Bread and Roses
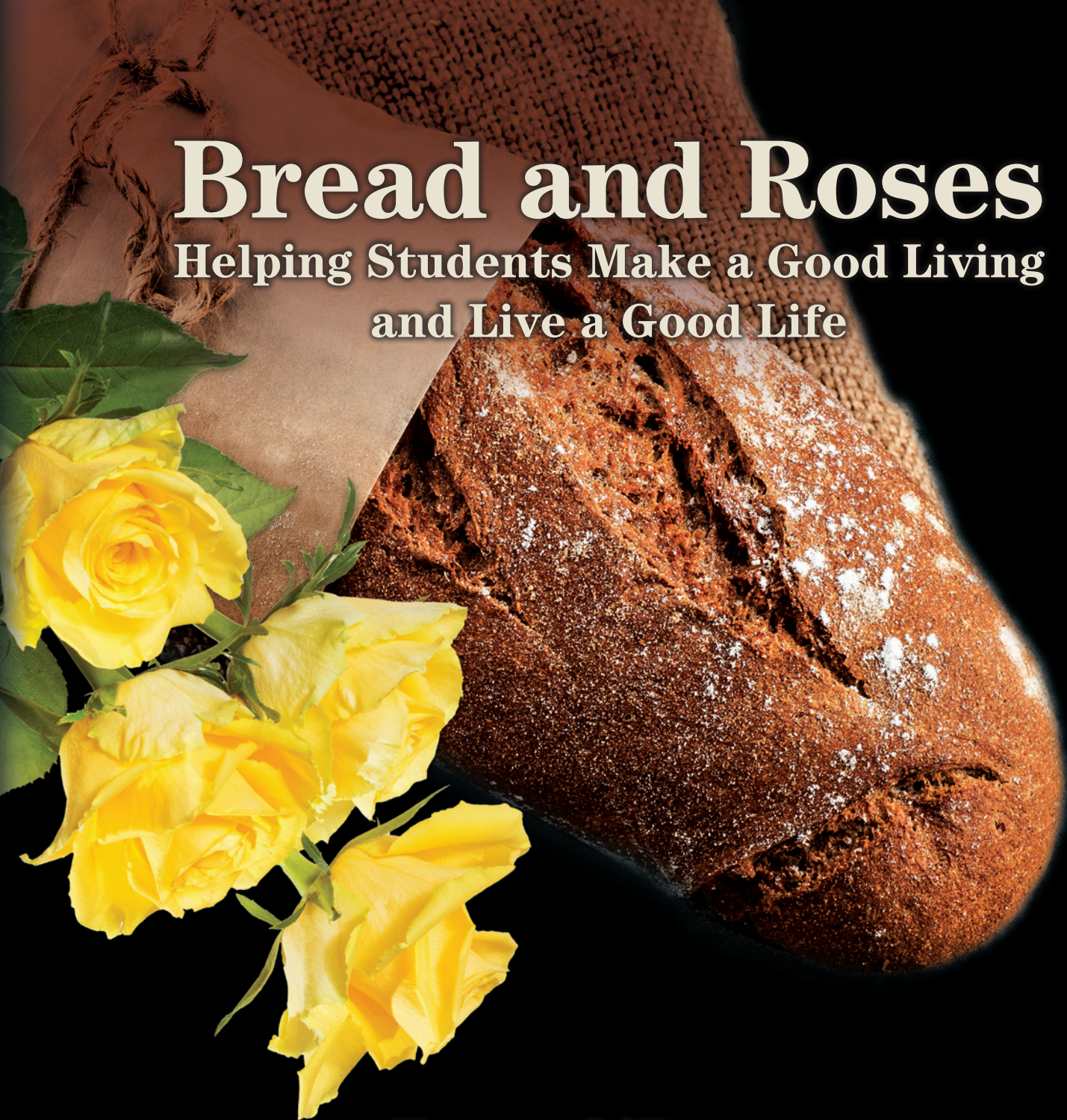
Helping Students Make a Good Living and Live a Good Life

TERRY O'BANION

FOREWORD BY KAY MCCLENNEY

Bread and Roses
Helping Students Make a Good Living and Live a Good Life

Terry O'Banion

Foreword by Kay McClenney

Terry O'Banion is President Emeritus of the League for Innovation in the Community College, a Senior League Fellow, and Chair of the Graduate Faculty at National American University. For additional biographical information, visit www.league.org/terry. He can be reached at obanion@league.org.

A joint publication of the League for Innovation in the Community College and the Roueche Graduate Center at National American University

The League for Innovation in the Community College is an international nonprofit organization dedicated to catalyzing the community college movement. The League hosts conferences and institutes, develops print and digital resources, and leads projects and initiatives with more than 800 member colleges, 160 corporate partners, and a host of other government and nonprofit agencies in a continuing effort to make a positive difference for students and communities. Information about the League and its activities is available at www.league.org.

National American University (NAU) established the Harold D. Buckingham Graduate School in 2000 in Rapid City, South Dakota. In 2012, the graduate school moved its headquarters to Austin, Texas, and is now housed in the Roueche Graduate Center (RGC) located at 6836 Austin Center Boulevard, Ste. 270, Austin, TX 78731. The Center is named in honor of Dr. John E. Roueche, president of the Center. Dr. Roueche is Director Emeritus of the Community College Leadership Program and Sid W. Richardson Chair Emeritus at The University of Texas at Austin. The purpose of the Roueche Graduate Center is to coordinate all graduate programs at NAU. The university recognizes the importance of focusing on master's and doctoral student experiences to prepare future practitioners and leaders. NAU's Community College Leadership Program is housed at the Center, with cohorts located throughout the United States.

Printed in the United States of America

ISBN 978-1-931300-70-4

 This publication is available in digital form in the League's iStream at www.league.org/innovation.

Please use the following format when citing this monograph:
O'Banion, Terry. (2016). *Bread and Roses: Helping Students Make a Good Living and Live a Good Life.* Chandler, AZ: League for Innovation in the Community College and Roueche Graduate Center, National American University.

Contents

A Preface That Is
Really Meant to Be Read

We need an education for the 21st century that will help our students make a good living and live a good life. Will anyone disagree with that statement?

In this monograph, I am suggesting that we take a fresh look at the kind of education our students need by using the phrase, *Bread and Roses*, as a metaphor for an integrated education that combines the best of liberal education and workforce education. It is a metaphor that transcends the historical divides we have created over decades and that may free us from the partisan positions of the past.

Liberal education is that education designed to help us live a richer and fuller life. *Roses* is the metaphor used here for liberal education. Workforce education is that education designed to help us prepare for a job and a career. *Bread* is the metaphor used here for workforce education.

I recommend we use the term, *Essential Education,* for the core learning experience that draws from the best of both liberal education and workforce education to create an integrated quality education for every student. *Bread and Roses* is the metaphor used here for an Essential Education.

I am not calling for an education that continues the divide with a complementary curriculum, such as a vocational course matched with a liberal education course or a vocationally-tailored course in writing for nurses. As creative as these approaches have been to bridge the divide, they end up highlighting the differences rather than integrating the similarities into a new form of Essential Education.

The task of creating models of an Essential Education will be the responsibility of the faculty, and it is for those faculty this monograph has been written. When faculty are assigned the task of creating a new curriculum, they are not always provided with background information or context for that work. This monograph is a primer and a roadmap for faculty committees that will be appointed by college leaders with strong representation from liberal education and workforce education.

As a primer, this monograph includes brief histories of liberal and general education and workforce education, and sections on the special perspectives of advocates from each side of the divide; as a roadmap, it makes the case for an Essential Education and offers constructs or approaches faculty can use to create an integrated curriculum essential for all students.

But a word of caution: Creating an *Essential Education* for all students is one of the toughest tasks in all of higher education. There are no easy solutions. While I propose seven different approaches to creating an Essential Education, none of these may work for your college, and you may need to design alternative approaches. If you agree to engage in this work, you will have to draw from your own values, experiences, and resources as dedicated faculty; you will need to use the resources provided in this monograph; and you will need to call on your colleagues and known experts for their assistance. It will be very hard work, but, in the end, if you and your colleagues succeed in creating an Essential Education that helps students *make a good living and live a good life*, the effort and the outcome will be among the most rewarding of your career in education.

Terry O'Banion

Acknowledgments

I am deeply indebted to my colleagues who provided so much assistance with this monograph by sharing resources, conducting research, critiquing, and editing.

A very special thanks to Ruth G. Shaw, former President of El Centro College and Central Piedmont Community College and past President and CEO of Duke Power Company, for her special insights and her edit of the final manuscript.

Don Averill, Chancellor Emeritus, San Bernardino Community College District, and President, PPL Inc.

Don Berz, former Executive Vice President at Chaffey College and Long Beach City College and Community College Consultant

Lou Anne Bynum, Executive Vice President, Long Beach City College

Allatia Harris, Vice Chancellor, San Jacinto Community College District

George Lorenzo, Editor, *The Source*

Andrew Meyer, Vice President for Workforce Development, League for Innovation in the Community College

Elizabeth Minnich, Senior Scholar, Association of American Colleges and Universities

Carol Spencer, Executive Director, AZTransfer

Larry Warford, Senior Workforce Consultant, League for Innovation in the Community College, and President, Warford and Associates

Laura Weidner, Research Associate, Walden University

Special thanks also to the creative faculty at Wenatchee Valley Community College (WA): Amy Carlson (English), David Lindeblad (History), and Steve Stefanides (Biology and Chemistry).

Foreword

Seeking Bread and Roses

A decade of serious work on reform in community colleges has brought college presidents, faculty, and national leaders to some challenging insights and some equally challenging questions. The insights include clear understanding that change primarily involving discrete interventions for small numbers of students, often on the margins of institutional work, will not produce the improvements in student attainment that we seek; that too little emphasis has been placed on the broad, genuine engagement of faculty in the efforts; and that many of the most important (and difficult) changes ahead will necessarily involve new choices about both curriculum and teaching strategies.

Among the many questions raised across the field are these: How can we invent and implement changes in students' educational experiences that are *large enough* to make a real difference in college completion rates and equity—while maintaining emphasis on both access and quality, and ensuring that the credentials students earn represent the *right learning* for their future work, life, and citizenship? How can we design clearer, more coherent, and more structured academic and career pathways for students—pathways that *integrate* knowing and doing (liberal education and career/technical education), high academic expectations and high academic support, curricular and co-curricular learning (including service learning), learning for credit and not-for-credit, and so on? And in the process of imagining these changes, what are the aspects of institutional culture, tradition, policy, and structure that may need to be altered or altogether abandoned?

In this timely monograph, Terry O'Banion offers a wealth of ideas to inform both discussion about and action on these issues going forward, and he does so with a return to "the main thing" in community college education: teaching and learning. O'Banion walks the reader through a discussion of curricula— both liberal education and career and technical education, including their roots, their development,

and especially, the intellectual and structural chasms that have long divided them. In the process, he goes after the versus debates in higher education: liberal *versus* career and technical education, research *versus* application, theory *versus* practice, education *versus* training, being *versus* doing. And he calls for both presidential leadership and faculty engagement in designing a new integrated core curriculum: "an essential education for all."

O'Banion labels that essential education "Bread and Roses," a metaphor that first appeared in the work of union activists in the early 1900s and was resurrected by the recent protesters in the Occupy Wall Street Movement. It is an apt metaphor for an integrated curriculum that combines the best elements of both career/technical education and liberal/general education.

Helpfully, then, the author describes a diverse set of constructs that offer ways into curriculum redesign—newly conceived core courses; essential questions as a frame for essential education; and activity analysis as a process undergirding curriculum development and ensuring its relevance to learners. Other constructs he describes are essentially pedagogical approaches or teaching strategies that support and promote integration of knowledge and skills, of learning and application: contextualized learning, applied learning, problem- and project-based learning, and service learning, for example.

O'Banion's final construct, the Student Success Pathway, brings the monograph to the heart of much of the leading-edge work now gaining momentum in the community college field; that is, the development of clear, coherent, and structured academic and career pathways for students— pathways beginning wherever students begin and ending with completion of their goals, which nearly always involve jobs and careers after college.

At their best, these pathways, or meta-majors, will break down the traditional barriers between liberal and technical education, creating clusters of related programs like arts, humanities, and design; STEM; health careers and biosciences; and so on. And, thus, they will create new opportunities for what AAC&U describes as integrative learning.

In contrast, the current curriculum in most community colleges can best be described as cafeteria-style, producing near-random and unconnected learning experiences for many students. In the arts and sciences, course-taking often is driven more by university transfer agreements than anything else, and then teaching too often is more about coverage than about the rhetorically heralded value of the humanities: developing whole human beings; kindling the human spirit; and building the broad and broadly valued habits of effective communication, critical thinking, problem solving, working in groups, and contributing to community. On the too-literal other side of the house, the curriculum becomes more and more specialized, adding more and more skill-building courses (and thus more and more required credits), while crowding out the liberal arts and sciences.

> *Overall, community college credentials in the several states examined lead to large wage gains, as well as greater likelihood of employment.*

O'Banion's work comes at an interesting juncture. A 2015 report from the American Academy of Arts and Sciences celebrates an increase in associate degrees earned in humanities averaging 4.3 percent annually from 1987 to 2013, even as bachelor's degrees in the humanities have recently been on the decline. On the other hand, illustrating a dilemma, Dadgar (2015) summarizes findings from several recent studies of the relationships between community college credential and subsequent wage gains with these conclusions:

- Overall, community college credentials in the several states examined lead to large wage gains, as well as greater likelihood of employment.

- There are especially high returns for associate degrees: They have higher returns than other credentials in most fields.
- However, the majority of associate degrees awarded are in the liberal arts and are associated with low returns in terms of wage gains; thus, colleges should ensure that these degree programs are tightly articulated through transfer pathways to the baccalaureate.

So O'Banion's call for integration is supported, most basically, by what some would call a mismatch between students' majors and their desire for jobs and careers with family-supporting salaries. More important, though, his proposition connects higher education more fully with contemporary life, in terms of both learning and work. Consider the multidisciplinary knowledge and skills students will need to excel in these fields, for example: genetic engineering, music business, sustainable environmental design, naturopathic medicine, documentary editing, media technology, and product design (now, more than ever, a blend of art, engineering, and human factors).

Taking the point a bit further, imagine a nurse ignorant of developmental psychology and the natural sciences. Imagine an historical novelist working without knowledge of Internet-based resources. Imagine an air traffic controller who understands only airplanes and not human factors. Imagine an investment advisor ignorant of statistics and human development. Imagine a filmmaker without working knowledge of set building, art direction, cinematography, film editing technology, musical scoring, acting, and now, computer animation. Imagine whether smart houses can be designed with only technological expertise, sans the understanding of people who will use that technology.

A Personal Illustration. Our family includes a son who runs a nonprofit organization (which he founded) in the Himalayan foothills of northern India. His work requires of him knowledge of business management (financial planning, accounting, payroll, government reporting, management, and development of staff), entrepreneurial skills, fundraising ability, and facility

in several languages—chiefly (though not exclusively) Hindi, English, and Tibetan. (Often, in India, I have heard him speaking English with an Indian accent so that the local English-speakers can understand him.) Effectiveness in his work depends not only on cultural awareness, but on a deep appreciation for and competency in working with people from a wide variety of nationalities, religions, ethnicities, and socioeconomic backgrounds; savvy in navigating government bureaucracies; compassion and finesse in dealing with cultural traditions and values (e.g., caste, gender inequality) that are not aligned with his own; a broad knowledge of organic gardening and horticulture; and skills in both using a variety of techniques in sustainable and indigenous architecture and teaching those skills (through active and collaborative learning) to international architecture students and Indian villagers alike. In his spare time (to feed his spirit and to augment his income), he produces musical recordings for both new and noted artists, writes and records his own music (including vocals and a dozen or so instruments), and develops websites (his own and others'). Currently, he also manages a complex international video project for a well-known Buddhist lama, coordinating the work of colleagues in ten countries and producing videos for online presentation in eight languages (M. Moore, personal communication, 2015).

My son needs and has found both bread and roses. His life's work involves patience, ingenuity, persistence, problem solving, listening, equanimity in the face of chaos, and a wealth of technical, technological, and artistic skills. All of this is grounded in values of service and compassion.

Want to guess his college major? (Actually, he had two.)

Design Thinking: More to Think About

The "d.school," or Hasso Plattner Institute of Design at Stanford University, is an interesting and even quirky part of the school of engineering. Those involved see the d.school as something very different from traditional higher education, as elaborated by Peter Miller (2015) in an essay in the *Chronicle of Higher Education:*

It sees itself as a training ground for problem solving for graduate students that "fosters creative confidence and pushes them beyond the boundaries of traditional academic disciplines." Whereas design schools elsewhere emphasize the design of products, Stanford's uses what the local culture calls "design thinking": "to equip our students with a methodology for producing reliably innovative results in any field."…What is design thinking? It's an approach to problem solving based on a few easy-to-grasp principles that sound obvious: "Show Don't Tell," "Focus on Human Values," "Craft Clarity," "Embrace Experimentation," "Mindful of Process," "Bias Toward Action," and "Radical Collaboration." These seven points reduce to five modes—empathize, define, ideate, prototype, test—and three headings: hear, create, deliver. That may sound corporate and even simplistic, but design thinking has been used to tackle issues like improving access to economic resources in Mongolia, water storage and transportation in India, and elementary and secondary education and community building in low-income neighborhoods in the United States. (para. 2)

D.school courses vary greatly, in content and in length, from full 10-week experiences to pop-up courses offered for a few weeks or a weekend. Typically team-taught, involving up to six instructors from different disciplines and professions, what the courses have in common are collaborative learning and problem solving. Stanford President John L. Hennessy, along with the head of the d.school, David Kelley, believes the d.school and design thinking can serve as the core of a new model of undergraduate education for the university. Much of this description echoes key aspects of O'Banion's discussion, as does Miller's (2015) further elaboration regarding the kind of radical integration this might imply:

For [Larry] Leifer [a Stanford engineering professor], the d.school is a kind of anti-university. Universities and their academic disciplines, he says, provide "context-independent knowledge." The world and its problems are not, however,

organized by discipline. Even if humanists still tend to look down on "applied" learning, Leifer argues, knowledge has to fit the shape of the problem, not the other way around. The d.school's learning is all "context-dependent," pulling whatever it needs from any discipline in order to solve specific problems. (para. 18)

Essentially Entangled

This is reality: Nearly all college students, particularly but not exclusively those in community colleges, are ultimately seeking a career. And whether her major is history or nursing, engineering or theatre, the student expects that a college degree will lead to a better life. That better life often is described by students in terms of economic prosperity; but it also extends to strengthened prospects for security, health, belonging in community, and ability to care for the health and educational needs of the next generation.

In a learning-centered and student-focused approach, entirely consistent with his many previous contributions, Terry O'Banion is offering ways for faculty to rethink what is most essential in students' education, considering both how people do their work and how they live their lives. Through this process, students may gain an essential education whereby the liberal and practical arts are experienced not just in tandem but ever more entangled with one another.

Throughout his distinguished career as a leader of the community college movement, Terry O'Banion has, with his mind, his humor, and his heart, brought us bread—practical assistance in our professions, our work. And he has brought us roses—those fragrant, fragile, and often fleeting experiences of humanity that fill our senses and fuel our passion. In this work, he does so again, and just in time.

Kay McClenney

References

American Academy of Arts and Sciences. (2015). *The state of the humanities: Higher education 2015*. Cambridge, MA: Author. Retrieved from http://www.humanitiesindicators.org/binaries/pdf/HI_HigherEd2015.pdf

Dadgar, M. (2015). What is the labor market value of community college credentials? Retrieved from http://www.careerladdersproject.org/wp-content/uploads/2011/05/JFF-presentation_Returns-to-credentials_Dadgar.pdf

Miller, P. (2015, March 26). Is 'design thinking' the new liberal arts? *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Is-Design-Thinking-the-New/228779/?cid=at

Bread and Roses

Bread and Roses: An Apt Metaphor

In 1912, Lawrence, Massachusetts, was the center of textile production in the United States. In an eight-square mile area, under dangerous and primitive conditions, tens of thousands of mill workers lived and labored. They produced 25 percent of the national output of woolens. The majority of mill workers were recent immigrants. Half of the workers were girls aged 14 to 18, and one-third died by age 25 due to their living and working conditions. The mill workers averaged less than eight dollars per week for a work week of 56 hours.

The circumstances at the mills led to the Great Lawrence Strike of 1912 in which workers were organized by union leaders to demand better working conditions. Mill owners controlled local law enforcement agencies that created havoc and disaster for the mill workers; a number of the strikers were killed. But leaders of the strike changed the history of work in the United States by demanding better pay, improved working conditions, and humane treatment. One such leader, Rose Schneiderman, said in a 1912 speech to the privileged women of Lawrence:

> What the woman who labors wants is the right to live, not simply exist—the right to life as the rich woman has the right to life, and the sun and music and art. You have nothing that the humblest worker has not a right to have also. *The worker must have bread, but she must have roses, too* [emphasis added]. Help, you women of privilege, give her the ballot to fight with. (as cited in Eisenstein, 1983, p. 32)

"Bread and Roses!" became the rallying cry for this strike and for similar movements and strikes across the United States and Europe. The poet, John Oppenheim, created a poem, published in *American Magazine* in December 1911 (Zwick, 2002), that influenced Schneiderman and other union leaders. Here are the two first stanzas:

> As we come marching, marching in the beauty of the day,
> A million darkened kitchens, a thousand mill lofts gray,
> Are touched with all the radiance that a sudden sun discloses,
> For the people hear us singing: "Bread and roses! Bread and roses!"
>
> As we come marching, marching, we battle too for men,
> For they are women's children, and we mother them again.
> Our lives shall not be sweated from birth until life closes;
> Hearts starve as well as bodies; give us bread, but give us roses!
> (Fowke & Glazer, 1973, p. 70)

The Great Lawrence Strike of 1912, which came to be known as the Bread and Roses Strike, was a significant event in the history of the movement toward greater equality in the United States. Women would not gain the right to vote until 1920 with the passage of the 19th Amendment, but in Lawrence, eight years earlier, they struck against injustice in spite of the power of corporations and local law enforcement agencies, and they were victorious.

Bread and Roses is an apt metaphor for a number of situations in which justice, equality, and opportunity are being disregarded. The metaphor was recently resurrected in 2012 by participants in the Occupy Wall Street movement in a statement, Global May Manifesto, that includes the following in a long list of demands:

Apart from bread, we want roses. Everyone has the right to enjoy culture and to participate in a creative and enriching leisure in service of the progress of humankind. (Occupy Movement, 2012, para. 9)

Perhaps the argument about the value of liberal education versus workforce education began around a campfire at the mouth of a cave near what is today the village of Montignac in the Dordogne Valley of France. Some members of the prehistoric clan had been making paintings of animals in a cave now called Lascaux, and other members may have ridiculed them for dabbling in "art" rather than dealing with the "real world" by training the young to sharpen spears and snare rabbits. The dividing line between liberal education and workforce education probably appeared quite early in the evolution of human beings, for it seems to reflect a divided characteristic in human nature—heart versus head, nature versus nurture, right versus left, conservative versus liberal, and doing versus being. What if our inability today to agree on an integrated core of education that equally represents both liberal and workforce education is in our DNA, and we are genetically cursed to relive this division generation after generation?

What if our inability today to agree on an integrated core of education that equally represents both liberal and workforce education is in our DNA, and we are genetically cursed to relive this division generation after generation?

In a few recent speeches, I have used the bread and roses metaphor to discuss the need in community colleges to bridge the divide between liberal education and workforce education for our students, and the metaphor has resonated with several faculty groups. Much has been written and much more discussed about the bifurcation of knowledge, skills, and attitudes

into two separate camps: one in the liberal arts and the other in workforce education. In this monograph, *bread* is a reference for workforce education, *roses* is a reference for liberal education, and *bread and roses* is a reference for Essential Education—an emerging paradigm that bridges the divide and which is the primary focus of this monograph.

Bread Versus Roses

Historical factors and constant changes in the socioeconomic environment of the U.S. contribute to either/or thinking about the value of liberal education versus the value of workforce education. The divisive argument has been going on for decades, perhaps centuries and millennia (see box), and is still today the primary lens through which educational leaders approach this issue. Any cursory reading of the literature in this area reveals the way contemporary leaders reference the divide: classic confrontation, historical dilemma, the widening disconnect, perennial collegiate argument, debates, and valid discussion.

Instead of dealing directly with this division between liberal education and workforce education, educational leaders have promulgated the division in numerous educational structures and policies. Most community colleges split their curriculum between the liberal arts (transfer, university-parallel, general education, collegiate) and the vocational (job training, career and technical education, occupational, and the now obsolete "terminal"). In addition, organizational structures are split along the same lines with a unit dedicated to academic affairs and one to career and technical education (CTE). A Dean of Career and Technical Education or Dean of Workforce Development often reports to a Vice President of Academic Affairs. Facilities are often divided to reflect the split in curriculum, and faculty are divided along the same dimensions. The A.A. degree and the A.A.S. degree reflect the division. Funding at the local, state, and federal levels is almost always split between liberal education and workforce education. A few innovative colleges have experimented with bringing the various factions of the curriculum and the faculty together through shared offices and redesigned structures such as centers and institutes, but the outcome seldom results in a unified or integrated curriculum bridging the liberal education and workforce education divide.

Helping Students Make a Good Living and Live a Good Life

In the evolution of liberal education and workforce education, an interesting pattern has emerged. For hundreds of years liberal education dominated and was unquestioned as the primary education for all students attending college. Workforce education had to struggle to carve out a legitimate piece of the educational enterprise and was often derided as education for the lower classes and of lesser quality than liberal education. In recent decades, workforce education has become more prominent, and liberal education is on the defense. Many initiatives, organizations, documents, and leaders championing liberal education today do so from a defensive position. A brief sample from current literature reflects the defensive posture:

> *A Defense of Liberal Learning* (May 15, 2014), Glenn C. Altschuler, www.insidehighered.com/ views/2014/05/essay-new-book-beyond-university?

> *What Is the Value of a Liberal Arts and Sciences Education?* (March 10, 2014), Tom Lombardo, www.facebook.comEducationalTechnologyToday/ notes

> One reason why our defenses can have a desperate ring to them is that we're not used to justifying ourselves. (Edelstein, 2014, para. 2)

> We raise this question, recognizing that liberal education and the great tradition of the American liberal arts college have been put on the defensive of late. Small colleges across the nation have to make their case to students, to their parents, and to the public more urgently. (St. John's College, 2014, para. 1)

Victor Ferrall (2015), President Emeritus of Beloit College, noted that liberal education is not only on the defensive, but also on the brink of major decline:

> There no longer is reason to believe the decline of liberal arts education will be stayed or reversed. Liberal arts are over the brink. Some liberal arts colleges will fail or be forced to sell out to for-profit institutions; some already have. Many will quietly morph into vocational trainers. A handful of the wealthiest colleges, probably fewer than 50, educating less than one-half of

1 percent of U.S. college students, may survive. They will, however, no longer play a central role in educating Americans. Rather, they will become elite boutiques, romantic remnants of the past, like British roadsters and vinyl phonograph records. (pp. 7-8)

The "classic confrontation" and the "perennial collegiate argument" continue to frame discussions about the importance and value of liberal education and the importance and value of workforce education. We are still struggling with how to deal with bread versus roses, with how to create an educational experience that will help our students make a good living and live a good life.

Perspectives on Liberal Education

The Association of American Colleges and Universities (AAC&U) celebrated its 100th anniversary in 2015 as the nation's leading advocate of liberal education. In its flagship project, Liberal Education and America's Promise (LEAP), the association clarified the differences among liberal education, liberal arts, and general education:

- A **liberal education** is an approach to college learning that empowers individuals and prepares them to deal with complexity, diversity, and change. This approach emphasizes broad knowledge of the wider world (e.g., science, culture, and society) as well as in-depth achievement in a specific field of interest. It helps students develop a sense of social responsibility; strong intellectual and practical skills that span all major fields of study, such as communication, analytical, and problem-solving skills; and the demonstrated ability to apply knowledge and skills in real-world settings.
- The **liberal arts** refers to specific disciplines such as the humanities, sciences, and social sciences.
- A **general education** is that part of a liberal education curriculum that is shared by all students. It provides broad exposure to multiple disciplines and forms the basis for developing essential intellectual, civic, and practical capacities. General education can take many forms, and increasingly includes introductory, advanced, and integrative forms of learning. (AAC&U, n.d.)

Helping Students Make a Good Living and Live a Good Life

> *My own definition of liberal education is that liberal education is designed to liberate us from ignorance.*

The classic seven liberal arts, first outlined in Plato's *The Republic* as the trivium and the quadrivium, defined liberal education as the primary curriculum for all education for centuries. That curriculum was transplanted to Harvard in 1636 and strongly influenced higher education in the U.S. for several hundred years. Although Harvard had a workforce education mission to prepare members of the clergy and the emerging class of entrepreneurs and business leaders, the curriculum in that preparation was pure liberal arts. Few educators questioned the legitimacy or the efficacy of such a curriculum at that time.

The Classic Seven Liberal Arts

Trivium	Quadrivium
grammar	arithmetic
logic	geometry
rhetoric	music
	astronomy

AAC&U provides a perspective on how liberal education is generally viewed today: "all students who have completed high school deserve the opportunity to attend college and to obtain an education that will prepare them well for *work, life, and citizenship*" [emphasis added] (AAC&U Board of Directors, 2013, para. 1). The value of a liberal education is expressed in how we live our lives, how we perform our work, and how we exercise our responsibilities as citizens.

Preparation for Life. "Man does not live by bread alone" (Matthew 4:4, King James Version) is the most basic argument for liberal education, in spite of the gender bias in the ancient observation. That the liberal arts help people expand their minds is a common enough expression to be a cliché, but look more closely at what that means, not as abstract platitude, but as meaningful practice. On the most fundamental level, individuals work in exchange for life's necessities—food, shelter, clothing—for themselves and their dependents. Matthew reminds us, though, that basic needs go much further than survival, and include matters of the heart and mind, the essence of being human. A liberal education exposes individuals to ideas and opportunities that help them explore the human condition and examine a vast array of possibilities on their way toward identifying their own dreams, honing their own talents, and fulfilling their own potential. The value of a liberal education lies in its ability to help individuals achieve their full potential, a basic principle of American education.

A professor of engineering and technology makes a personal statement about the value of liberal education in his own life:

> Without the arts, human existence is pretty sterile. I love working in technology, but in my free time I enjoy literature, music, film, and art. I read about science, history, and philosophy. I attend public lectures. ...Those hobbies may not lead to financial gain, but they feed my soul, and I find that much more valuable. (Lombardo, 2014)

Ergo: Feeding my soul is more important than financial gain, or, man does not live by bread alone.

Abraham Maslow, decades ago, created a Hierarchy of Needs for human beings, noting that the most immediate needs of humans included food and shelter along with safety and security. Survival, of course, for all living creatures, is the first priority. But after survival, after sufficient bread, other needs emerge, and self-actualization is the capstone. In the language of the humanistic psychologists, those who are moving toward self-actualization transcend the norm. They become more fully-functioning; they are more capable of what Carl Rogers called "unconditional positive regard" for others. In their lives, we can hear Ethel Merman trumpeting in the background, "Everything's coming up roses."

The mottos of colleges and universities overwhelmingly reflect the higher order needs of human beings for truth, love, and enlightenment, and the importance of the liberal arts in achieving these goals. Dominican University's motto is "Love and Truth," which is echoed in the mottos of dozens of other institutions of higher education. The University of Michigan calls for "Art, Science, and Truth," while the University of Minnesota opts for "A Common Bond for All the Arts." The motto of the University of Chicago connects the

higher order terms to the education of individuals: "Let knowledge grow from more to more; and so be human life enriched." The motto from the State University of New York, "Let each become all he is capable of being," directly addresses the goal of education as the means to help individuals reach their full human potential. The State University of New York's motto is an adaptation of Thomas Carlyle's famous observation tying together culture and education, the liberal arts and education, "The great law of culture is: Let each become all that he was created capable of being." One key purpose of liberal education is to make sure that man does not live by bread alone. It is interesting to note that community colleges do not generally create these kinds of lofty mottos. It may be because of their newness or because they tilt toward more utilitarian values.

Preparation for Citizenship. The second major argument for liberal education is based on its necessity in preparing an informed citizenry to protect the basic tenets of a democracy. In a letter to Charles Yancey on January 6, 1816, Thomas Jefferson made his famous observation, "If a nation expects to be ignorant and free, in a state of civilization, it expects what never was and never will be" (Looney, 2004, p. 328). Jefferson believed in the ability of the common person, through education, to make laws that would be fair to all and to implement those laws by governing fairly. This ideal is reflected throughout the Declaration of Independence and in the mission and values of the University of Virginia, which he founded.

The ideal of using the liberal arts to prepare an informed citizenry for enlightened participation in a democracy, however, has always fallen short of the goal. The trivium and the quadrivium served a very select group of citizens for hundreds of years. Henry David Thoreau wrote,

> We seem to have forgotten that the expression 'a liberal education' originally meant among the Romans one worthy of free men; while the learning of trades and professions by which to get your livelihood merely, was considered worthy of slaves only. (Thoreau, 1893, p. 448)

Historically, the liberal arts were available only to the elite; only with the coming of the land-grant colleges in 1862 and the community colleges in 1902 did the "lesser classes" gain access to the liberal arts.

In 1947, the President's Commission on Higher Education reported to President Harry S. Truman that,

> *The unexamined life is not worth living.*
> Socrates

> American colleges and universities…can no longer consider themselves merely the instrument for producing the intellectual elite; they must become the means by which every citizen, youth, and adult is enabled and encouraged to carry his education, formal and informal, as far as his native capacities permit. (p. 101)

Today, there is still a stratified system of education in the U.S. in which elite and private high schools prepare students for elite and private liberal arts colleges and universities.

> For the most part, the wealthy in this country continue to pay increasingly exorbitant tuition to private prep schools, good liberal arts colleges, and elite universities, where their children get strong opportunities to develop their minds, dress themselves in cultural capital, and learn the skills necessary to become influential members of society. (Samuelson, 2014, para. 6)

In spite of the economic and social divisions in this country, Carol Geary Schneider and David Townsend (2013) make an elegant case for liberal education as the foundation for a sustainable democracy. Decrying the attacks by Congress on the National Endowment for the Humanities and the National Endowment for the Arts, Schneider and Townsend note that, "studies in the arts and humanities, across both school and college, help secure the future of freedom by fostering capacities essential to self-governance" (p. 2). They make the case that the disciplines represented in the arts and humanities are "basic to democracy":

- Through the study of *history* [emphasis added] we come to understand the roots, contexts, and complexities of issues we face as citizens. Studies in our democratic heritage confront us directly with fundamental questions about justice, freedom, obligation, equality, and democracy itself.

Helping Students Make a Good Living and Live a Good Life

- Through *philosophy and religion* [emphasis added], we explore questions of meaning and value and come to understand the sources of our own and other peoples' most profound commitments and concerns.
- Through *literature* [emphasis added], we develop empathy, imagination, and insight about the varieties of human experience and about shared hopes and frailties.
- The study of the *creative, visual, and performing arts* [emphasis added] brings us into direct contact with powerful expressions of the human spirit and develops our capacities for creativity, communication, and self-expression. (p. 3)

Schneider and Townsend (2013) conclude their case by pointing out that, "Leaders who undervalue ideas, arts, and humanities open the door to plutocrats, despots, factions, violence, and chaos—all the ancient enemies of prosperity, freedom, and democracy" (p. 4).

Liberal Education and Preparation for Work. The Board of the Association of American Colleges and Universities makes a strong case for liberal education as preparation for life and for democracy; it also makes a strong case that a sound liberal education is necessary to prepare students for a life of work.

In addition to the traditional hard skills of technical competency provided through workforce and on-the-job training, educators and employers in the last several decades have come to recognize the importance of the soft skills for highly competent and competitive workers: "Soft skills are identified to be the most critical skills in the current global job market especially in a fast moving era of technology" (Jain, 2009, para. 1). Soft skills usually include skills in communication, critical thinking and problem solving, teamwork and collaboration, leadership, innovation, and entrepreneurism. More recent lists of soft skills reflect even more directly skills often associated with liberal education. Feather River College, a California community college, in its New World of Work initiative, has identified the top ten 21st century soft skills as self-awareness, social/diversity awareness, resilience, empathy, communication, adaptability, collaboration, digital literacy, entrepreneurial mindset, and analysis/solution mindset (Gill & Schulz, 2014). Career and technical education leaders have always recognized

the importance of the soft skills and include enriched technical courses or special courses such as human relations in their programs. The soft skills are also addressed directly or indirectly in various disciplines representing the liberal arts, and as George Boggs (2015) reminds us: "Employers…value the 'soft skills' that can be developed by courses in the Liberal Arts" (p. 14). If employers want to ensure that students reflect these skills, they will work with educators to create educational opportunities that include the best of both the liberal arts and workforce training.

Recent AAC&U surveys and interviews strongly indicate the value employers appropriate to liberal education in preparing a competent workforce. In 2013, Hart Research Associates conducted for AAC&U an online survey of 318 employers whose organizations had at least 25 employees. Respondents included owners, presidents, and vice presidents from the private sector and nonprofit organizations. Nearly all those surveyed (93 percent) agreed that "a candidate's demonstrated capacity to think critically, communicate clearly, and solve complex problems is *more important* than their undergraduate major" (p. 1). More than nine in ten of those surveyed said it is important that those they hire demonstrate ethical judgment and integrity, intercultural skills, and the capacity for continued new learning. More than three in four employers indicated they want colleges to place more emphasis on helping students develop key learning outcomes, including critical thinking, complex problem solving, written and oral communication, and applied knowledge in real-world settings. These results are a ringing endorsement of the soft skills that are usually visibly included in liberal education programs and increasingly in workforce education programs.

When asked directly about the importance of liberal education in preparing today's workforce, 94 percent of the employers indicated that such an education was very or fairly important. In response to the question, "If you were advising your child or a young person you know about the type of college education he or she should seek in order to achieve professional and career success in today's global economy, would you recommend he or she pursue a liberal education?" 89 percent indicated they would advise students to do so. It is quite clear that the leaders who participated in this survey view liberal education as a key component for a successful career.

Liberal education also plays an important role in helping students make initial decisions about careers and career changes later in life. The common wisdom is that most people will change careers at least seven times; however, there is a big difference between changing a job and changing a career, and most researchers point out that there is no real consensus based on reliable data about the number of such changes. A job search specialist notes, "Today, the average person changes jobs ten to fifteen times (with an average of 12 job changes) during his or her career" (Doyle, n.d., para. 2), which means a good amount of time is spent changing employment.

Cappelli (2013) reminds us, though, that, "The trouble is nobody can predict where the jobs will be—not the employers, not the schools, not the government officials who are making such loud calls for vocational training" (para. 8). So, if we do not even know where the jobs will be, and if workers change jobs and careers a number of times, on what basis will these decisions be made? A sound immersion in liberal education can provide a foundation for dealing with such decisions.

Don Averill (personal communication, November 13, 2014), an expert in workforce education, notes that about 200 jobs disappear every year and that about 200 new job classifications are created to keep up with the changing nature of work in American society. If the training is too specific, a number of work skills are obsolete every year. In that sense, liberal education has a much longer shelf life than career and technical education, which adds to the case for a sound liberal education.

AAC&U takes a practical approach by suggesting that a liberal education is essential to preparing for and living a full life, for educating citizens for participation in a democracy, and for securing the necessary skills and attitudes required of a competent and globally competitive workforce. Carol Geary Schneider (2014) eloquently addressed this challenge as she prepared the association for its 100th anniversary in 2015:

> Across the entire centennial year, we will probe higher education's role in engaging students with the world's "grand challenges" and "wicked problems" and in helping create a more just and sustainable future for the United States and for societies around the globe…. Together, we will

connect the equity imperative to the US talent-development imperative, and explore both "what works" and how to advance what works in order to better prepare twenty-first-century students for *work, life, and citizenship.* [emphasis added] (para. 3)

A Brief History of General Education

A key problem for educators and for the author of this monograph is the challenge of defining and distinguishing between liberal education and general education. The definitions provided by AAC&U above are not very helpful in making this distinction. Basically, liberal education is the broad-based education not reflected in workforce education, and general education is a subset of core learning experiences derived from liberal education—still somewhat confusing. A brief history of general education may be the best way of clarifying the distinctions between liberal education and general education. Readers need to understand general education because that is the primary form liberal education has assumed in the community college and the form that has framed much of the community college curriculum for the past fifty-plus years.

> *Readers need to understand general education because that is the form liberal education has assumed in the community college and the form that has framed much of the community college curriculum for the past fifty-plus years.*

General education began to emerge in the first part of the 19th century as a reaction to a number of forces:

- It was, in part, a reaction to liberal education itself, which had been historically designed for aristocratic gentlemen who could afford to attend selective colleges and universities.
- It was, in part, a democratic movement to make education more accessible to nontraditional students whose numbers were rapidly increasing following World Wars I and II and who began attending two-year colleges—often referred to as Democracy's Colleges—in the 1960s.

- It was, in part, a movement in response to the elective principle that allowed students to create their own curriculum from a smorgasbord of courses with no curriculum integrity.
- It was, in part, a change of philosophy in educational pedagogy and in experiments in what constitute an integrated core of knowledge for all students.
- It was, in part, an attempt to guard against over-specialization in subject matter or in a profession.

Columbia University played an early role in general education by creating a special course, first offered in 1919, titled Contemporary Civilization—a required overview of knowledge and resources to help its students understand the world. Hundreds of colleges and universities have offered the course, or a version of it, and many still do.

Robert Hutchins was an early innovator of the core curriculum as president of the University of Chicago in the 1930s. In 1931, the year Hutchins arrived at Chicago, the university launched a core curriculum—The New Plan—considered "the most thoroughgoing experiment in general education of any college in the United States" (Bell, 1966, p. 26). Hutchins was tepid in his support of this plan and worked with Mortimer Adler for a number of years to refine the plan more to his liking. In 1936, he appointed a Committee on the Liberal Arts "to develop a curriculum for the four-year college that was based on the trivium and quadrivium and conveyed by the study of the Great Books" (Holyer, 2014, p. 49). In 1937, Hutchins agreed to become chairman of the board of St. John's College where, along with his colleagues, he was allowed to create his ideal model of general education which he could not establish at Chicago. The model was created around Great Books of the Western World as the core of a four-year degree—a program that continues today at St. John's College. The Great Books program was much more liberal education than general education—an example of the confusion about the concepts then, and now.

Anne Stevens (2001) has analyzed Hutchins's impact on general education, and has pointed out one of the key dilemmas of his approach.

> The course of study they offered was historically aristocratic. The notion of an education in the

classics and of knowledge for its own sake was part of the nineteenth-century ideal of a gentlemanly education, providing refinement and culture to the upper classes rather than training them for a profession. When this kind of education is then provided to working-class students, it becomes part of a democratic philosophy. If it is provided only to a select group of upper middle-class students, it carries residual traces of its aristocratic origins. (p. 174)

By the 1940s, a general education movement was well underway in American higher education, and Columbia University continued to play a key role. Earl McGrath (1946) at Columbia established the *Journal of General Education* and in the first edition claimed that general education is:

> …the unifying element of a culture. It embraces the great moral truths, the scientific generalizations, the aesthetic conceptions, and the spiritual values of the race, ignorance of which makes men incapable of understanding themselves and the world in which they live. (p. 3)

McGrath (1944) created one of the most quoted definitions of general education as "a common core of learning for the common man" (p. 74). He also pointed out that, "Few terms commonly used by educators have been defined with greater variation than 'general education.'" (p. 74).

Some educators argued that a different approach to education was needed for all students and hoped general education would be that vehicle. Hugh Stickler, in his seminal paper, *Whence and Whither General Education* (1957), made the point that general education was basically a new approach to education requiring a realignment of the curriculum and a new approach to teaching. Dean Sidney French of Rollins College made the point, cited by Stickler, that, "In general education courses we bend subject matter to the needs of the student; in [liberal arts] departmental courses we bend the students to the needs of the subject matter" (p. 15).

The pedagogy of general education was based on tenets of Progressive Education and the related work of John Dewey. One of Dewey's doctoral students,

Helping Students Make a Good Living and Live a Good Life

W.W. Charters, a professor and Director of the Bureau of Educational Research at Ohio State University (1928-1942), created a research methodology known at the time as activity analysis. Charters analyzed real-life activities as a base for determining program objectives. Stephens College in Columbia, Missouri—then a private, two-year innovative college for women—invited Charters to use this approach to create one of the early general education programs in the nation. Charters asked all the students to keep detailed diaries for a week and record what they did each day, what they thought about what they did, what they thought about in general, and how they interacted with those around them. Applying activity analysis to these diaries, Charters created a pattern of the major issues, ideas, and concerns of the students and designed a general education program that became a model in its time. Charters's work is an outstanding example of bending the subject matter to the student. Interestingly, Charters's activity analysis approach to creating a general education program is the same approach that some career and technical educators use today to create workforce training programs.

The 1945 Harvard report, *General Education in a Free Society*, was another milestone in the heyday of the general education movement. A reaction against overspecialization and an attempt to return to some of the basics of liberal education, the program proposed that all undergraduates take six common courses. The recommendations were never fully implemented at Harvard, but the report influenced many general education programs across the country. There are numerous models of general education created by universities and community colleges in these productive decades worth studying in greater detail. For community colleges, B. Lamar Johnson's book—*General Education in Action* (1952)—is a seminal document.

Johnson, Dean of Instruction and librarian at Stephens College, was asked in the early 1950s to study the general education programs in California community colleges. His study is probably best known for a list of twelve competencies that should be reflected in a person who is generally educated. This list, or parts of it, was duplicated verbatim in the catalogs of hundreds of community colleges across the nation as the objectives of general education throughout the 1950s and well into the 1960s.

- Exercising the privileges and responsibilities of democratic citizenship.
- Developing a set of sound moral and spiritual values by which he guides his life.
- Expressing his thoughts clearly in speaking and writing and in reading and listening with understanding.
- Using the basic mathematical and mechanical skills necessary in everyday life.
- Using methods of critical thinking for the solution of problems and for the discrimination among values.
- Understanding his cultural heritage so that he may gain a perspective of his time and place in the world.
- Understanding his interaction with his biological and physical environment so that he may adjust better to and improve that environment.
- Maintaining good mental and physical health for himself, his family, and his community.
- Developing a balanced personal and social adjustment.
- Sharing in the development of a satisfactory home and family life.
- Achieving a satisfactory vocational adjustment.
- Taking part in some form of satisfying creative activity and in appreciating the creative activities of others. (Johnson, 1952, pp. 21-22)

Except for the dated gender references and the absence of objectives related to information technology, diversity, and global understanding, this list is still useful as a guide in creating an integrated core of general education. Many of these objectives from the past appear in the more contemporary list of essential learning outcomes created by AAC&U (2011).

Unless educators have been students enrolled in a classic general education program or have participated in creating one, it is sometimes difficult to envision the design of these programs and how they worked. A brief summary of such a program created at Santa Fe Junior College (now Santa Fe College) in Gainesville, Florida, will illustrate the integrated design and the philosophy and structures that made it work.

The Integrated Core at Santa Fe Junior College. Santa Fe opened its doors to students in 1966 with a general education program in place created by an engaged faculty and staff under the leadership of

founding president, Joseph W. Fordyce. Six 3-credit-hour courses constituted an integrated program required of every entering student. Descriptions of the program began with a small circle that represented the individual student. The course that focused on the individual student was Behavioral Science (BE) 100, "The Individual in a Changing Environment," a personal development course designed to help students explore values and a philosophy of life, and confront prejudices and viewpoints. The course was taught mostly through the methods of the encounter group and the human potential seminar. It was the forerunner of the current student success course, except it was much less didactic and focused on personal elements not often addressed in college courses today. Many colleges in the 1950s and through the 1970s offered personal development courses or applied psychology courses, but few engaged students in the process of self-understanding as did BE100 at Santa Fe.

Around the core course in personal development, designers drew three additional circles to illustrate the three environments that impact individual development. HM100, "The Humanities," represented the Aesthetic Environment; SC100, "The Physical Sciences," represented the Physical Environment; and SS100, "The Social Sciences," represented the Social Environment. Two lines crossed the circles, indicating that in all environments students needed to be competent in two languages: EH100, "The English Language," and MS100, "The Mathematics."

Figure 1 illustrates the integrative nature of the Santa Fe program.

Figure 1. Core Curriculum at Santa Fe
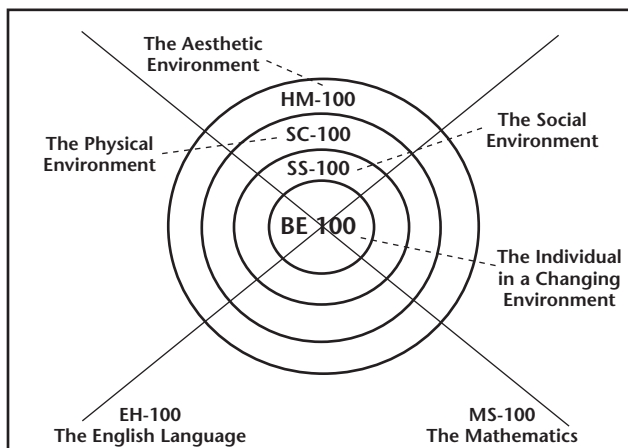
The program was more than a core of six courses. Santa Fe had developed a philosophy of values and a philosophy of teaching to give meaning to the core. The Santa Fe Commitment included eight statements:

1. The student is the central focus for the process of learning.
2. Teaching occurs only when students learn.
3. Effective educational experiences will modify human behavior in a positive manner.
4. All human beings are motivated to achieve that which they believe is good.
5. Education should be an exciting, creative, and rewarding experience for the student and the teacher.
6. All human beings have worth, dignity, and potential.
7. Experimentation and innovation are reflections of attitudes; when they are translated into practice, the process of education can be significantly advanced.
8. Traditional concepts of education (the lecture, the thirty-student class, the fifty-minute period, the standard textbook, the rectangular classroom, the student desk, etc.) are suspect and in need of careful trial and evaluation at least equal to, and perhaps more than, new and innovative practices.

The Santa Fe Commitment provided an overarching framework for the values of the college, and was used to screen every new employee. All applicants for positions at Santa Fe had to write a response to the statements indicating the extent to which each reflected their own values, including evidence from their own experience of how they had implemented each statement as an instructor or administrator. Robert Shepack (1969), former president of El Paso Community College in Texas, completed his doctorate at the University of Florida with a study on the impact of this faculty selection process and concluded that it played a significant role in helping Santa Fe become one of the most innovative colleges of its time. In 1968, Santa Fe was one of only twelve colleges in the United States selected for membership in the League for Innovation in the Community College (League), based in great part on its general education program and progressive philosophy. Santa Fe is still an active member of the League and was awarded the 2015 Aspen Prize for Community College Excellence, the

nation's preeminent recognition of high achievement and performance in America's community colleges.

In addition to this overarching philosophy for the entire college, the six core courses were required of every new student, first-time or transfer. Each course had both cognitive and affective behavioral objectives; the grading system for all college courses used A, B, and C, and students could not earn the failing grades of D and F; a critical minima of competencies was established for an A, B, or C for each course; learning contracts using the critical minima were required for every student in every course; and learning strategies included an emphasis on active learning, problem-based learning, and collaborative learning.

A sound general education program involves more than agreeing on core courses or core objectives. To reflect the views of the founders of general education, there must also be a foundation of values and strategies to make the program a transformative experience for students. The leaders at Santa Fe, in addition to creating an integrated core of learning, embedded that core in a culture of innovation and a philosophy of student-centered learning that made it transformative for students, faculty, and administration.

Perspectives on Workforce Education

Anthony Carnevale (2014) frankly reminds us, "The inescapable reality is that ours is a society based on work. It's hard to live fully in your time if you are living under a bridge" (p. xii). Work is so basic to human survival that it is hardly necessary to make a case for workforce education as a social and economic necessity. As Melvin Barlow says, "The most respected—and respectable—word in the American language is 'work'" (1976, p. 65).

For thousands of years, the young were trained for work through emulation of their parents and tribal leaders. These early versions of home schooling were effective when the adults had the skills and the job was more narrowly defined as making pots, carving, fishing, or building a fire. Over time, this early version of home schooling could not keep up with the increasingly complex culture created by the intellectual and social advances of developing human beings. As life became more complex, work became more complex, and the young were apprenticed to specialists who had acquired advanced skills in the work itself and in

teaching others about the work. On-the-job training, through apprenticeships, became the primary method by which the unskilled learned to become competent; it is still a highly effective methodology and has been incorporated into some educational programs in a number of countries.

In our contemporary society, the training of workers has become codified as a part of formal schooling that has opened a Pandora's box of issues and opinions about the nature and purpose of education itself. Educators today still argue about the following statements:

- The primary purpose of a college education is to train students for a particular job.
- The primary purpose of a college education is to prepare students to live a full life.

In this document, we are trying to create a framework in which the choice does not have to be between a successful career or a worthwhile life. When liberal education in its various forms reigned supreme, the purpose of education was the same as that of liberal education. The incorporation of workforce education into the structures of formal schooling raised questions about the value of liberal education and created stress points about the place of workforce education in the curriculum, in the faculty, in the facilities, and in the allocation of resources. The addition of workforce education also created questions about the quality of education most often expressed in the seemingly unsolvable division between education and training.

These issues and concerns may not be solved for many years, but in the meantime, workforce education has become deeply embedded in higher education, and especially in community colleges. Some leaders argue that workforce education has supplanted liberal education as the primary focus of a college education.

> For over a generation, the primary rationale provided by all students for pursuing higher education across all sectors has been to enhance employment prospects. Yes, there are other legitimate, widely recognized reasons for pursuing a higher education degree, but contribution to employability is the single most influential driver in the higher education marketplace, and it looks like it will be so into the foreseeable future. (Hentschke, Tierney, & DeFusco, 2014, p. 4)

Others have argued that the community college has become the primary purveyor of workforce education. According to Paul Fain (2014), "Because of their geographic accessibility and affordability, community colleges have routinely—and rightly—been identified as the U.S. higher education institution most capable of and responsible for our country's economic and employment rebound" (para. 22). James Jacobs (2009) notes, "If there is one common mission identified with community colleges, it is work-force education" (para. 1).

As noted earlier, workforce education has not always been viewed in such a positive light. When it first began to migrate from the apprenticeship system into courses in the schools, critics lambasted the movement as an action that would lower the quality of education. In his history of vocational education, Barlow (1976) pointed out, "Technical education was called a 'deceptive farce' by zealous guardians of liberal education who considered it a threat to the intellect and unacceptable in the public schools" (p. 47). Brad L. Stone (1998) decried the rise of "vocationalism," which he defined as "training in certain skills that prepares one for work in order to earn a living. It is 'learning for the sake of earning'" (p. 2). Furthermore, Stone described "vulgar occupations [as] forms of labor undertaken for money" and cited Cicero's belief: "Labor performed exclusively for compensation was never suitable for gentlemen" (p. 5).

These criticisms of vocational education reflect a continuing theme that is still prevalent today: A liberal education is designed for the elite and the wealthy to prepare them to fulfill their destiny as privileged ladies and gentlemen. Training is designed for the poor to prepare them for a job so they can survive without help from the wealthy. There are many ways to state this theme, including the recent "99 percent versus 1 percent," and "If your daddy was rich, you're gonna stay rich, and if your daddy was poor, you're gonna stay poor" (Marche, 2012, para. 1).

In another section of his essay in *Humanitas* (1998), Stone notes "new, crude forms of vocationalism are now even part of higher education" (p. 1). "Vulgar" and "crude" are code words commonly used by the elite to reference the poor. The socioeconomic theme of rich versus poor has been analyzed for centuries and will continue to be for centuries to come. It

is mentioned here to make the point that it is a key framework for examining the complex nature of work in American society. Community college educators, of course, cannot resolve this issue, but recognizing it may give some sense of urgency and substance to their work in creating a curriculum that bridges both liberal education and workforce education.

Creative and innovative community colleges have been chipping away for decades at the idea that a community college education is of lesser value than an education at a four-year institution. Critics often assign community college education lesser value because community colleges have assumed, as Frank Newman once said, "the toughest tasks of higher education." A wag once said about California institutions of higher education, universities take the top 10 percent of high school graduates; community colleges take the top 100 percent. Providing education for high school students who read at the fourth and fifth grade levels and for students who come from the nation's lowest social and economic levels certainly does present challenges. But the community college should be judged on the comprehensive range of what the society has assigned it to do. The record is not great in developmental education, but some community college career and technical education programs compete with elite universities. As one example, and there are many, in 2014 the Long Beach City College in California sponsored its Underwater Robotics team in an international competition that included MIT, Arizona State University, British Columbia Institute of Technology, Institute for Marine Technology Problems (Vladivostok Russia), University of California Santa Cruz and San Diego, and Washington State University, and came in second in the world. In 2007, a Long Beach City College Viking Explorers ROV team came in fifth in the world in a similar competition. Many community colleges have established advanced programs in a variety of technical fields that are among the most sophisticated and substantive in all of higher education (L. A. Bynum, personal communication, December 5, 2014).

Making the case for career and technical education may no longer be necessary given the massive support of the federal and state governments. With trillions of dollars and dozens of acts, support for workforce education has become a key policy of the

Helping Students Make a Good Living and Live a Good Life

United States. Workforce education is woven into the nation's defense policies, foreign policies, and social and economic policies. No aspect of higher education has been so fully embraced or supported with special acts as has workforce education. It is difficult to locate the amount of total allocations for workforce education since the first Morrill Act in 1862, but the U.S. Government Accountability Office (2011) reported total federal funding of employment and training activities at $17.6 billion in fiscal year 2009. More recently, Carnevale, Strohl, and Gulish (2015) reported federal job training support at $18 billion and "certifications, apprenticeships, and other workforce training" support at $47 billion. Carnevale also pointed out that, "The United States spends $1.1 trillion on formal and informal postsecondary workforce education and training annually" (p. 3), with much of that funding coming from employers, states, and colleges. In the report, two-year colleges were cited as spending $60 billion a year on workforce education. William Blank (2010) points out that "federal funding is less than ten percent of the total funds expended on vocational programs by states" (p. 7).

In comparison, the support for liberal arts education through the National Endowment for the Humanities (NEH) and the National Endowment for the Arts (NEA) has been miniscule. As one example of the difference in priorities of the federal government, in July of 2014 Congress approved an update of the Workforce Innovation and Opportunities Act which governs more than $3 billion in programs, many of them aimed at community colleges. Also in July of 2014, President Obama asked Congress to maintain the current level of funds for the NEH at $146 million, while Republicans proposed a reduction of 5 percent. A budget plan released by U. S. Representative Paul Ryan (R-Wisconsin) earlier in 2014 proposed ending all federal funding for NEH, a continuing goal for Republicans.

National political leaders have made a concerted attack on liberal education in defense of workforce education, as reported by Scott Jaschik (2014):

> President Barack Obama: "I promise you, folks can make a lot more potentially with skilled manufacturing or the trades than they might with an art history degree" (para. 9).

Governor Rick Scott of Florida: "If I'm going to take money from a citizen to put into education then I'm going to take that money to create jobs. So I want that money to go to degrees where people can get jobs in this state. Is it a vital interest of the state to have more anthropologists? I don't think so" (para. 9).

Governor Patrick McCrory of North Carolina: "If you want to take gender studies that's fine, go to a private school and take it. But I don't want to subsidize that if that's not going to get someone a job" (para. 9).

A few months after President Obama made the statement above, he walked it back when he presented the 2013 National Medal of Arts and National Humanities Medal in July 2014: "The arts and humanities aren't there to be consumed when we have a free moment. We need them like medicine. They help us live" (para. 9). This is a strong statement by the President, but one not backed by action. In his 2014 State of the Union address, the President assigned Vice-President Joseph Biden the task of leading an across-the-board reform of the nation's job-training programs. Three months later, Biden keynoted the annual conference of the American Association of Community Colleges (AACC) to announce a new program that would provide a pathway to the middle class for working families and a pipeline of skilled workers for employers. Biden asked, "If not community colleges, what vehicles do we have to train our work force for the future" (Field, 2014, para. 9)? Few, if any, such announcements come from the White House about reform or funding efforts related to liberal and general education.

It is left to organizations like the Association of American Colleges and Universities, along with concerned scholars, to make the case for liberal education. The case for workforce education is also made by national organizations and concerned scholars, but it is made most powerfully by the nation's top political leaders and most visibly by the billions of dollars they appropriate to support career and technical education.

A Brief History of Workforce Education

From the founding of the English colonies in the early 1600s to the middle 1880s, apprenticeship training was

---

*Melvin Barlow's work on *The History of Vocational Education* was an invaluable resource in preparing this section.

the dominant form of organized preparation for work. A manual training movement emerged in the 1870s, influenced by experiments in Russia and later the Scandinavian countries. Advocates in America created and funded a number of manual training programs for boys, including the Massachusetts Institute of Technology and the St. Louis Manual Training School at Washington University. Manual training programs also began to appear in public schools.

From the 1880s through the end of the century, the trade school movement emerged as a more comprehensive program that expanded the idea of manual training. The New York Trade School, the Hebrew Technical Institute, and the Williamson Free School of Mechanical Trade were the best known and served as models for various approaches to formal training for work.

These institutions were the forerunners of today's trade schools and technical institutes. Then, as now, some were proprietary and some were incorporated into public schools and colleges.

The late 1800s through the early 1900s was a time of great growth for America and for its rapidly expanding educational system. The Industrial Revolution was changing the socioeconomic framework of the country, and schools and colleges were adjusting as rapidly as they could to keep up. The manual training and trade school movements expanded to address the needs of business and industry for trained workers. At the same time, developments in home economics and agricultural education—especially the role of the agricultural extension stations—broadened the impact of workforce education. The kitchen garden movement, designed to teach the young about the domestic arts, set the stage for the creation of the Industrial Education Association (IEA) of New York in 1884. The IEA established the New York College for Training Teachers in 1888, which became Teachers College of Columbia University. Institutions and associations continued to evolve to reflect the changes and advancements in workforce education.

In the early 1900s, workforce education morphed into industrial education. The Massachusetts Committee on Industrial and Technical Education introduced the concept "industrial intelligence," noting a lack

of it in skilled workers. Barlow (1976) explained, "It was generally understood that industrial education referred to that area of education between manual training and college engineering" (p. 53). There was great interest in industrial education, which led to the creation in 1906, by a number of prominent leaders, of the National Society for the Promotion of Industrial Education. The purpose of the Society was to bring together all leading workforce training organizations in the U.S. as an advocacy group and to influence the federal government to provide funds for training workers. Branches were organized in every state, and a statement released for the first national meeting echoes the statements that have become commonplace for organizations and commissions on workforce education ever since:

> The need for industrial education in the United States has become a social and individual question of the first magnitude. It is not only a question that affects our material prosperity as a nation, but one that vitally concerns the well being of society as a whole. (Barlow, 1976, p. 52)

The Society eventually merged into the American Vocational Association, which in 2001 became the Association of Career and Technical Education, a powerful and influential organization today.

The next mutation of workforce education was dubbed the vocational education movement. This movement expanded rapidly in the early 1900s, with champions from organizations and national leaders, but mostly because of support from the federal government. Vocational education was a priority for many groups in the United States. Business and industry needed a well-prepared workforce. Labor organizations had an interest in promoting standards and in supporting their members. Schools and colleges had a major stake as the primary purveyors of training and as the primary recipients of the federal funds anticipated. For the federal government, it was a national imperative to ensure the nation's future, prompted in part by the nationwide adoption of vocational education in Germany and the beginning of World War I in 1914. It would take the U.S. Congress a number of years to work out the compromises, but on February 23, 1917, President Woodrow Wilson signed into law the Smith-Hughes Act, the first comprehensive bill to support

vocational education in the country and the beginning of federal support that continues to this day. Although a number of national experts were contacted in the preparation of this monograph to determine total amounts of funding of these acts, no authoritative source could be identified. Several experts have indicated that the federal government has invested trillions of dollars in workforce education, an amount that does not include matching funds from the states and the colleges. See the side bar for a list of some of the most significant acts to support vocational education from 1862 to the present.

In a period of one hundred years, workforce education in the U.S. had evolved through a number of movements: apprenticeship training, manual training, trade schools, industrial education, home economics, agricultural education, vocational education, and career and technical education. Barlow (1976) notes that, "By 1926, vocational education was beginning to make its mark upon the educational purposes of the nation" (p. 58). With federal funding and the need to keep the U.S. globally competitive, vocational education became so dominant in community colleges that in 2003-2004, 46 percent of associate degrees were conferred to students in the arts and sciences or general education, and 54 percent to students in occupational curricula (Cohen and Brawer, 2008). According to the Association for Career and Technical Education (n.d.),

> From 1997 to 2007, there was a 58.4 percent increase in less-than-one-year certificates awarded at two-year institutions, a 28.5 percent increase in certificates that take at least one year but less than two years and an 18.7 percent increase in associate degrees. (para. 7)

As Jamie Merisotis, President of the Lumina Foundation, said, "…to deny that job skills development is one of the key purposes of higher education is increasingly untenable" (as cited in Altschuler, 2014, para. 5).

Vocational education did more than make its mark on the educational purposes of the nation; it would soon become the dominant program in a number of educational institutions. With increasing support from the federal government, the individual states, and business and industry, vocational education was firmly

---

Federal Vocational Education Acts and Legislation

The First Morrill Act, 1862
Smith-Hughes Act, 1917
George-Deen Act, 1937
Employment and Training Act, 1946
Manpower Development and Training Act, 1962
Vocational Education Act, 1963
Amendments to the Vocational Education Act, 1968, 1972, 1974
Comprehensive Employment and Training Act, 1973
Career Education Act, 1974
Job Training Partnership Act, 1982
The Carl D. Perkins Vocational Education Act, 1984
Amendments to the Perkins Act, 1990, 1998
School-to-Work Opportunities Act, 1994
Advanced Technical Education-NSF, 1994
School-to-Work Opportunities Act, 1998
Workforce Investment Act, 1998
Trade Adjustment Assistance Community College and Career Training, 2011
Workforce Innovation and Opportunity Act, 2014

---

embedded in the DNA of American culture. World War I, as one pundit noted at the time, had "caught the nation with our skills down." The Great Depression, World War II, and the Russian launching of Sputnik in 1957 prompted leaders to experiment with social and economic policy to ensure we would not be caught with our skills down again.

The community college also had an impact on the evolving idea of vocational and occupational education. Originally designed as preparation in the "junior academy" for entrance to the "senior academy," the junior college expanded its transfer function to include "terminal education." The word, terminal, is no longer used in this context, but in the 1930s and 1940s it referred to vocational education. Throughout the next several decades both the community college and workforce education continued to expand rapidly. In 1964, the National Advisory Committee on the Junior College, established by the American Association of Junior Colleges (1964), concluded that "the two-year college offers unparalleled promise for expanding educational opportunity through the provision of comprehensive programs embracing job training as

well as traditional liberal arts and general education" (p. 14). By 1993, public postsecondary vocational education was provided by 720 degree-granting community colleges, 162 technical institutes, 812 area vocational schools, and 70 postsecondary skills centers for disadvantaged youth (Hayward and Benson, 1993, p. 15). The community college movement paralleled the vocational education movement from the early 1900s to the present day.

> *The community college movement paralleled the vocational education movement from the early 1900s to the present day.*

Vocational education has a complex and rich history in American education and in 1971 morphed into career education under the leadership of Sidney P. Marland, Jr., U.S. Commissioner of Education. Career education was a more appealing term than vocational, occupational, and terminal, and it broadened the idea of workforce education as an educational continuum that begins early in life and extends through old age. Career education was viewed as part of life's pattern, not as just a job. Marland's work, and that of his colleagues, resulted in the first vocational act introduced by Carl D. Perkins—the Elementary and Secondary Career Education Act of 1976—which funded the implementation of career education throughout the nation.

Although workforce education continued to expand and to be funded with billions of dollars, the U.S. began to lose its competitive edge in the global marketplace in the late 1970s. The 1983 report, *A Nation at Risk* (National Commission on Excellence in Education), launched a major reform movement in education when it declared:

> Our nation is at risk. Our once unchallenged preeminence in commerce, industry, science and technological innovation is being overtaken by competitors throughout the world….the foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and as a people. (p. 5)

A Nation at Risk was aimed primarily at reform in the high school, but ten years later a similar report,

An American Imperative: Higher Expectations for Higher Education (Wingspread Group on Higher Education, 1993), called for major reform in higher education and reflected many of the same warnings as the 1983 report:

> A disturbing and dangerous mismatch exists between what American society needs of higher education and what it is receiving….The American imperative for the twenty-first century is that society must hold higher education to much higher expectations or risk national decline. (p. 1)

As a result of these reports and others, more than 275 educational task forces went to work across the nation recommending and implementing expanded course requirements for high school graduation, stronger college admission requirements, statewide student assessment programs, and teacher competency tests. The two major reports and many task forces triggered reform efforts to improve the entire educational enterprise, but much of the reform focused on workforce education. The Carl D. Perkins Act of 1984, the Carl D. Perkins Vocational Applied Technology Education Act of 1990, the School-to-Work Opportunities Act of 1994, and the Carl D. Perkins Vocational and Technical Education Act of 1998 were all designed to implement national reforms in the realm of vocational education.

There have been a number of innovative reforms in vocational education in the last several decades. "A New Vocationalism" emerged as an expansion from the emphasis on vocational education to an emphasis on career and technical education. Community colleges became deeply involved in contract education by offering specialized training to specific industries around the world. General Motors's ASEP program is an example that began at Delta College in Michigan and spread to many colleges across the nation. Today, contract education has morphed into the corporate college model, designed specifically to serve the interests of business and industry with little or no involvement from traditional faculty. Community colleges also became champions of economic development for their communities and regions, creating partnerships with local business and industry, chambers of commerce, and other agencies to attract new businesses and to meet the workforce education needs of existing business and industry.

Community colleges in over twenty states have created baccalaureate programs to offer four-year degrees in occupational careers not being sufficiently addressed by local four-year colleges and universities, including teacher training, information technology, engineering technology, nursing and health sciences, and others. In August 2014, California passed a bill to add bachelor's degree programs to its community colleges. The Chancellor of the California Community Colleges noted, "This bill will enable California community colleges to confer bachelor's degrees…and help close the skills gap in our workforce. I applaud the Legislature for addressing California's workforce needs" (Harris, 2014, para. 2).

As community colleges continued to evolve in their mission and functions, so did workforce education. Occupational and vocational education began to be referred to as career and technical education (CTE) which is the most common term for workforce education today.

CTE has broadened its appeal through career academies, tech prep programs, and career pathways. CTE has made popular the instructional approaches represented in applied learning, contextual learning, collaborative learning, and work-based learning. The CTE curriculum is often organized into 16 career clusters in which students study a wider range of skills rather than focusing on the skills appropriate to only one job. As a result of these innovations, enrollment in CTE soared to more than 15 million students in 2007.

More recently, workforce education has concentrated on STEM (science, technology, engineering, and mathematics) programs as high priority. The federal government has allocated special funds to support STEM, and some have suggested that STEM will become the next concept to replace CTE. These changes are being driven by an increasingly competitive global economy that relies on STEM education. The World Economic Forum ranks the United States 52nd in the quality of mathematics and science education and 5th (and declining) in overall global competitiveness. A report prepared for the U. S. Department of Commerce (Langdon, McKittrick, Beede, Khan, & Doms, 2011) noted that,

> Science, technology, engineering and mathematics workers play a key role in the sustained growth and stability of the U. S. economy and are a critical component to helping the U. S. win the future…. STEM occupations are projected to grow by 17.0 percent from 2008 to 2018, compared to 9.8 percent growth for non-STEM occupations. STEM workers command higher wages, earning 26 percent more than their non-STEM counterparts. (para 1)

Leaders in STEM are also beginning to recognize the importance of integrating liberal arts with workforce education. There is a growing STEAM (science, technology, engineering, arts, and mathematics) movement to show that art can help bring science to life. At the League for Innovation's annual STEM conference, for instance, one conference track is designed for projects and practices that reflect the integration of STEM and the liberal arts.

One thing seems certain: Workforce education will continue to evolve to reflect the needs of the economy and the responses of educational institutions in meeting those needs. It will remain a high priority for American society, and if it is not already the dominant program in education, it is well positioned to become so.

The Case for an Essential Education That Bridges the Divide

There is a robust literature on liberal education and on workforce education, and much of that literature focuses on explaining the purpose or defending the value of each position. Occasionally, one side will reference the value of the other side, but those references are seldom fully developed. As long as this debate has gone on, however, advocates and leaders who favor a combined approach have made their voices known, as illustrated in the following perspectives:

> Calvin M. Woodward created, in 1879, the first school-based job training program in the nation, the St. Louis Manual Training School of Washington University. When the first class of 50 boys began their studies on September 6, 1880, they were greeted by an inscription from Woodward over the entrance:

> > Hail to the skillful cunning hand!
> > Hail to the cultured mind!
> > Contending for the World's command,
> > Here let them be combined. (Barlow, 1976, p. 46)

Helping Students Make a Good Living and Live a Good Life

The aim of a community college education must be not only to prepare students for productive careers, but also to take them beyond their narrow interests, broaden their perspectives, and enable them to live lives of dignity and purpose…. The community college, more than any other higher education institution, should overcome departmental narrowness by integrating technical and career studies with the liberal arts. (AACC, 1988, pp. 17-18)

The key question, it seems to me, is how to rebalance, while preserving the essence of liberal learning, at a time in which higher education in general and, most especially, the humanities are under a sustained attack by cost-conscious advocates of an increasingly narrow vocationalism. (Altschuler, 2014, p. 3)

Community colleges offer degrees in career education and liberal arts and sciences. To suggest that one is more important than the other is short-sighted and counterproductive. Career programs and LAS programs do not compete; they complement each other. If you want a strong community, both culturally and economically, then you'll recognize the value of all college degrees. (Lombardo, 2014, p. 2)

The business community and the students are best served in the educational setting when career technical education is combined with general education to create students who are capable of managing their careers for life. (Drummond, n.d., p. 1)

Foundational, lifelong skills such as critical thinking, teamwork and collaboration, and problem solving are climbing to the top of employers' wish lists….Ultimately, integration in this area should bridge academic and applied education and skills expectations across institutions and employers to accelerate opportunities for students. (Tyton Partners, 2015, pp. 6-7)

These quotes from six different advocates of integrating liberal education and workforce education reflect a perspective that has been in place for many decades, a perspective that has been picking up steam in recent years. For some, integration still means making sure both perspectives are represented as complementary.

However, what we mean in this monograph is a new perspective; one that integrates, combines, and unifies the two historical perspectives into a new and different form of Essential Education. In an essay calling for "ending the divide between liberal arts and practical education," the president of Northeastern University, Joseph Aoun (2015), calls for an essential education he terms, "The New Literacy":

What the worn-out juxtaposition of the liberal arts versus the applied disciplines overlooks is that aspects of each are essential for living a full life, both professionally and personally….Both domains have relevance, utility and beauty, and both contain critical components of a new skill set—a new literacy—that students need if they're to flourish in modern life and the global economy. (para. 14)

Although AAC&U focuses its mission as an advocate of liberal education, the association recognizes the need for an education that bridges liberal education and workforce education.

A great democracy cannot be content to provide a horizon-expanding education for some and work skills, taught in isolation from the larger societal context, for everyone else….It should not be liberal education for some and narrow or illiberal education for others. (AAC&U Board of Directors, 2010, p. 3)

A step toward bridging the divide sometimes comes through in the language of advocates and champions. In *Greater Expectations: A New Vision for Learning as a Nation Goes to College* (2002), AAC&U called for, "a practical liberal education as the most powerful form of learning for the twenty-first century" (p. xi). Larry Warford (personal communication, December 4, 2014), Senior Workforce Consultant for the League for Innovation, has called for a liberal career education, as a way to bridge the divide. Practical liberal education and liberal career education are examples of encouraging language from strong advocates on both sides of the divide.

We do not need another commission on liberal or general education; we do not need another commission on workforce education or CTE; we need a *Commission on Essential Education for All* as a new way of thinking about this issue. One way

to initiate such a commission is for AAC&U and the Association for Career and Technical Education to combine efforts to establish it. Both associations have created seminal documents on what they believe to be essential from the perspective of their associations. These documents already contain many answers to what constitutes a quality education essential for all students. It will take work and compromise to agree on the specifics, but it is a goal worth exploring in which our own divisiveness about what constitutes an essential education for all students contributes to the divisiveness in our students and our society.

Whether a model of Essential Education is designed by national organizations or by faculty committees appointed in leading community colleges, educators who want to explore what constitutes an Essential Education for all students should first agree on a set of values they hold in common regarding this paradigm. The following tenets are offered as a place to begin:

1. Liberal education and workforce education are of equal value in American society and in the educational enterprise.
2. No student is fully educated who does not experience and embrace the core skills and knowledge represented by liberal education and by workforce education.
3. An educational experience that integrates the core knowledge and skills from liberal education and workforce education is much more powerful and substantive in its impact than an education that is skewed to one side or the other.
4. Faculty must be prepared to transcend the partisan commitments to their disciplines while they are engaged in designing and implementing an Essential Education.
5. Faculty from secondary and postsecondary education must be willing to work across and through existing systems.
6. Collaborative and applied learning and Student Success Pathways are foundational strategies to implementing the Essential Education paradigm.
7. New and innovative forms of information technology will make it possible to create and deliver an Essential Education that simultaneously embraces an integrated core of learning for all students and addresses the unique needs of each student.

8. Colleges will need to create new forms of assessment to measure the impact of an Essential Education.
9. New structures and organizations may need to be created in the college to accommodate the new forms of Essential Education.
10. Thinking outside of the course as the organizational structure for learning may produce more innovative and creative models of an Essential Education.

As noted throughout this monograph, while there has been an historical divide between the advocates of liberal education and workforce education, there has also been recognition at many junctures of the importance and value of integrating the

We need a practical liberal education and a liberal career education.

two sides. In recent decades there is growing interest in integrating the two positions, stymied by the historical architecture of education erected by earlier advocates to defend and solidify their positions. It will be very difficult to overcome the barriers of the historical architecture: separate divisions, separate faculty, separate facilities, separate funding, separate advocates, and separate terminology. The place to begin the conversation is to find common ground in a set of common values based on the goal of creating an education for students that helps them make a good living and live a good life.

Working from a common set of values—these ten or others agreed upon by those who will do the work of creating the curriculum for an Essential Education—provides a foundation on which the future can be built. To assist educators in creating a new model of essential education that bridges the divide between liberal education and workforce education, the following partial models or constructs are offered as starting points.

There are no fully-developed models or constructs of Essential Education that are universally acknowledged. There are partial frameworks, pieces of promising concepts, and some practices around which a core of Essential Education could be constructed. These suggestions cannot be labeled emerging models; they are, however, partial constructs that could become models in the hands of creative educators.

The following seven constructs are offered to provoke and stimulate educators to consider the possibilities of a redesigned learning experience that incorporates and integrates the most important elements from liberal education and workforce education. Historically, such programs are usually framed as a series of core courses, as exemplified in Construct 1. The other constructs suggest different approaches, such as creating a program of Essential Education around core questions or using an approach such as problem-based learning or applied learning to frame a quality education for every student. Some of these constructs already include specific elements that make it easy to design a curriculum; others include elements of teaching and learning practices based on research that may provide a gateway to creating a new form of curriculum. These are only seven constructs or gateways to a new curriculum of essential education. Creative faculty will design other approaches to meet the needs of their institutions and their students.

Emerging Constructs of Essential Education

Essential Education is defined as an integrated core of learning that includes and connects the key components from liberal education and workforce education to ensure that a student is equipped to earn a good living and live a good life. It is a quality education essential to all students.

Essential Education is defined as an integrated core of learning that includes and connects the key components from liberal education and workforce education to ensure that a student is equipped to earn a good living and live a good life.

The goal is to design a new curriculum of Essential Education for all students, whether vocational- or transfer-oriented, that will provide a core experience, limited in scope, that will integrate key elements from liberal education and workforce education. Students who complete this core experience should be much better equipped to pursue vocational and/or transfer goals to success and completion. By requiring this core experience for all students as the initial college experience, the stress and uncertainty

of choosing majors, programs, and courses will be diminished considerably. The common curriculum will help unify faculty work, student support services, curriculum alignment with secondary schools and universities, and assessment processes. The cafeteria model of a buffet of courses will no longer dominate course offerings. Revision of the general education program will no longer be necessary because the one-dimensional general education program of the past will be replaced by a new integration of the best from both liberal education and workforce education into a new Essential Education—an education that will help students make a good living and live a good life.

Construct 1: Core Courses. There are plenty of clues to the most important elements in liberal education and workforce education that all students need. In the lists of outcomes and objectives created by advocates from each side, four stand out on most such lists: critical thinking, problem solving, collaboration and teamwork, and communication. These knowledge sets, or skills, cut across the liberal education and workforce education divide and begin to frame a core of integrated learning valuable to every student. These four arenas of learning could be designed fresh by educators as a required curriculum:

- Critical Thinking 101
- Problem Solving 101
- Collaboration and Teamwork 101
- Communication 101

The four areas could be taught as standalone courses for 3 semester credits each or combined into a learning community of 12 credits. Some educators will combine problem solving and critical thinking into one course.

Educators who favor this core course approach will, of course, want to explore additional courses to add to the core. These additional areas of essential learning might include diversity, global awareness, and information technology, which often show up on lists of essential skills. The purpose here is not to determine which courses should be included in an essential core, to begin the really hard work of outlining the content to be included in each course, or to suggest the teaching approaches that might be most effective. The purpose here is to suggest an approach to a new construct—maybe a new model—that bridges liberal education and workforce education

and prevents relying on old models from the past. This construct requires educators to consider what is absolutely *essential* and to be creative in combining new elements to design learning experiences that incorporate the best from both sides.

Another way to think about this approach is to answer this question: If state regulations limited the college to six basic three-credit courses to teach all students what is essential to living a good life and making a good living, what would those six courses be and what would an outline of the content of each course include?

This construct of basic core courses reflects the changes that have occurred in the very nature of work. The current knowledge economy demands different skills, different ways of working, and different expectations from employers than the old agrarian and industrial models required. In today's workplace, assembly lines may employ robots and supply chain management may run on sophisticated software, but these tools don't appear on their own; people develop them to improve efficiencies and address challenges. These innovative individuals must have the knowledge, skills, and abilities to work collaboratively, communicate effectively, approach and solve problems creatively, respond to change with flexibility—and to do all this extremely well and, quite possibly, under great pressure. By blending the best from liberal education and workforce education, educators are urged to create a new set of core courses that are essential for all students, regardless of their ultimate goals.

Construct 2: Essential Questions. If an irrefutable case for Essential Education is to be made to constituencies not yet addressed or included in these efforts, it must be made in a language they understand. One way to achieve that goal is to reimagine Essential Education framed in a series of Essential Questions, the key questions that most human beings struggle to answer as they navigate the rough waters of life. Such questions can clear away the fog of pedantic jargon and focus on the deeper needs of human beings. The questions may be able to frame learning outcomes and areas of knowledge; they may even translate into a curriculum. At the very least, exploring the Essential Questions may stimulate fresh thinking about redefining and organizing an integrated core of learning for all.

One of the Principles of Excellence for AAC&U's LEAP initiative is to engage the big questions. In a working paper on the LEAP Challenge (2014), the association states:

> To prepare students for a lifetime of working with unscripted questions—in their careers, in diverse communities, and their own lives—college study should immerse them in their own explorations of significant and complex problems, questions that matter to them and whose significance to others they are prepared to explain. In exploring these significant questions and problems, students should, with guidance from faculty, take the lead in framing the questions, exploring the options, engaging diverse views, and producing visible results—whether through research, writing, practicums, service, social media, e-portfolios, or other forms of creativity, invention and problem-solving. (p. 4)

A major challenge in creating a set of Essential Questions is creating a set of categories under which to list the questions. If educators find this idea of any value and agree to explore it, there will be a great deal of discussion and possible dissension because every person, every committee, and every institution will have a preference and an opinion. The task of creating Essential Questions is likely to engage a great many stakeholders because it clearly reflects

The final product of training must be neither a psychologist nor a brick mason, but a man.

W. E. B. DuBois

what matters most and is stated in a powerful form of questions that makes students and faculty begin thinking immediately about their own personal answers.

Even though the language needs updating, W. E. B. DuBois succinctly states the challenge: "The final product of training must be neither a psychologist nor a brick mason, but a man" (Altschuler, 2014, para. 4). In this draft of Construct 2, the goal is to create serviceable categories and list the provocative questions that could provide the foundation for a quality education essential for all. Students and faculty will add to the list to reflect their own values and interests.

Helping Students Make a Good Living and Live a Good Life

Personal Development

1. Who am I? Where am I going? And, what difference does it make?
2. What values and ideals have I accumulated so far, and what values and ideals do I want to work on for the future?
3. Do I believe in some kind of supreme being? Why or why not?
4. Who, so far, has influenced my personal philosophy of life, and how do I describe my personal philosophy?
5. What is happiness for me, and to what extent am I reaching that goal?

Economic Development

1. What are the basic talents and skills I have that can translate into a good career?
2. What are the rewards for working that are important to me?
3. What is my dream job, and what kind of educational experiences will it take to get me there? Am I currently working on that plan?
4. What is more important to me—satisfaction in the contribution I make to society through my work, or the money and benefits I will earn? What can I do to make sure both goals are met?
5. When I die, what do I want my family, friends, and coworkers to say about the work I have done?

Civic Development

1. How much do I understand and appreciate about being a citizen of a major democracy?
2. Why should I vote? How do I make a case that my vote counts?
3. What are the basic values and policies of Democrats, Republicans, and Independents, and which political group best represents my own values? Are any of the values of these groups relevant to my own values?
4. Through what means can I make a difference so that I leave my country better than I found it?
5. What magazines, news channels, blogs, critics, analysts, and books do I follow to obtain a balanced perspective on current events?

Cultural Development

1. What are my most creative urges and talents that could produce something worth sharing with others, and to what extent have I been exercising those urges and talents?
2. Am I more knowledgeable about popular culture or historical culture? What difference does it make?
3. How do I or can I use art, music, dance, theatre, and poetry to enrich my life? Which of these do I like most and why?
4. What do I know and appreciate about other cultures in my country and around the world? To what extent do I have questions and doubts about other cultures that some may identify as racist, ageist, or homophobic? What am I doing to change these perceptions?
5. What do human beings around the world hold most in common?

Social Development

1. What is my responsibility to my fellow human beings? How have I demonstrated that responsibility so far?
2. What do I need to work on to become a better companion, spouse, parent, member, friend, or employee?
3. Do I like people in general? Who are the friends on whom I can depend in a crisis? How would friends describe my character and personality? Of my current friends, who is most likely to attend my funeral?
4. What contributions am I making or planning to make to improve my family, friends, school, workplace, church, organization, community, or country?
5. What characteristics do I have that would make me a good partner?

These categories and questions are a first rough draft. They tend to focus on the personal and affective, but creative educators will ensure the questions are relevant to both liberal education and workforce education. This is only a partial construct to illustrate the potential of planning curriculum and instruction

Helping Students Make a Good Living and Live a Good Life

based on key human questions. For faculty and students, these kinds of questions may suggest new perspectives for what constitutes an integrated core of education for all as they did at the two universities noted below.

For over 70 years, Lawrence University in Wisconsin has required Freshman Studies, a two-trimester experience that is the introductory piece of its liberal arts/general education core.

> The curriculum is filled with an ever-changing and multidisciplinary list of books, films, and musical works that encourage students to explore the bigger questions in life in a deep and meaningful fashion. What is the good life? What does it mean to have an identity, and how does one find it? What is our place in the world as human beings, and how do we relate to our natural environment? How are we as individuals affected by society? (Hall, 2014, para. 2)

At Ursinus College in Pennsylvania, all first-year students take a required two-semester course, the Common Intellectual Experience. Here, too, key questions provide the framework: "What does it mean to be human? How should we live our lives? What is the universe, and how do we fit into it?" (Fong, 2014b, p. 30). These are the core questions that all human beings ask and that are reflected in a number of liberal education programs around the country. It is quite possible to create a liberal education/workforce education core experience based on Essential Questions.

Consider the challenge and the excitement that faculty groups might experience in workshops and seminars to further develop the categories and questions. Consider how faculty, once they agree on a basic set of categories and questions, might begin to translate this framework into learning events and opportunities—curriculum and instruction. Consider how faculty might use the basic framework to enhance and enrich existing learning, teaching practices, and programs. Consider how these questions might stimulate continuing conversations among students after class—face-to-face and through social media. Consider the activities of collaborative and active learning that could emanate from these questions. Consider the possibilities of enhanced motivation on the part of students and faculty because of the relevance of these

questions to a sound education. Consider how these questions could become the milestones and indicators of progress along the Student Success Pathway. Consider the joy that students might experience by engaging in learning experiences clearly relevant to their personal lives.

Construct 3: Contextual Learning. The Center for Occupational Research and Development (2012) is one of the champions of contextual learning and contextual instruction. Anchored in constructivism and based on theories of John Dewey,

> …learning occurs only when students process new information or knowledge in such a way that it makes sense to them in their own frames of reference (their own inner worlds of memory, experience, and response). The mind naturally seeks meaning in context by searching for relationships that make sense and appear useful. (para. 5)

What do I know and appreciate about other cultures in my country and around the world? To what extent do I have questions and doubts about other cultures that some may identify as racist, ageist, or homophobic? What am I doing to change these perceptions?

In other words, students learn best when they can connect new information to information they already know and then apply that information in new contexts.

Contextual learning is not a new concept. It has been researched and applied in K-12 and adult literacy for the last twenty years. Recently, community colleges have adopted it as a useful innovation and have begun to experiment with it in developmental education, college success courses, first-year experience courses, learning communities, and supplemental instruction.

Donna McKusick (2012), Dean for Developmental Education and Special Academic Programs at the Community College of Baltimore County, and author of *Making It Real: Using Contextualization for Student Success* (The Cross Papers, Number 15), provides a

brief history of contextualization and examples of how it has been applied in community colleges. She notes, "Contextualization holds promise for improving learning outcomes for learners at all levels of the curriculum" (p. 10) and lists examples of instructional platforms that support contextualization:

1. Contextualized technical education, which integrates basic skills into career and technical training programs;
2. Academic development and orientation courses, which contextualize content and skills about college success with materials representing philosophical themes or specific majors or careers;
3. Learning communities, which pair two or more courses and disciplines, providing opportunities for faculty to integrate course content;
4. Common book assignments across curricula and programs, where all students read a single book and faculty integrate the book themes into their courses;
5. Culturally responsive instruction, which integrates the cultural perspectives of the learners into the pedagogy and content of courses;
6. Supplemental Instruction, which provides opportunities for students to learn how to learn within the context of a specific discipline;
7. Mainstreaming, which provides at-risk learners with college-level instruction while integrating support into the curriculum; and
8. Service learning and learning outside the classroom, which provides students with the opportunity to extend their learning by applying it directly to real-life situations. (pp. 10-11)

McKusick makes a special point about the usefulness of contextualization for bridging the gap between liberal education and workforce education: "As a means to help learners construct knowledge, contextualization is an instructional technique that connects academic subject matter with real-world situations and applications" (p. 6). She cites the Department of Labor's Commission on Achieving Necessary Skills, the School-to-Work Initiative Act, and the Carl D. Perkins Career and Technical Education Act as legislation designed to connect academic preparation with workforce readiness that provides an incentive for community colleges to integrate academic and vocational education. She says, "all college students need to transfer what they are learning in general education to their majors, and what they are learning in their majors to the workplace" (p. 7).

So, how can contextual learning provide a framework—a construct—for bridging the divide between liberal education and workforce education and serve as a guide for educators committed to creating an Essential Education for all students? One answer is Washington State's Integrated Basic Education and Skills Training (I-BEST) program.

I-BEST is a nationally recognized model that boosts students' literacy and work skills so they can earn credentials, obtain living wage jobs, and put their talents to work for employers. I-BEST pairs two instructors in the classroom—one to teach professional and technical content and the other to teach basic skills in reading, math, writing, or English language—so students can move more quickly through school and into jobs. As students progress through the program, they learn basic skills in real-world scenarios offered by the job-training portion of the curriculum. Different instructors take different approaches to teaching the courses, but in every case the technical knowledge in one course is framed in the basic skills required of all students.

The Community College Research Center (CCRC) has been conducting research on I-BEST students in Washington for a number of years with the following conclusion: "Overall, the 34 colleges agreed that I-BEST is an effective model for increasing the rate at which adult basic skills students enter and succeed in postsecondary occupational education" (Wachen, Jenkins, & Van Noy, 2010, p. 3). In 2009, CCRC conducted a study on 31,000 basic skills students, including 900 I-BEST students. Controlling for differences in student background characteristics, the results showed that I-BEST students were more likely than other basic skills students to score higher on a post-basic skills test, persist into the second year, continue into credit-bearing coursework, and earn occupational certificates (as cited in McKusick, 2012, p. 12). Similar results have been found for students in programs of developmental learning communities, Supplemental Instruction, Reading Apprenticeship, the Accelerated Learning Program (Community College of Baltimore County), math programs such as Statway and Quantway, and FastStart (Community College of Denver).

Although McKusick primarily cites basic skills programs as the focus of contextual learning, there is no reason to believe that contextual learning should be limited to basic skills. If basic skills students can succeed in formats using contextual instruction, how much better might college-ready students succeed in similar formats that combine liberal education and workforce education?

Do educators create new courses to bridge liberal education and workforce education as suggested in Construct 1 above, or do they blend existing courses to provide for a more integrated education as suggested by the concept of contextual education? In both cases, the goal is to combine in some appropriate mix the theoretical and the practical, the knowing and the doing.

Construct 4: Projects and Problems. An old adage states, tell me and I forget, show me and I remember, involve me and I understand. This bit of wisdom is the essence of project-based learning, inquiry-based learning, and problem-based learning. While each of these approaches has its own champions and organizations, they overlap considerably as variations on processing information to solve problems by directly involving students. The website, Teacher Tap (n.d.), defines slight differences in the three approaches:

- Project-based learning is an approach to learning focusing on developing a product or creation.
- Inquiry-based learning is a student-centered, active learning approach focusing on questioning, critical thinking, and problem-solving.
- Problem-based learning is an approach to learning focusing on the process of solving a problem and acquiring knowledge.

All these approaches use active and collaborative learning. A structured problem, question, or project is designed, and groups of students work together to achieve an outcome. Students are more engaged when learning activities relate to the world they live in. Students are more invested when they are involved in designing and steering the process. The basic skills of analysis, critical thinking, collaboration, communication, and creativity are used throughout the execution of the learning activity. Several examples will illustrate the nature of these approaches.

As a professor of higher education at the University of Illinois between 1967 and 1975, I taught the basic graduate course, The American Community College, every semester. In addition to a series of mini-lectures, a textbook, and numerous required articles, I designed two project-based learning activities to focus the learning outcomes for students.

Early in the term, students participated in a project that required them to convince their colleagues of the value of a selected core function of the community college. Students signed up for a group that made the case for transfer education, career and technical education, developmental education, general education, or community education. Each group worked in collaboration to become knowledgeable of the function the members championed and were given 30 minutes of class time to make the case for retaining that function in the college. Part of the design included a class vote at the end of the presentations to eliminate one of the functions because of declining resources. The students who represented the function that was eliminated were given pink slips and lost their jobs at the college. Students enjoyed this activity and learned a great deal about all the core functions of the community college. They were also better prepared to participate in the second project, which was much more complex and time consuming; it was designed as a capstone experience for the course.

The capstone project became known as the Aquarius Community College Project, and even today a few of my students mention the project as one of the best educational experiences of their graduate years; some who became professors use the same project framework to teach their own graduate courses. The musical *Hair* had its Off-Broadway opening in 1967 and was very popular at the time. In this project, I had students organize in groups to create a model community college in which "peace would guide the planets and love would steer the stars," iconic lyrics from "Aquarius" (MacDermot, 1967/1968, track B6), a

> *If basic skills students can succeed in formats using contextual instruction, how much better might college-ready students succeed in similar formats that combine liberal education and workforce education?*

lead song from *Hair*. They were charged with designing an innovative community college for the future that would improve and expand student learning as the primary purpose of the college. They created mission and value statements, organizational structures, curricula, teaching strategies, facilities, resources, criteria for employment, and evaluations. Each of the four or five groups of six to eight students produced a written document of the plan and then had an hour to present the model. Experienced leaders from area community colleges were invited to each presentation to critique the models. One group created a major video of their model; another group took over a local mall where class members went from store to store to learn about the various components of the college; another group rented a bus and took the entire class to a neighboring rural community sharing their model along the way and noting how it fit the small community we drove through.

Readers might be thinking that it is fairly easy to engage a mature group of students with a vested interest in learning to become this involved in a project. But students at all grade levels and maturity can prosper in this approach. The following is an example of problem-based learning with fourth graders, supported by the Autodesk Foundation and relayed by the Foundation's president years later.

> Here in Marin County, where we actually promoted through the Autodesk Foundation a tremendous number of projects, there was an outstanding project that really birthed a lot of other projects, in the whole region and in the country, and that was in the early, mid-90s—the fresh-water shrimp project. And this was a project that fourth graders [worked on] at Brookside School in San Anselmo, California, in which two classes worked together to save the California fresh-water shrimp.
>
> The problem was that up in [the] West Marin area, a great cattle region, the cattle were destroying the creek beds—small creek beds that were the home of this unique California fresh-water shrimp. They did this by just walking through the creeks, stirring up dirt, destroying the water, and the problem was: How do you get them to stop doing that? When you spoke to the cattle ranchers, on whose land these creeks existed, they didn't want to do anything about it because they thought it would be too expensive to put up fencing to keep the cattle from going there. So the kids actually worked with the ranchers—a human relations kind of situation where they had to take into account the cattle ranchers' interests, not just berate them morally, but they had to see: How do we get them to work together with us?
>
> So the solution—and it took a long time to execute the solution—was for the kids to raise money and be able to finance the planting of shrubbery along the creek beds, and build cattle bridges so the cattle could cross the creek. This was done with farmers throughout the region. It took several years to do this—the kids testified in the U.S. Congress about this problem, tremendous publicity ensued for this species [that risked] becoming extinct, and as a result they were able to save the California fresh-water shrimp. (Edutopia, 2002, paras. 5-7)

Problem-based learning, project-based learning, and inquiry-based learning are powerful approaches to improving and expanding learning. They can be applied to the challenge of creating an Essential Education that bridges liberal education and workforce education. Instead of thinking about courses as the design for structuring what needs to be learned, educators need to consider the problems, projects, or questions (or a combination of these activities) that can address the most essential learning required of all students.

For example, if one of the overarching goals or areas in Essential Education is helping students to better understand, appreciate, and celebrate diversity, what are the questions, the problems, the projects that could be constructed to lead students to some level of competency about diversity? Maybe a class project in which each student traces his or her background as far back as possible and describes the positive and negative factors related to that background. Maybe a class project in which class members select and

Problem-based learning, project-based learning, and inquiry-based learning are powerful approaches to improving and expanding learning.

analyze the socioeconomic conditions of a particular neighborhood by interviewing residents and analyzing public data. Maybe class members could plan a collegewide event to celebrate the diversity on campus and to educate students about the various forms of diversity.

Using this approach, there are literally hundreds of lessons that can be designed to involve and engage students in real-life activities that reflect the elements of an Essential Education. Faculty might find it challenging to create a program that does not involve traditional course structures, but thinking about Essential Education as a process rather than a product may uncover some very productive designs.

Construct 5: Activity Analysis. As reviewed in the section, "A Brief History of General Education," W. W. Charters created one of the first general education programs in the country. In the 1930s, Charters was a well-known researcher who was invited to Stephens College to create a more useful education for the students. He had the students keep a journal for a week to record what they did each day, what they thought about what they did, what they thought about in general, and how they interacted with those around them. He, then, collected the journals and created a research methodology—activity analysis—to codify the content of the journals. From the summaries of these real-life experiences, he organized program objectives and core courses that served as a model of general education for many colleges during the 1930s and through the 1950s.

Activity analysis became a useful and practical methodology and is one of the primary approaches still in use by leaders in career and technical education. To determine the skills required for competency in a job or in a key component of a job, trained analysts observe what highly competent workers actually do on the job and translate that analysis into instruction and training guides. Interviews with skilled workers or with business executives and key staff also add important information to strengthen the analysis. The DACUM—developing a curriculum—process emerged in the late 1960s from the vocational education movement as one example of activity analysis still in use.

Uri Treisman, well-known contemporary researcher and innovator in creating new approaches to teaching

mathematics, used a version of activity analysis in his dissertation (1985) at the University of California, Berkeley. Treisman taught calculus at Berkeley and was puzzled that his African American students did not perform as well as his Caucasian and Asian students since, to be admitted to Berkeley, all students were pretty much equal academically. For his dissertation, Treisman videotaped his calculus students in the cafeteria, in the residence halls, in the libraries, and in the daily routine of their collegiate experience. He applied activity analysis to the recorded information and discovered that Caucasian and Asian students always studied in groups but African American students never or seldom did so. Using this information, Treisman taught his African American students to study in groups, and they were soon performing equally to the other students in calculus. Treisman's contribution to improved education and student success has been substantial, and today he heads the Charles A. Dana Center at The University of Texas at Austin, a major center of mathematics reform.

Activity analysis may be an innovative approach to creating an Essential Education that provides a quality education for every student. Applying activity analysis to today's diverse students with assistance from social media now available could produce a significant reservoir of data for designing a new program of Essential Education. The following strategies suggest a number of options for collecting information:

- *Journals*: Ask all new students (or a random sample) to keep an electronic journal, similar to the one Charters asked of students at Stephens College, for one week. Categories for responses (e.g., home life, relationships, college work, key worries) could be created to make it more efficient for students to record and for researchers to analyze.
- *Class Assignments*: Identify selected courses and instructors who are willing to incorporate class assignments designed to collect information. Assignments could be designed to frame many of the questions in Construct 2, or project-based assignments could be constructed around areas of key information such as projects to determine dating habits of students, concerns about world issues, perceptions about diversity, dreams about the future, economic challenges, and family issues.

- *Student Designs*: Why not engage students directly in creating their own versions of an Essential Education? In a special issue of Diversity and Democracy, editor Kathryn Peltier Campbell (2014) set the context for involving students: "… these authors are calling on higher education to create a more democratic approach—one that allows students to be 'full participants' in the educational experiences they help create" (p. 3). Using a problem-based approach, an entire course could focus on the task of designing an Essential Education for today's students. This monograph could serve as an introductory text. A faculty committee charged with creating a new design of Essential Education could work with the students as participants or as advisors.
- *Chat Rooms*: All students could be urged to participate in a month-long project to register their views in a chat room around identified categories and questions. The project could be announced at a collegewide convocation to kick off a new year and reinforced in classrooms by instructors; special class projects could be built around some of the categories appropriate to a specific course.
- *Facebook*: College researchers, graduate students interning at the college, or advanced or honor students, could analyze information on the Facebook pages of participating students to determine key issues and trends. Enrolled students could be asked to address a specific question on their Facebook page or in the college-established Essential Education Facebook group for analysis by researchers.
- *Twitter*: Similarly, students could be assigned to follow their friends' conversations on Twitter for a week and to analyze the content. Students could also tweet key questions and analyze the answers.
- *Focus Groups*: Students could be invited to participate in focus groups, both face-to-face or virtually, built around

> *Applying activity analysis to today's diverse students with assistance from social media now available could produce a significant reservoir of data for designing a new program of Essential Education.*

key issues relevant to an Essential Education. Instructors could schedule several class meetings as a focus group on topics and issues commensurate with the discipline and content of the class, or they could use Skype or similar technology for the conversation.

There are numerous ways to collect information from students that can be incorporated in existing classes and programs. What today's students think about issues and what they would desire in a substantive educational experience provides a rich reservoir of information that has not been fully explored. A contemporary version of what Charters accomplished 80 years ago awaits the creative educators willing to use this approach.

Construct 6: Applied Learning. There is a great deal of overlap in key concepts in these constructs, and applied learning is a good example. The construct on questions requires applied learning; the construct on problem and project-based learning requires applied learning. All sound education requires applying learning to new contexts. John Dewey's philosophy permeates the foundations of these constructs, and that philosophy is built on applied learning or learning by doing.

Applied learning is so central to a sound education that some colleges have built their entire culture around the concept of work. The Federal Government defines a "work college" as a type of institution at which student work is an integral and mandatory part of the educational experience. A Work Colleges Consortium is quite small and includes such institutions as Alice Lloyd College and Berea College in Kentucky, College of the Ozarks in Missouri, and Warren Wilson College in North Carolina. Antioch College in Ohio is probably the best known such college. Work colleges were often founded by leaders who believed in the value of integrating the academic curriculum with real work on campus or in the community, and they often attracted students in financial need.

Although only a very few colleges adopted the philosophy of requiring all students to work, many colleges offered programs in cooperative education for selected majors where work experience enhanced opportunities for more integrated learning and

employment. In more recent years, school-to-work initiatives, supported by the U.S. Departments of Labor and Education, have expanded work-based learning opportunities. Many colleges today offer cooperative education, apprenticeships, on-the-job training, internships, and practicums. The very presence of these work-based programs suggests that colleges value them and continue to make them part of the core educational experience. These programs are often attempts to integrate liberal education with workforce education, and they provide a foundation for creating an Essential Education to bridge the divide.

One of the most productive avenues for designing and creating an Essential Education framed around the concept of applied learning is to experiment with programs using service learning as the starting point. In their seminal work on the American community college, Arthur Cohen and Florence Brawer (2008) point out that service learning is deeply connected to general education:

> The efforts to integrate service-learning into the community college curriculum in the 1990s echoed the general education ideal. Service-learning emerged as an attempt to reduce the growing disparity between the liberal arts as portrayed in the disciplines and its original purpose of placing learning in its larger societal context.... Service thus forms a direct part of students' learning experience, with a clear connection between academic courses and real-world problems.... (p. 377)

Campus Compact is a national organization of over 1,000 institutions of higher education committed to service learning. In its 2012 survey (2013), 557 colleges responded:

- Ninety-five percent offer courses that include service learning components.
- Sixty-two percent require service learning as part of the core curriculum.
- Forty-four percent of the students participate in some form of community engagement.
- In 2011-2012, the work students contributed to their local communities was estimated to be worth $9.7 billion.

Service learning is well established in the nation's institutions of higher education. It is very popular in community colleges, where it finds a natural home in the philosophy of a college deeply committed to engaging with its local community—and how better to do that than to arrange many such connections between students and community organizations and agencies. According to AACC, two-thirds of the 1,200 associate degree-granting colleges in the U.S. offer service learning. Between 1994 and 2012, AACC managed a national project, Community Colleges Broadening Horizons through Service Learning, which has had significant impact on embedding service learning into the colleges. Today, most states have a statewide organization championing service learning, and hundreds of community colleges have established centers to encourage and implement service learning.

As Patton (2012) explains, "Service learning meshes course context with activities that address genuine community needs. AACC's research indicates that this pedagogy teaches workforce skills, improves student engagement, increases student learning outcomes and retention, and fosters civic responsibility" (para. 4). Service learning is one example of applied learning. Applied learning is putting knowledge to work; it is active, hands-on learning; it is experiential learning; it is, as noted above, Dewey's idea of learning by doing.

Applied learning, and its spin-off service learning, has great potential to provide a basic framework for an Essential Education that incorporates core elements of liberal education with core elements of workforce education. The following examples illustrate this potential.

Ursinus College in Pennsylvania is a liberal arts college that recently established an interdisciplinary U-Imagine! Center for Integrative and Entrepreneurial Studies. The mission of the Center is to assist students in learning the fundamentals of liberal education (communications and scientific, cultural,

One of the most productive avenues for designing and creating an Essential Education framed around the concept of applied learning is to experiment with programs using service learning as the starting point.

and historical literacy) by applying that learning in an entrepreneurial context by developing ideas for a marketable product or service or creating solutions to social problems. Students are also encouraged to participate in internships, externships, career development, and service learning to apply their learning. The president of Ursinus clearly articulates the theme of this monograph: "Students should cultivate the ability to make a living, but also to make their lives worth living" (Fong, 2014a, para. 11).

Another example illustrates how one course can incorporate both English language communication skills and career exploration skills. A professor of English at the University of Missouri at Columbia tells her story:

> For the last ten years or so, I've been piecing together, often clumsily…a three-credit course on career exploration. Based on the premise that students can apply the writing and research skills they've developed in the liberal arts to launch their job searches, this course defends the choice of a liberal arts major, while at the same time confronting the challenging job market these students face…. Rather than refer students to career professionals, we need to partner with these counselors, in our classrooms and in their career centers. Only if we work collaboratively can we give our students in the liberal arts the career guidance they need and deserve. (Okker, 2014, pp. 1-2)

Both examples—one a center at a college impacting many students and one a single course impacting fewer—illustrate efforts by liberal arts faculty and administrators to bridge the divide between liberal education and workforce education. Many models of an Essential Education can be constructed in which applied learning becomes the basic principle around which programs, experiences, and core courses are organized. Consider how applied learning activities could bring to life the core courses suggested in Construct 1. Consider how applied learning could frame the activities designed for students to explore the Essential Questions in Construct 2. And Constructs 3 (Contextual Learning) and 4 (Projects and Problems) cannot function without applied learning.

Construct 7: Student Success Pathways. The core business of education from kindergarten through graduate school has been to help students successfully navigate the curriculum, assisted by instructional processes and support services, to completion of their goals. One of the most visible and useful frameworks for mapping this journey through the institution is the Student Success Pathway (SSP). The SSP is a flexible model that can be applied to every sector and level of education. In the community college, the most traditional model maps a student's journey beginning in high school and includes a series of components reflecting the steps the student takes to goal completion: college admission/intake, developmental education, first-term college-level courses, continuing progress, and completion.

The model of the Student Success Pathway is deeply embedded in the culture and history of the community college. Tech Prep was a forerunner of the current emphasis on career pathways which are championed by career and technical educators across the country. Most of these career pathway models focus on integrating academic and career and technical education, and aligning curriculum between high schools and postsecondary education. The career pathway is defined as "…a coherent, articulated sequence of rigorous academic and career courses that embed the knowledge and skills necessary to prepare learners to pursue a wide range of career opportunities" (League, 2010, p. 52). The career pathway focuses primarily on courses while the Student Success Pathway reflects all the programs, practices, and activities (including courses) that impact the student from intake through completion. Career pathways should be viewed as

The Student Success Pathway provides a visible and integrated roadmap for the core business of the community college and should be used as the institutional framework for creating strategic and long-range plans. The Student Success Pathway also provides a visible and integrated roadmap for students and should be used as the framework for their individual educational plans.

an important subset of specific course pathways that can be incorporated in the more comprehensive Student Success Pathway.

The Bill & Melinda Gates Foundation, as well as other foundations and agencies, have extended these career pathway models to create the concept of the Student Success Pathway that applies to all students and to all programs. In its signature initiative to double the number of completers—Completion by Design—the Gates Foundation charged funded colleges to:

> Empower an interdisciplinary, cross-campus delegation of faculty and administrators to work together to analyze their own systems, model and learn from other systems, and build a new and better system, *a model pathway to completion* [emphasis added] that employs proven and promising practices and uses next generation technology in ways that reduce costs and improve results. (Pennington & Milliron, 2010, p. 4)

The Community College Research Center also supports the concept of Student Success Pathways and how they should be created:

> Colleges should create a cross-functional committee or task force of faculty, student services staff, and administrators to map out the experience of students from the time they first make contact with the college, examine the interactions between students and college programs and services at each point along these "pathways," and assess the extent to which college policies and practices help or hinder students from making progress toward successful completion. (Jenkins, 2011, p. 34)

In *Access, Success, and Completion: A Primer for Community College Faculty, Administrators, Staff, and Trustees*, the author defines the student success pathway:

> The Student Success Pathway provides a visible and integrated roadmap for the core business of the community college and should be used as the institutional framework for creating strategic and long-range plans. The Student Success Pathway also provides a visible and integrated roadmap

for students and should be used as the framework for their individual educational plans. (O'Banion, 2013, pp. 10-11)

Using the Student Success Pathway as a framework for creating an individual educational plan opens up some new ways of thinking about how best to educate students. There are two ways of thinking about individual educational plans. Students, with the help of advisors, can create an individual plan by selecting from the resources already packaged on the institution's shelves—a plan limited to the curriculum and the services the faculty have created. The process is an attempt to match the student's needs and interests to what the college has to offer; in essence, the student is bent to the needs and resources of the college.

Another way to think about the individual educational plan is to begin with the individual student as the generator and driver of what that individual needs. Such an approach requires the student to participate as a managing partner in the design and execution of the plan. In this approach, the student is the subject matter, and the resources

An Essential Education can be tailored to meet the specific needs of an individual student and is illustrated by the milestones or goals agreed upon.

of the institution (i.e., faculty, curriculum, programs, services, technology, facilities, materials, labs) are bent to the needs of the student. Creating an individual learning plan using this approach is an ideal seldom realized in the bureaucratic structures we have built to handle mass education in the 21st century, but it is an ideal we may be able to achieve in the future.

With increasing ability to design educational experiences for an individual, using technological applications unimagined even a few years ago, the question must be asked: Does an integrated core of courses even make sense anymore? Or can we design Essential Education around an individual, so that students use very different approaches to arrive at similar sets of outcomes or outcomes tailored to their specific needs? Instead of a core of learning experiences created by the faculty and required of every student, perhaps we can use the framework

of the Student Success Pathway to create a series of learning experiences tailored to the individual needs and goals of each individual student—thus, truly realizing the deeper implications of individualized education.

An Essential Education is an integrated learning experience that incorporates the best content, knowledge, skills, and attitudes from both the heart and the head, the knowing and the doing, the cultivated mind and the skillful hand— an integrated learning experience that includes both bread and roses.

The Student Success Pathway does not need to prescribe the content of Essential Education, but it can provide a framework directed toward success in which the content, goals, milestones, and experiences can be organized. Students can ask, "What do I need to do at this college to become successful in my career and my life?" Working with faculty and counselors to assess strengths, weaknesses, and goals, an individual plan emerges and is recorded as key elements of the pathway. An Essential Education can be tailored to meet the specific needs of an individual student and is illustrated by the milestones or goals agreed upon.

As noted above, these constructs overlap a great deal. One can begin to identify the elephant by taking hold of its trunk, its ear, or its leg, but in the end, all lead to an elephant. Educators can begin their efforts to create an Essential Education by beginning with any of the constructs in this monograph, but, in the end, they should all lead to what educators consider an Essential Education that provides an integrated quality experience for every student.

Creating an Essential Education

The primary purpose of this monograph is to try and convince educators—especially those working in community colleges—to set aside their partisan advocacy of liberal education or of workforce education and to become an advocate of an approach that bridges this divide. Here we have called that education an Essential Education that provides a quality experience for every student. An Essential Education is an integrated learning experience that incorporates the best content, knowledge, skills, and attitudes from both the heart and the head, the knowing and the doing, the cultivated mind and the skillful hand—an integrated learning experience that includes both bread and roses. An Essential Education helps students make a good living and live a good life.

We are still near the beginning of a new century and a new millennium that opened with a great deal of hope for the future. Transformation was the rallying cry of reformers—transformation in the church, in technology, in government, in global perspectives, in diversity, in family—and transformation in education. In education, we expanded our horizons with a great deal of new research and in creative initiatives generously funded by an increasing number of foundations. We learned better to partner with each other, with business and industry, with states, and with students. We became more entrepreneurial and less dependent on our historical supporters. The country identified the community college as a key player, if not the key player, to ensure a vital democracy and a thriving economy. At the same time, the barriers to transformation, the challenge to change, the opportunity to create an Essential Education, appear more formidable than ever.

I have long held the position that our primary challenge in education resides in the limitations placed on us by the historical architecture of education—the traditional ways of doing our work that we have inherited from the past and which we seem incapable of correcting. (See O'Banion, T., *A Learning College for the 21st Century*, 1997.) We are stuck in educational models developed in the 18th century for an agricultural economy and in the 19th century for an industrial economy. Public schools still let out at 3:00 in the afternoon because in the 1800s students needed to milk the cows, gather the eggs, and feed the hogs. We still operate in chunks of time such as the 50-minute class because in the 1900s we tried to duplicate the efficiency of building Model-T Fords on an assembly line. The school bell is an artifact of the factory whistle. Roger Moe once described education as "1,000 years of tradition wrapped in 100 years of bureaucracy" (Armajani, Heydinger, & Hutchinson, 1994, p. 1).

We have a vested interest in keeping traditional systems alive. Terrence Robinson, Director of Business Development for Cuyahoga Community College's Corporate College in Ohio, describes the challenge in a creative simile:

> Our current education system is similar to a wealthy patriarch who is brain dead and has had a complete systems failure but is kept on life support. He is no longer functional or productive, but because so many depend on him and have a special interest in his survival, no one is willing to pull the plug. (as cited in O'Banion, 2014, para. 3)

The historical architecture of education is the primary barrier to substantive change and transformation. It affects policy, programs, practices, and personnel, and our response has been to see change as a piecemeal process—tucking up a practice here, adding on a prosthetic technology there, or launching here and there a boutique program for 20 students. We have yet to create a unified front of educational innovators charged with the task of designing a framework and a system of education appropriate for the 21st century.

In the meantime, we cannot wait for that kind of transformative change; we have to move forward in the reality of the present to change what our culture will allow. And if we are to create a new kind of Essential Education to deal with an old and thorny problem that continues to divide our curriculum, our faculty, and our students, we must give up some old ways of thinking.

We must give up the idea that a student will be better educated if there is a smorgasbord of courses that meets the general education requirements. As colleges in the 1970s and on abandoned the required core of courses, faculty added new courses in great numbers to meet the general education requirements. Students today select from a menu of courses in which any of the thirty courses listed for the humanities will meet the three-hour credit requirement for humanities. There are colleges that offer as many as forty to fifty courses to meet the social science requirement. These distributed or cafeteria models of general education are prevalent today across all levels of higher education. There is no longer any integrity in the curriculum; instead many faculty use the curriculum as their own playground

to develop courses that reflect their own interests and what they want to teach rather than to create courses designed for what students need to learn. The distributed curriculum to meet general education requirements is a cop out on the part of faculty who should do, instead, the really hard work of agreeing on an integrated core of education for all students.

Thomas Bailey and his colleagues at the Community College Research Center, in one of the most substantive books that will be written in this decade, *Redesigning America's Community Colleges: A Clearer Path to Student Success*, identify the cafeteria model of courses and services as the primary barrier to student success in community colleges:

> Throughout this book, we have argued that community colleges are designed and operate according to a cafeteria or self-service model. While colleges organized in this way do an excellent job of providing affordable access to college courses, they are not well configured to help students enter and complete high-quality programs of study—programs that prepare them for success in further education and advancement in the labor market. (Bailey, Jaggars, & Jenkins. 2015, p. 199)

We must give up the idea that an agreed-upon list of learning outcomes is a solution to the distributed curriculum. Responding to criticisms of the distributed curriculum, educational leaders and accrediting agencies have required or urged faculty members to create lists of learning outcomes to provide a framework for general education. Having the faculty agree on a list of core learning outcomes is a good step. The challenge is in the implementation. Faculty are supposed to include learning activities for the learning outcomes in each course they teach, and they can usually document that effort. In one community college, learning outcomes from the list have been incorporated into over 200 courses. But how are students to meet all the learning outcomes if they are distributed across hundreds of courses or even a few dozen? How do we know that the outcomes are distributed equally among courses; what if two or three of the outcomes make up half or more of the learning activities embedded in a handful of key courses? How do students aggregate an integrated core of learning if they specialize early in vocational

Helping Students Make a Good Living and Live a Good Life

If the learning outcomes are so important and include the core learning outcomes every student should achieve, then why don't colleges just create a required course for each of the outcomes to better ensure that students achieve the outcomes?

or other courses that may not be subject to the inclusion of learning outcomes? How does the college track part-time students to ensure they have met all the learning outcome requirements? Can we be sure that the learning outcomes, even though documented in the syllabus, are deeply embedded in the course and not just add-ons to meet requirements? Can we be sure that faculty understand how to teach for the outcomes in their courses—and are doing so? How does the college evaluate the faculty on how well they implement the outcomes? How does the college evaluate the extent the student has achieved an integrated core of learning based on the outcomes? If the learning outcomes are so important and include the core learning outcomes every student should achieve, then why don't colleges just create a required course for each of the outcomes to better ensure that students achieve the outcomes?

An engaged community college faculty member provides a perspective on learning outcomes and their assessment:

> Having served as our campus' Student Learning Outcomes coordinator from 2007 to 2014, I've developed a fair amount of skepticism as to the benefits of outcomes assessment. Considering the tremendous resources (money, time, mental anguish, etc.) that we devote to the process, I find myself frequently asking the question, "To what end?"….I have yet to see any compelling data that shows that students, programs, institutions, etc. really do "improve" in any meaningful way as a direct result of outcomes-based assessment….I do not believe for one moment that any college or university would continue to assess outcomes were the process no longer mandated by the accrediting agencies. We ought to be honest with ourselves on this point: We assess because we are compelled to do so, not because it improves student learning. (Koutroulis, 2014)

We must give up the idea that our curriculum is more important than their curriculum. Historically, there has been a tug of war regarding required college courses between those who advocate for liberal education and those who advocate for workforce education. Those in the liberal education camp often rely on tradition and philosophy to make their case: There has always been a core of experiences required to create the well-rounded person, they say. Those in the workforce education camp often rely on the requirements of business and industry for qualified workers to make their case: We cannot add any more liberal education courses to the curriculum because we need all our courses to guarantee that our workforce is well prepared, they respond. Sometimes state and federal requirements have been stipulated that place limits on which camp prevails.

In reality, the curriculum does not belong to the faculty, or to any group of faculty, or even to the college. In systems of public education, the curriculum belongs to the society in which we are all equal partners. The faculty is usually assigned as the steward of the curriculum with the assumption that its members will place the needs of society and the needs of students above their own needs and interests. To the extent faculty members fail in their stewardship of the curriculum, there is the danger that the state or the federal government could assume responsibility for the curriculum.

Continuing disagreement over the curriculum by factions of the faculty is not a healthy option for the future of education. Faculty must negotiate with each other to design the best education for the society and the students that represents the best from both liberal education and from workforce education. A new curriculum designed as an Essential Education for all students is an opportunity worth considering. As a title of a recent article suggested, "We don't need more STEM majors. We need more STEM majors with liberal arts training" (Jackson-Hayes, 2015).

We must give up the idea that the course must be the primary way we deliver education. Chopping up knowledge into chunks so it can be delivered through a course may have been an efficient way to organize learning experiences when masses of new students flooded into high schools and colleges, but there are unintended consequences that have created major problems for educators. Knowledge, or what students

need to learn, is much too complex to be chopped into chunks for which three or four hours of credit are awarded. As Peters (1994) pointedly asked, "Isn't it a coincidence of cosmic proportions that it takes exactly the same billable unit of work to learn the plays of Shakespeare and the differential calculus? Or maybe the guest has been amputated to fit the bed" (p. 23).

The limitations of organizing learning experiences into courses and credits is most evident in the grade point average (GPA), which plays such an important role in making judgments about students. GPA is like sausage; it is better not to know the ingredients that go into it. It includes an average of all the courses and credits a student has accumulated over a period of time and the grades students earn for each of those courses. While GPA may be an efficient marker and predictor for some purposes, consider what is being combined when we know that "the course grade is an inadequate report of an inaccurate judgment by biased and variable judges of the extent to which a student has attained an undefined level of mastery of an unknown proportion of an indefinite material" (Dressel, 1983, p. 1).

Courses make it too easy to chop up knowledge, to assign a number of credits, and to assign grades. They also make it easy for faculty to form silos of departments and divisions, to use primary textbooks when knowledge is changing so rapidly that what students need to know cannot be contained in a single document, to assign workloads for faculty, and to calculate graduation requirements. The unintended consequences of using courses and credits as the common denominator of the educational enterprise may far outweigh the convenience they provide.

The idea of the course is so deeply embedded in the culture of education it is very difficult to think of alternatives. The course is a handy structure that allows us to communicate easily while at the same time limiting our thinking about what is possible. For the foreseeable future, the course will dominate as a unit of efficiency. Construct 1 even suggests a core of courses as a viable alternative. But if we can consider the challenge of creating an Essential Education that bridges an historical divide, we can also consider constructing learning experiences that do not always rely on the idea of the course. It will be challenging and refreshing to consider how core learning experiences can be created using the approaches outlined in the constructs suggested in this monograph: questions, contextual learning, problem-based learning, activity analysis, applied learning, and the Student Success Pathway.

Significant change involves giving up some ideas and embracing some new ones. The four ideas we must give up or reconsider are rooted in the historical architecture of education and deeply embedded in curricular frameworks, assessment and accountability structures, and shared communication patterns across all levels of education. They place formidable barriers on innovation and experimentation. Educators need to make these limitations more visible so they can be discussed, analyzed, and changed. Forums on college campuses and at national conventions need to be scheduled so that educators can address these barriers. The historical architecture of education places many limitations on education, but addressing these four barriers is a good place to begin this much needed conversation—a conversation necessary for those who will create an Essential Education for all.

If we can create a new Essential Education that truly incorporates the best from liberal education and from workforce education, we may one day hear our students singing,

> Bread and Roses! Bread and Roses!
> Hearts starve as well as bodies,
> Give us bread and give us roses.

It is time for us to restructure the historical architecture of education and to work together to combine the very best from two primary streams of education that dominate the educational enterprise. Leaders have been telling us for decades that we need to integrate the concepts of the skillful hand and the cultured mind, of the heart and the head, of the soft skills and the hard skills, of doing and being. We need to combine the best from liberal education and workforce education to create an Essential Education that will help our students make a good living and live a good life. That is the challenge set forth in this monograph—a challenge belonging to all educators who are courageous enough to face it.

References

Altschuler, G. (2014). A defense of liberal learning. *Inside Higher Ed.* Retrieved from https://www.insidehighered.com/views/2014/05/15/essay-new-book-beyond-university

American Association of Community Colleges (AACC). (1988). *Building communities: A vision for a new century.* Washington DC: Author.

American Association of Junior Colleges. (1964). *A national resource for occupational education.* Washington, DC: Author.

Armajani, B., Heydinger, R., & Hutchinson, P. (1994). *A model for the reinvented higher education system: State policy and college learning.* Denver, CO: Education Commission of the States.

Association of American Colleges and Universities (AAC&U). (n.d.). What is a 21st century liberal education? Retrieved from http://www.aacu.org/leap/what-is-a-liberal-education

AAC&U. (2002). *Greater expectations: A new vision for learning as a nation goes to college.* Washington, DC: Author.

AAC&U. (2011). College learning for the new global century: An executive summary of the LEAP report. Washington, DC: Author.

AAC&U. (2014). *The LEAP challenge: Make "signature work" a goal for all students—and the expected standard for quality learning in college.* Draft Working Paper. Washington, DC: Author.

AAC&U Board of Directors. (2010). *The quality imperative: Match ambitious goals for college attainment with an ambitious vision for learning.* Washington, DC: AAC&U.

AAC&U Board of Directors. (2013). Diversity, equity, and inclusive excellence. A Statement of the Board of Directors of the Association of American Colleges and Universities. *Liberal Education*, *99*(3), 5.

Association for Career and Technical Education. (n.d.). What is CTE? Retrieved from https:www.acteonline.org/general.aspx?id=120

Aoun, J. E. (2015, April 20). A complete education. *Inside Higher Ed.* Retrieved from https://www.insidehighered.com/views/2015/04/20/essay-calls-ending-divide-between-liberal-arts-and-practical-education

Bailey, T., Jaggars, S., & Jenkins, D. (2015). *Redesigning America's community colleges: A clearer path to student success.* Cambridge, MA: Harvard University Press.

Barlow, M. (1976, May). The vocational age emerges, 1876-1926. *American Vocational Education*, *51*(5), 45-58.

Bell, D. (1966). *The reforming of general education: The Columbia College experience in its national setting.* New York: Columbia University Press.

Blank, W. (2010). Foreword. In C. Fenton & B. Watkins, *Teaching and learning strategies for 21st century workforce education* (pp. iii-ix). Perkins Professional Development Institute, College of Central Florida. Florida Department of Education.

Boggs, G. (2015). *Facing change in the community college: Leadership issues and challenges.* A joint publication of the Roueche Graduate Center, National American University, and League for Innovation in the Community College.

Campus Compact. (2013). *Creating a culture of assessment: 2012 Campus Compact annual member survey.* Boston, MA: Author.

Cappelli, P. (2013, November 15). Why focusing too narrowly in college could backfire. *The Wall Street Journal.* Retrieved from http://www.wsj.com/articles/SB100014241278873241394045790166627188685576

Carnevale, A. (2014). Foreword. In Mellow, G. & Heelan, C. (Eds.), *Minding the dream: The process and practice of the American community college* (2nd ed.). Blue Ridge Summit, PA: Rowman & Littlefield Publishers, Inc.

Carnevale, A., Strohl, J., & Gulish, A. (2015). *College is just the beginning: Employers' role in the $1.1 trillion postsecondary education and training system.* Washington, DC: Georgetown University Center on Education and the Workforce.

Center for Occupational Research and Development. (2012). What is contextual learning? Retrieved from http://www.cord.org/contextual-learning-definition/

Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco, CA: Jossey-Bass.

Doyle, A. (n.d.) *How often do people change jobs?* Retrieved from http://jobsearch.about.com/od/employmentinformation/f/change-jobs.htm

Dressel, P. (1983). Grades: One more tilt at the windmill. In A. W. Chickering (Ed.), *Bulletin* (pp. 3-21). Memphis, TN: Memphis State University Center for the Study of Higher Education.

Drummond, M. (n.d.). *Career technical education white paper.* Sacramento, CA: Chancellor's Office, California Community Colleges.

Edelstein, D. (2014, January 21). The humanities are an existentialism. *Inside Higher Ed.* Retrieved from www.insidehighered.com/views/2014/01/21/essay-argues-humanities-are-existentialism

Helping Students Make a Good Living and Live a Good Life

Edutopia. (2002, April 25). *Bob Pearlman: Project-based learning.* Retrieved from http://www.edutopia.org/bob-pearlman-project-based-learning

Eisenstein, S. (1983). *Give us bread but give us roses: Working women's consciousness in the United States, 1890 to the First World War* (ISBN 0-7100-9479-5). London: Routledge.

Fain, P. (2014, June 17). Open access and inequity. *Inside Higher Ed.* Retrieved from https://www.insidehighered.com/news/2014/06/17/new-book-says-community-colleges-should-tighten-their-admissions-policies

Ferrall, V. (2015, January 27). Valediction for the liberal arts. *Inside Higher Ed.* Retrieved from https://www.insidehighered.com/views/2015/01/27/essay-offers-valediction-liberal-arts

Field, K. (2014, April 7). Biden announces drive to award credit for apprenticeships. *The Chronicle of Higher Education.* Retrieved from http://chronicle.com/article/Biden-Announces-Drive-to-Award/145809/

Fong, B. (2014a, February 2). Liberal arts are as vital as ever. *Philadelphia Inquirer.* Retrieved from http://www.pressreader.com/search?newspapers=1014&query=Liberal%20Arts&stop=2014-02-02&start=2014-02-02

Fong. B. (2014b). Cultivating "sparks of the divinity": Soul-making as a purpose of higher education. *Liberal Education, 100*(3). Retrieved from https://www.aacu.org/liberaleducation/2014/summer/fong

Fowke, E., & Glazer, J. (1973). *Songs of work and protest.* New York: Dover Publications.

Gill, R., & Schultz, A. (2014). *Community colleges and 21st century skills: Skills panels to assist student career success.* Quincy, CA: New World of Work. Retrieved from http://newworldofwork.org/wp-content/uploads/2015/02/New-World-of-Work-Skills-Panel-Report-April-2014.pdf

Hall, A. (2014, November 6). This small Midwestern college is challenging every student to ask life's big questions. *The Huffington Post.* Retrieved from http://www.huffingtonpost.com/2014/10/31/lawrence-university-freshman-studies-big-questions_n_6042434.html

Harris, B. (2014, August 21). California community colleges chancellor Brice W. Harris applauds final legislative approval of bill allowing community colleges to confer bachelor's degrees [Press release]. Retrieved from http://californiacommunitycolleges.cccco.edu/Portals/0/DocDownloads/PressReleases/AUG2014/MS_SB850BlockPassage_8_21_2014.pdf

Hart Research Associates. (2013). It takes more than a major: Employer priorities for college learning and student success. *Liberal Education, 99*(2). Retrieved from https://www.aacu.org/publications-research/periodicals/it-takes-more-major-employer-priorities-college-learning-and

Hayward, G. C., & Benson, C. S. (1993). *Vocational-Technical education: Major reforms and debates 1917-present.* Washington, DC: Office of Vocational and Adult Education, U.S. Department of Education. Retrieved from ERIC database. (ED3699598)

Hentschke, G., Tierney, W., & DeFusco, M. (2014, June 9). *A research agenda for for-profit colleges and universities.* Los Angeles: Pullias Center for Higher Education, University of Southern California. Retrieved from http://www.uscrossier.org/pullias/wp-content/uploads/2014/06/Research-agenda-for-profit-higher-education.pdf

Holyer, R. (2014). O taste and see: A commemorative history of the Wye Seminars. *Liberal Education, 100*(3). Retrieved from https://www.aacu.org/publications-research/periodicals/o-taste-and-see-commemorative-history-wye-seminars

Jackson-Hayes, L. (2015, February 19). We don't need more STEM majors. We need more STEM majors with liberal arts training. *The Washington Post.* Retrieved from http://www.washingtonpost.com/posteverything/wp/2015/02/18/we-dont-need-more-stem-majors-we-need-more-stem-majors-with-liberal-arts-training/

Jacobs, J. (2009). Meeting new challenges and demands for workforce education. In G. Myran (Ed.), *Reinventing the open door: Transformational strategies for community colleges.* Washington, DC: Community College Press.

Jain, V. (2009, February 22). *Importance of soft skills development in education.* Retrieved from http://schoolofeducators.com/2009/02/importance-of-soft-skills-development-in-education/#sthash.6W2eEMTY.dpuf

Jaschik, S. (2014, January 31). Obama vs. art history. *Inside Higher Ed.* Retrieved from https://www.insidehighered.com/news/2014/01/31/obama-becomes-latest-politician-criticize-liberal-arts-discipline

Jenkins, D. (2011). *Redesigning community colleges for completion: Lessons from research on high-performance organizations* (CCRC Working Paper No. 24, Assessment of Evidence Series). New York: Community College Research Center, Teachers College, Columbia.

Johnson, B. L. (1952). *General education in action.* Washington, DC: American Council on Education.

Koutroulis, M. (2014, October 21). Re: Learning outcomes [Electronic mailing list message]. Retrieved from LearningOutcomes@listserv.cccnext.net

Langdon, D., McKittrick, G., Beede, D., Beethika Khan, B., & Doms, M. (2011, July). *STEM: Good jobs now and for the future.* ESA Issue Brief #03-11. U. S. Department of Commerce Economics and Statistics Administration.

League for Innovation in the Community College (League). (2010). *Significant discussions: A guide for secondary and postsecondary curriculum alignment.* Phoenix, AZ: Author.

Lombardo, T. (2014, March 10). What is the value of a liberal arts and sciences education? Retrieved from www.facebook.com/EducationalTechnologyToday/notes

Looney, J. J. (Ed.). (2004). *The papers of Thomas Jefferson, Retirement series: Volume 9.* Princeton, New Jersey: Princeton University Press.

MacDermot, G. (1967). Aquarius. [Recorded by Rado, J. & Ragni G.]. On *Hair: The American tribal love-rock musical* [Vinyl record]. New York: RCA Records. (1968).

Helping Students Make a Good Living and Live a Good Life

Marche, S. (2012, January). We are not all created equal: The truth about the American class system. *Esquire Magazine*. Retrieved from http://www.esquire.com/news-politics/a11919/american-class-system-0112/

McGrath, E. (1944). General education in the postwar period. *The ANNALS of the American Academy of Political and Social Science*, *231*(74), 74-80.

McGrath, E. (1946). The general education movement: An editorial. *Journal of General Education*, *1*(1), 3-8.

McKusick, D. (2012). *Making it real: Using contextualization for student success*. The Cross Papers, Number 15, Chandler, AZ: League for Innovation in the Community College.

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for education reform*. Washington, DC: U.S. Government Printing Office.

O'Banion, T. (1997). *A learning college for the 21st century*. American Council on Education Series on Higher Education. Washington, DC: Oryx Press

O'Banion, T. (2013). *Access, success, and completion: A primer for community college faculty, administrators, staff, and trustees*. Chandler, AZ: League for Innovation in the Community College.

O'Banion, T. (2014, April 14). Point of view: Why education reform fails. *Community College Week*. Retrieved from http://ccweek.com/article-3823-pov-why-education-reform-fails.html

Occupy Movement. (2012, May 11). The 'GlobalMay manifesto' of the international occupy assembly. *The Guardian*. Retrieved from http://www.theguardian.com/commentisfree/2012/may/11/occupy-globalmay-manifesto

Okker, P. (2014, August 1). It's the faculty's job, too. *Inside Higher Ed*. Retrieved from https://www.insidehighered.com/views/2014/08/01/liberal-arts-professors-must-help-their-students-get-jobs-essay

Patton, M. (2012, September 7). AACC completes 18 years of service learning. *Community College Daily*. Retrieved from http://www.ccdaily.com/Pages/Campus-Issues/AACC-completes-years-of-service-learning.aspx

Peltier Campbell, K. (2014). General education and democratic engagement. *Diversity and Democracy*, *17*(3).

Pennington, H., & Milliron, M. (2010). *Completion by design*. Seattle, WA: Bill & Melinda Gates Foundation.

Peters, R. (1994). Some snarks are boojums: Accountability and the end(s) of higher education. *Change*, *26*(6), 16-23.

President's Commission on Higher Education. (1947). *Higher education for American democracy*. New York: Harper & Brothers Publications.

Samuelson, S. (2014, April 29). Why I teach Plato to plumbers. *The Atlantic*. Retrieved from http://www.theatlantic.com/education/archive/2014/04/plato-to-plumbers/361373/

Schneider, C. G. (2014). President's message: One hundred years! *Liberal Education*, *100*(2). Retrieved from https://www.aacu.org/publications-research/periodicals/one-hundred-years

Schneider, C. G., & Townsend, D. (2013). Defunding disciplines basic to democracy. *Liberal Education*, *99*(3), 2-4.

Shepack, R. (1969). *Some commonalities of faculty selection and in-service development techniques as related to faculty operating behavior which is consonant with community junior college philosophy* (Doctoral dissertation). University of Florida, Gainesville, Florida.

St. John's College. (2014, October). What is liberal education for? (Conference program). Santa Fe, New Mexico. Retrieved from http://www.sjc.edu/programs-and-events/santa-fe/50th-anniversary-conference/

Stevens, A. (2001). The philosophy of general education and its contradictions: The influence of Hutchins. *The Journal of General Education*, *50*(3), 165-191.

Stickler, H. W. (1957). Whence and whither general education? *The Journal of Higher Education*, *28*(4), 195-236.

Stone, L. S. (1998). Vocation, liberal education, and vocationalism. *HUMANITUS*, *11*(1). Washington, DC: National Humanities Institute. Retrieved from http://www.nhinet.org/humsub/stone11-1.htm

Teacher Tap. (n.d.). Project, problem, and inquiry-based learning. Retrieved from http://eduscapes.com/tap/topic43.htm

Thoreau, H. D. (1893). *The writings of Henry David Thoreau: Cape Cod and miscellanies*. Boston, MA, and New York: Houghton Mifflin.

Treisman, P. M. U. (1985). *A study of the mathematics performance of black students at the University of California, Berkeley* (Doctoral dissertation). University of California, Berkeley.

Tyton Partners. (2015). *Evidence of learning: The case for an integrated competency management system for students, higher education, and employers*. Boston, MA: Author.

U.S. Government Accountability Office. (2011, January). *Multiple employment and training programs: Providing information on colocating services and consolidating administrative structures could promote efficiencies*. Retrieved from http://www.gao.gov/new.items/d1192.pdf

Wachen, J., Jenkins, D., & Van Noy, M. (2010). *How I-BEST works: Findings from a field study of Washington State's integrated basic education and skills training program*. New York: Columbia University, Teachers College, Community College Research Center.

Wingspread Group on Higher Education. (1993). *An American imperative: Higher expectations for higher education*. Racine, WI: The Johnson Foundation, Inc.

Zwick, J. (2002). *Bread and roses: The lost histories of a slogan and a poem*. Retrieved from http://www.learningace.com/doc/5410740/ae418a11e5a4e3bf68fd2672233995ce/breadandroses
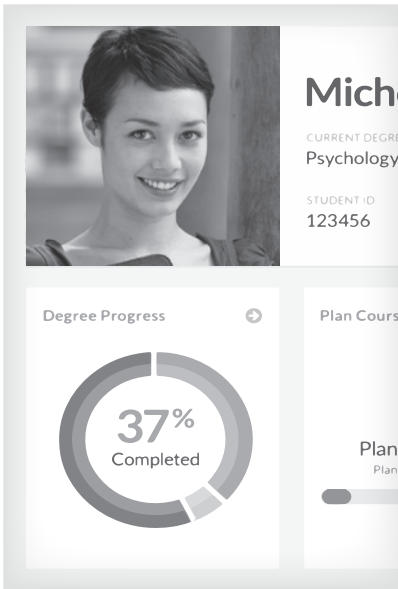
CIVITAS
LEARNING

WE ARE ON A MISSION TO HELP A MILLION MORE STUDENTS LEARN WELL AND FINISH STRONG

Civitas Learning works with institutions to bring deep, relevant insights to decision-makers and personalized, real-time recommendations to the front lines of education in order to measurably improve student learning, persistence, and
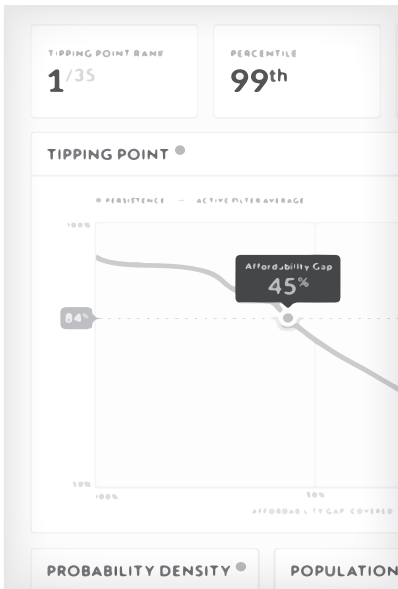
- **ACTION INFORMED BY INSIGHTS**
  Lightweight cloud-based applications enable a rich understanding of student pathways through the institution.

- **DATA RICH DECISIONS**
  Thousands of data sources and features inform a series of better, smaller, more precise decisions across the entire student lifecycle.

- **LEARNING TOGEHER™**
  Experimental design allows institutions to measure and learn continuously about the real impact of their student success initiatives.
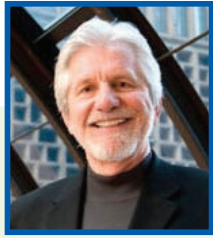
JOIN OUR MISSION
CIVITASLEARNING.COM | PARTNERSHIPS@CIVITASLEARNING.COM

Micha...
CURRENT DEGRE
Psychology
STUDENT ID
123456

Degree Progress
37% Completed

Plan Cours
Plann

TIPPING POINT RANK
1/35

PERCENTILE
99th

TIPPING POINT
PERSISTENCE — ACTIVE FILTER AVERAGE
100%
Affordability Gap 45%
84%
50%
100%   50%
AFFORDABILITY GAP COVERED

PROBABILITY DENSITY   POPULATION

Engagement Overview

Withdrawls 3   Very High 6   High 6

Recommended Outreach
- 6 students have low discussion board res
- 1 student has recently moved to 2 offici
- 4 students have low attendance and low

Dr. Terry O'Banion
President Emeritus
League for Innovation

Dynamic Campus is pleased to announce our continued support of **Dr. Terry O'Banion**; Dynamic Campus Advisory Board member, President Emeritus, League for Innovation, and Chair of the NAU Graduate Faculty, for his groundbreaking *Bread and Roses* monograph. We are proud of the partnerships we have built with both Terry and the League, and with our other Advisory Board members:
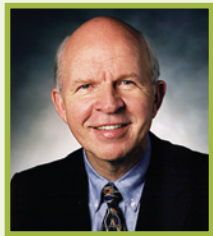
Dr. John Roueche
President
Roueche Graduate Center
National American University

Dr. Jerry Sue Thornton
President Emeritus
Cuyahoga Community College

Dr. Jim Catanzaro
Past President Chattanooga
State Community College
Director HERDI South

Dynamic Campus' partnership with these well-respected leaders allows us to provide support to community college presidents eager to discuss and solve key challenges facing campuses today.

Follow Dynamic Campus on Twitter **https://twitter.com/DynamicCampus** and LinkedIn **https://www.linkedin.com/company/dynamic-campus-inc.** to stay on top of critical trends in higher education.

"Dynamic Campus is perfectly situated at the intersection of technology solutions and student success. From their leadership team to senior field representatives, one couldn't have found a company with more integrity and higher level of professionalism than Dynamic Campus to help craft technology solutions to move the needle on student success."

Dr. W. Cherry Li-Bugg

Vice Chancellor, Educational Services and Technology

North Orange County Community College District

Customized, game-changing responses to critical institutional challenges, from optimizing the impact of technology college-wide to integrating predictive analytics into every student success initiative, Dynamic Campus brings to its partners unequaled operational efficiency and unprecedented strategic performance.

www.DynamicCampus.com

National American University

Developing Future Leaders to Meet the Challenges Facing Community and Technical Colleges

John E. Roueche
President
Roueche Graduate Center
National American University

The NAU Partnering Advantage

- Offering a blended cohort-based doctoral program in community college leadership

- Helping students reach their educational goals by developing articulation agreements with community colleges for optimal transferability

- Providing scholarship opportunites for undergraduate, master's and doctoral degrees for students, staff, and faculty

For information on programs or partnership opportunities, contact:

ROUECHE GRADUATE CENTER

NATIONAL AMERICAN UNIVERSITY

6836 Austin Center Blvd, Suite 270 • Austin, TX 78731

877-398-0118

National Community College Advisory Board

Dr. George A. Baker III
Distinguished University
Professor Emeritus
North Carolina State University

Dr. George R. Boggs
President and CEO Emeritus
American Association of
Community Colleges

Dr. Donald W. Cameron
President Emeritus
Guilford Technical
Community College

Dr. Gerardo E. de los Santos
President and CEO
League for Innovation in the
Community College

Dr. Margaretta B. Mathis
Senior Vice President, and
Dean of Master's and
Doctoral Programming
Roueche Graduate Center
National American University

Dr. Christine Johnson McPhail
Managing Principal
McPhail Group LLC

Dr. Terry O'Banion (Chair)
Distinguished Professor and
Chair, Graduate Faculty
National American University;
President Emeritus
League for Innovation in the
Community College

Dr. Jerry Sue Thornton
President Emeritus
Cuyahoga Community
College

Ex-Officio
Dr. Lynn Priddy
Provost
National American University

Ex-Officio
Dr. Bob Paxton
President
Strategic Initiatives and
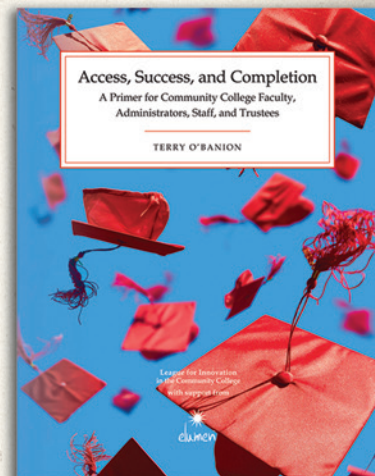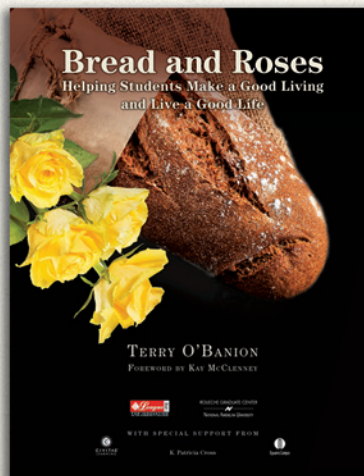External Relations
National American University

The Terry O'Banion Collection

Terry O'Banion served as President of the League for Innovation in the Community College for 23 years, during which time the international association served over 700 colleges and was recognized by *Change* magazine as "the most dynamic organization in the community college world." Since retirement, he has worked on special projects for the League, MetLife Foundation, Bill & Melinda Gates Foundation, Chauncey Group International, Walden University, and National American University. One of the leading spokespersons in the country on the Learning College, Student Success Pathways, and the Completion Agenda, O'Banion has consulted in more than 800 community colleges in the U.S. and Canada. He is President Emeritus of the League, and currently serves as a Senior League Fellow and Chair of the Graduate Faculty at National American University.

Special Pricing on purchases of the entire Terry O'Banion Collection. Contact Judy Greenfield, greenfield@league.org, for details.