning and seek to solve problems within their communities and beyond. This paper outlines the benefits of Liberal Arts education, with an emphasis on its value for both employers and their workers.

93% of employers agree that candidates’ demonstrated capacity to think critically, communicate clearly, and solve complex problems is **more important** than their undergraduate major. –Association of American Colleges and Universities

What is a Liberal Arts Education?

Liberal Arts include the humanities, the fine arts, and the social sciences. These disciplines focus on the human experience: past, present, and future. From literature and history to anthropology and art, students learn about where they come from and who they are. These disciplines allow students to see that there are often many options, many opinions, and few absolute answers to complex questions. They learn about their roles in society and how to become engaged citizens. Without the Liberal Arts, our society and values have no context, and we no longer have an informed democracy; our creativity and sense of societal responsibility cannot persist. Through classroom discussion and outside work on these topics, Liberal Arts students learn skills essential in the modern workplace: the ability to read and think critically, communicate effectively, and engage productively with other people.

American creativity has long been valuable in the marketplace. While Liberal Arts proponents in the United States have been on the defensive in recent years, countries such as China, India, the Netherlands, Japan, Singapore, and Bulgaria have noticed that students educated in the United States come back with an innovative spirit not found in those educated in their own countries, and they believe that this is due to the liberal education at the core of American higher education (Gatson, pg. 4, 2010; Zakaria, pgs. 67-71; 97-105, 2015). In China, the government has invited several American universities to set up colleges based on the Liberal Arts model (for example, see <https://www.nyu.edu/shanghai.html>). These are often free zones where Liberal Arts preparation, debate, and exploration are allowed and even encouraged. China plans to train part of its population to help create innovative products and procedures for the future.

While a Liberal Arts education is grounded in the humanities, social and physical sciences, and the arts, the term also reflects an approach to learning that values broad understanding, reflection, and synthesis. “What appears to produce the extraordinary result of a Liberal Arts education is the particular combination of matter [subjects] and manner [approach], a broad-based curriculum with specific pedagogical practices in a context that also contributes to learning” (Nugent, 2015). As shown below, earnings statistics as well as employment numbers for recent graduates reflect excellent opportunities for Liberal Arts graduates, and the future economy depends on being able to produce graduates with exactly the knowledge and skills

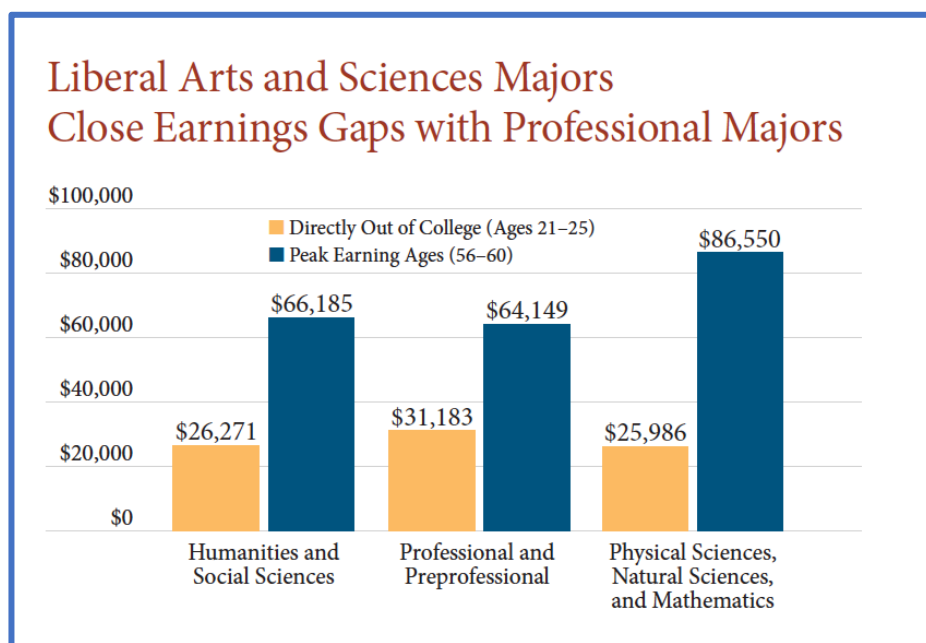
provided by a strong Liberal Arts education. As technological innovation becomes the driving force in the economy, creativity, a keen understanding of the human experience, and a variety of soft skills become increasingly necessary for success. A combination of the subject matter and the approach of a Liberal Arts education represents the best preparation for the economy of the future.

“I’m looking for diversity of thought.... When I put a team of engineers on a project, I don’t want a bunch of people who all think the same. I need people who can see things differently, who can bring unique perspectives to the table, who can empathize with others, and think outside the box. To be innovative, we need that.”

–Petroleum Company Senior Executive

Liberal Arts and Our Economy

Earnings data demonstrate that graduates in the Humanities and Social Sciences, two of the core areas in the Liberal Arts, out-earn their professional and pre-professional peers during their peak earnings years. A far greater share of Liberal Arts graduates go on to earn advanced degrees, which also improves lifetime earnings (Association of American Colleges and Universities, 2014).²



Source: *Liberal Arts and Employment*: Association of American Colleges and Universities

Liberal Arts students in traditional fields experience rapid earnings growth over time, closing the pay gap with those in professional programs because “skill obsolescence and increased competition from younger graduates work together to lower the earnings advantage for STEM degree-holders as they age.” (Deming, 2019).

² High achievers in the Liberal Arts excel in lifetime earnings, outpacing accountants, civil engineers and computer scientists, for example, with Political Science and Philosophy majors at the top of the earnings chart (Anders, pg. 155, 2017).

Earnings by experience & major category				
	0-5 Years	10-20 Years	20+ Years	% Increase
English Language & Literature	\$39,000	\$69,000	\$73,000	87%
History	\$41,000	\$72,000	\$81,000	98%
International Relations	\$44,000	\$74,000	\$119,000	170%
Philosophy	\$42,000	\$82,000	\$97,000	131%
Political Science	\$43,000	\$77,000	\$89,000	107%
Psychology	\$38,000	\$60,000	\$69,000	82%
Liberal Arts Average	\$41,167	\$72,333	\$88,000	114%
Accounting	\$47,000	\$73,000	\$84,000	79%
Business Management	\$45,000	\$69,000	\$81,000	80%
Civil Engineering	\$56,000	\$89,000	\$108,000	93%
Computer Science	\$63,000	\$103,000	\$116,000	84%
Hospitality Management	\$39,000	\$60,000	\$70,000	79%
Nursing	\$57,000	\$73,000	\$75,000	32%
Professional Programs Average	\$51,167	\$77,833	\$89,000	74%
Source: Payscale.com as cited in <i>Wall Street Journal</i>, 9/11/2016				

In fact, the push to place students into STEM and business has created a surplus of students who are narrowly focused, when the jobs of the future will require rapid adaptability. Studies indicate that many of those in college now will find project-based work (Leasca 2017; Newport 2017; Torpey and Hogan 2016). They will move from employer to employer where working effectively in teams to solve specific problems will be vital. Soft skills will be essential, and Liberal Arts training helps students develop exactly those skills. Students in STEM and business would benefit from Liberal Arts training, perhaps opting to add Liberal Arts minors or certificates to their courses of study. According to Debashish Ganguly, Associate Vice President of Infosys, a tech company with more than 230,000 employees, his core problem in hiring is rigidity. Infosys offers extensive retraining opportunities for employees because the tech skills they need change; therefore, they want to hire graduates who are “nimble, open, flexible, and able to learn—employees with a Liberal Arts attitude” (Petersen, 2019). The same combination of hard and soft skills also benefits Liberal Arts majors; studies show that those students succeed best in the job market when they supplement their Liberal Arts education with some technical training, such as in data analytics (Marklein, 2013).

The Liberal Arts make significant indirect contributions to our economy, as demonstrated by the economic impact of the creative economy. During the 2015 fiscal year, the arts and non-profit sector contributed nearly \$430 million to the economy of Nashville-Davidson County alone, supporting over 14,000 full-time jobs (Americans for the Arts, pg. 4, 2017). This effect is felt far beyond the arts organizations as attendees spent more than \$250 million dollars outside of the events they attended, supporting economic growth and development across a wide swath of the economy (pg. 8). Beyond the immediate economic contribution resulting from arts expenditures, Tennessee enjoys an advantage in innovation because the state attracts creative people. Success in business is enhanced by the strengthening of our “creativity muscles” (Americans for the Arts, 2017).

Success in and out of the Field

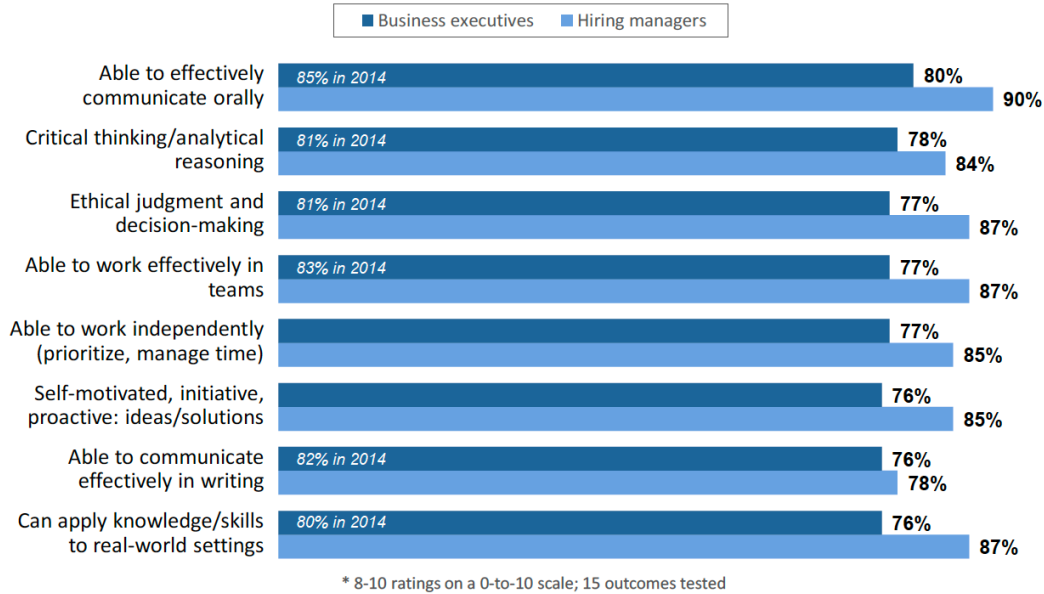
In Tennessee, Nashville is adding tech jobs at a higher rate than the national average (Stinnett, 2018). What might be surprising is that technology companies now are hiring Liberal Arts graduates rather than those trained only in computer science (Anders, pgs. 8-25, 2015; Hartley, 2017)³. These employers find that they can teach new employees programming, but what they really need are people with creative problem-solving skills who can work in groups and communicate effectively. As a result, when examining mid-career incomes for Liberal Arts majors, it is clear that a traditional Liberal Arts major, such as history, English, or philosophy, does not lead to an unsuccessful career path (Association of American Colleges and Universities, 2014).

Why are Liberal Arts graduates so successful? When asked about skills and knowledge specific to a Liberal Arts education, employers strongly endorse the following skills:

³ AT&T conducted a study of employees of 30 years and determined that the undergraduate degrees most likely to lead to success in the company were in the Liberal Arts (Overland Research Group, 2016).

The learning priorities that executives and hiring managers value most highly cut across majors.

Very Important Skills for Recent College Graduates We Are Hiring*

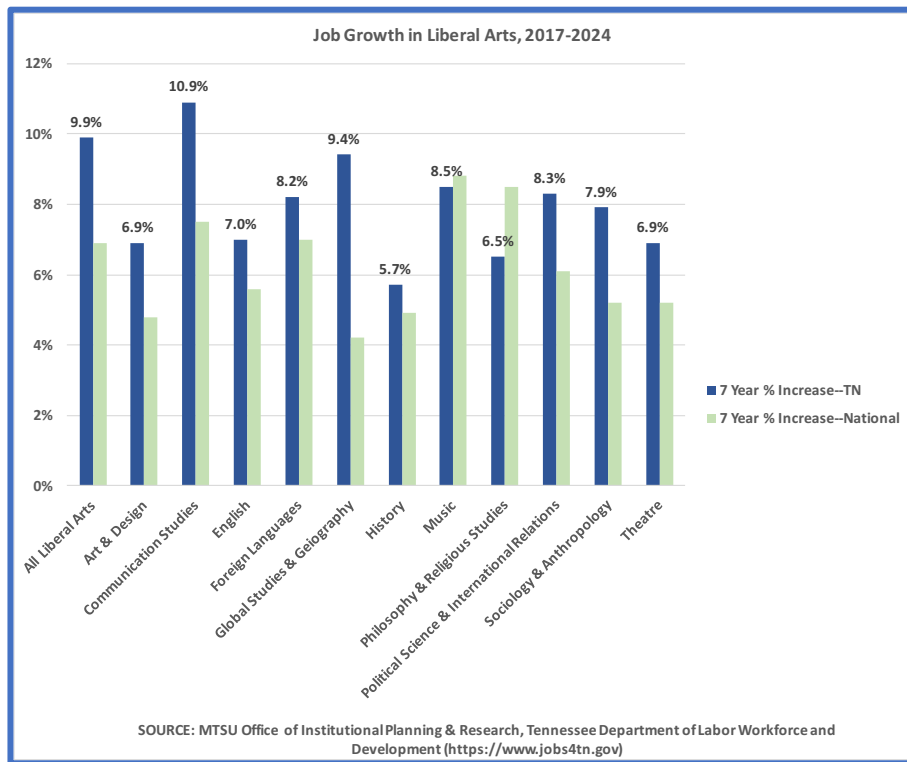


Source: "Fulfilling the American Dream: Liberal Education and the Future of Work." AAC&U.

Quite simply, this is a list of skills that students learn as a result of their exposure to Liberal Arts disciplines. Communication, critical thinking, ethical and independent decision-making, and creativity are critical learning outcomes for Liberal Arts disciplines and crucial for the success of our economy now and in the future. As such, employers overwhelmingly support the skills taught in Liberal Arts disciplines for *all* employees regardless of major. Universities interested in responding to the economic needs of their communities must think beyond technical skills and prepare graduates for a changing workforce. Students in Liberal Arts tend to be well-prepared for their first career and subsequent career changes because they have the knowledge and skills to adapt and grow. As a result, Liberal Arts graduates fare well economically, particularly over time.

While we have established that Liberal Arts majors are widely perceived as having transferable skills that allow for success in a variety of fields, students do go on to seek employment in their field of study as well. For that, the outlook in Tennessee is promising. Over the next seven years, Tennessee is projected to add more than 16,000 jobs in fields *directly related* to majors in

Liberal Arts. As shown below, the growth ranges from six to eleven percent. Nationally, the economy will add more than 746,000 jobs in these fields.



Tennessee needs quality graduates to fill these jobs as well as to fill the countless other jobs that require critical thinking, excellence in communication, and the myriad of soft skills that are the hallmark of a solid Liberal Arts education. Additionally, we need graduates with the creativity and entrepreneurial spirit to drive innovation in our economy and manage firms. Management employment in Tennessee is projected to increase nearly 30% by 2026 (Tennessee Department of Labor and Workforce Development, 2019). Ultimately, Liberal Arts graduates are prepared to build successful careers and become productive members of society.

The success of my family’s business depends on finding and cultivating a creative and innovative workforce. I have witnessed firsthand the power of the arts in building these business skills. When we participate personally in the arts, we strengthen our ‘creativity muscles,’ which makes us not just a better ceramicist or chorus member, but a more creative worker—better able to identify challenges and innovative business solutions.”
 — Christopher Forbes, Vice Chairman, Forbes, Inc

Opportunities for Higher Education in Tennessee

Despite the evidence that a Liberal Arts education is a good investment for students, families, and for the state, we recognize that the economy and our students have needs that higher education as a whole has not responded to effectively. The needs fall primarily within two domains: skills-based credentialing and interdisciplinary programs. Based on the assumption that we must maintain a core Liberal Arts education accessible to all regardless of socioeconomic status⁴, we consider those two areas for the expansion of the Liberal Arts in Tennessee.

Skills-based Credentialing

Students in our disciplines learn transferable skills without explicitly recognizing the value of those skills in the marketplace. Here we focus on quantitative literacy and communication, but numerous other possibilities exist.

Students in the social sciences and humanities learn to work with data as consumers and researchers. A fruitful avenue for Liberal Arts would be the packaging and credentialing of these skills. For example, a student with a degree in Political Science or Sociology can read and understand statistical research. With the addition of some skills-based modules, that student could graduate with a certificate in analytics or another area of applied research. History and English students can take classes that teach them to understand and create digital source

⁴ While the overall cost to educate a student in Tennessee has declined, the burden of that cost has shifted from the State to the student, creating a student debt burden and, potentially, preventing otherwise capable students from earning a degree. Our State risks missing out on talent, creativity, and innovation if higher education is no longer seen as a public good. “Total revenue (state appropriations, tuition and fees) per award (bachelor’s, master’s, and doctoral degrees) is a measure of efficiency in degree production at Tennessee universities. Revenue per award has declined in the last three decades, from a high of \$79,491 in 1986-87 to \$66,809 in 2015-16. This means that it now costs less to produce a degree at a Tennessee university than it did thirty years ago. Additionally, the total amount of state appropriations per award has declined significantly, corresponding to a greater reliance on tuition and fee revenue for each award (from 27.1 percent tuition and fee revenue in 1986-87 to 68.4 percent in 2015-16).” <https://tennessee.gov/thec/article/5.-university-revenue-per-award-1987-through-2016>

material. With the addition of skills-based modules, the same graduate could be certified in Digital Content Production.

Students in our communications-based disciplines learn to evaluate arguments for logical consistency and validity, thereby learning how to make strong, persuasive arguments. These students learn to communicate in a variety of formats and with people from diverse backgrounds. With the addition of skills-based modules, these students could acquire certification in communication that will help them in any profession.

Skills-based certificating supplements the deep learning that occurs in Liberal Arts by helping students understand how to use their skills in a variety of settings and demonstrate those skills to potential employers. Additionally, the credentialing programs would help non-Liberal Arts students. For example, the difficulty some scientists and engineers have in communicating the results of their work effectively could be mitigated by participation in these programs. Understanding and working with digital content or analytics are skills that would be useful for business majors, journalists, and many more.

Interdisciplinary Programs

The knowledge and skills acquired as part of a Liberal Arts education would be beneficial to students from disciplines outside of the Liberal Arts. Indeed, the National Endowment for the Humanities is funding programs that take the Liberal Arts into other areas⁵. Interdisciplinary programs, when done well, allow students to combine two or more disciplines to facilitate deeper understanding of crucial issues that cross traditional academic borders. This option can be very powerful in preparing motivated learners. For example, a program in ethics and technology would provide students with the philosophical background to ask the difficult ethical questions that must be addressed when evaluating gene-splicing technology. The same student would be educated in Biology so that he or she could foresee the potential applications of such technology and other technologies that arise as a result. Such a student would be a better scientist or a better philosopher and would certainly be in high demand as companies struggle to navigate the changes brought about by rapid advances in technology. Related topics include the contradiction between free speech and political influence on social media, the

⁵ See <https://www.neh.gov/grants/education/humanities-connections-implementation-grants> for details.

development of applications to enhance safety of self-driving cars, or the means of food production as it evolves to meet increasing population demands.

“We’re entering a labor market where many people will change jobs half a dozen times or more before retirement, and graduates will have to be flexible thinkers who can adapt to new careers and new challenges. In response, academic programs should look beyond their disciplinary walls at the connections between people and problems” (Carlson, 2017). Policymakers at the state level should find creative ways to reward institutions willing to engage in an expansion of the Liberal Arts and fight to protect access to a broad-based Liberal Arts education for all students who are capable and willing to take advantage of the opportunity.

“Why take advice from America? ... Political and business leaders in Hong Kong recognized significant deficiencies in graduates, especially in light of the global and digital world into which they would be stepping after college. To function successfully in this environment, graduates needed to supplement their technical expertise. They needed to be critical and agile thinkers, effective communicators, creative problem-solvers, and willing initiative-takers. They needed adaptable skill sets and knowledge that would allow them to approach their work with confidence in an environment of nearly constant change.” *A Liberal Arts Education: Global Trends and Challenges*

Tennessee at the Forefront of Innovation

A study of the effects of vocational education in different countries found that “individuals completing a vocational education are more likely to be employed when young, but this employment advantage diminishes with age” (Hanushek et al, pg. 83, 2017). Moreover, vocational education, they discovered, is more effective in slow growth economies while traditional Liberal Arts education is better for rapidly growing, innovative economies (pg. 84). According to the U.S. Bureau of Labor Statistics, every year more than one-third of the workforce changes jobs, and 30 million Americans begin work in jobs that *did not exist* in the previous quarter (Humphreys et al., 2015, emphasis added). Clearly, the economy in the U.S. is innovative and requires more than simply vocational training for long-term success. Tennessee is at the forefront of growth and innovation.

The State of Tennessee, and particularly Middle Tennessee, is experiencing unprecedented growth that provides an opportunity for us to innovate. That innovation, ironically, involves looking to the past as well as the future. Tennessee will need a workforce that is nimble and prepared for the challenges the future economy will bring. We will need a workforce that can operate effectively in the “gig” economy, create intellectual capital, and make the most effective use of diverse human capital. How does one develop such a workforce? By preserving the core of higher education: the Liberal Arts. As noted above, Liberal Arts disciplines teach students to anticipate and manage rapid change, to think critically about and respond effectively to a changing environment, and to work well with a variety of other people while doing so. Liberal Arts graduates can lead others through those rapid changes, thereby becoming thought leaders in their industries and in public service⁶. Therefore, it is not surprising that “the dominant narrative that one’s undergraduate major is all that matters and that only some majors will prepare students for success in the workplace doesn’t match the reality. A student’s undergraduate experience, and how well the experience advances critical learning outcomes...is what matters most, with 80% of employers agreeing that all students need a strong foundation in the liberal arts and sciences” (Pasquerella, 2019).

⁶ Notably, 73% of U.S. Presidents in the 20th and 21st century, 90% of Senators in 2015, and 33% of fortune 500 CEOs have degrees in the Liberal Arts (Nugent, pg. 24, 2015).

While some in the United States fixate on technical or vocational education, our global competitors recognize that they must have workers able to manage the modern economy and take full advantage of changing technology. As such, they are actually opening more Liberal Arts programs. “Political and business leaders in Hong Kong recognized significant deficiencies in graduates, especially in light of the global and digital world into which they would be stepping after college. To function successfully in this environment, graduates needed to supplement their technical expertise. They needed to be critical and agile thinkers, effective communicators, creative problem-solvers, and willing initiative-takers. They needed adaptable skill sets and knowledge that would allow them to approach their work with confidence in an environment of nearly constant change” (Logan & Curry, pg. 75, 2015). Great Britain, China, and many other countries are moving away from narrow training programs to the American model of a Liberal Arts education precisely because the narrow model does not create the economic flexibility required in the modern economy. Tennessee should lead the U.S. in higher education by promoting and supporting exactly the kind of education necessary to further the expansion of our state’s innovative and creative economy—a Liberal Arts education.

“The Bureau of Labor Statistics predicts that by 2022 some 1 million more Americans will enter the workforce as educators. Another 1.1 million newcomers will earn a living in sales. Such opportunities won’t be confined to remedial teaching or department store cashiers. Each wave of tech will create fresh demand for high-paid trainers, coaches, workshop leaders and salespeople. By contrast, software engineers’ ranks will grow by 279,500, or barely 3% of overall job growth. Narrowly defined tech jobs, by themselves, aren’t going to be the answer for long-term employment growth, says Michael Chui, a partner at McKinsey Global Institute” (Anders, 2015).

Conclusion

The economy of tomorrow will be characterized by rapid change, which will leave behind those workers not equipped to respond. Increasingly, jobs that used to require skilled humans will be automated, leading to economic dislocation in industries previously immune to such events, such as the service economy and white-collar industries (Paquette, 2017). So-called “robot-proof jobs” are those that require soft skills and critical thinking. They are the jobs that require training in the Liberal Arts. Many of the “safe” professions, from aviation to lab technician, are based on specific skills that can be replicated by machines. Continuing to focus on such skills-based training rather than training people to be nimble intellectually is not a good investment in the long term for the State of Tennessee. In fact, it is the modern equivalent of training for the manufacturing job and is ripe for economic dislocation.

Stewart Butterfield, Slack’s 42-year-old cofounder and CEO, whose estimated double-digit stake in the company could be worth \$300 million or more, is the proud holder of two degrees in philosophy. “Studying philosophy taught me two things,” says Butterfield... “I learned how to write really clearly. I learned how to follow an argument all the way down, which is invaluable in running meetings. And when I studied the history of science, I learned about the ways that everyone believes something is true—like the old notion of some kind of ether in the air propagating gravitational forces—until they realized that it wasn’t true.” (Anders, 2015)

In addition to prioritizing a broad, Liberal Arts education, the State of Tennessee must invest in higher education to ensure that all qualified and motivated students have the opportunity to thrive in higher education without the unreasonable debt burden currently faced by students. That debt burden is not the result of skyrocketing costs but of rapidly declining state funding⁷. Graduates who leave with high levels of debt are less engaged in their professions and less likely to take the risks associated with entrepreneurial activity (Busteed, 2015; Rivard, 2014). Conversely, Liberal Arts graduates are the most likely to have experienced higher education in a

⁷ See <https://tennessee.gov/thec/article/5.-university-revenue-per-award-1987-through-2016>

way that leads to high levels of engagement at work (Rivard, 2014). We need entrepreneurs in the state to take full advantage of the economy of the future and make Tennessee a leader in economic activity. As such, we need citizens who have the economic support to pursue a Liberal Arts education without fear of crippling debt.

Tennessee can lead the nation in educational innovation by pairing an investment in the Liberal Arts with the Drive to 55 and other initiatives so that Tennesseans can pursue the type of educational experience most likely to pay dividends for citizens and for the state in the future.

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