

# Trends and Challenges Facing Higher Education: Implications for Agricultural Education

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## Abstract

*Dr. Bryan L. Garton presented the 2018 AAAE Distinguished Lecture at the Annual Meeting of the American Association of Agricultural Education in Charleston, South Carolina in May 2018. The article is a philosophical work based upon the author's experiences in the agricultural education profession and in higher education.*

## Introduction

I will share today what I view are the major trends and challenges facing higher education, which have implications on the future of our academic disciplines. My primary goal is to stimulate a dialog that I hope will carry on throughout the conference so that we may begin to share strategies and provide leadership in addressing these challenges.

These trends and challenges are ones we collectively face at our respective institutions. Our institutions may face these challenges to varying degrees, in some cases based on geographic location; however, I think you will see our challenges are more similar than different and that the best actions will be those that we collectively develop and implement. In preparation for this presentation, I performed two tasks:

- 1) Over the past 10 months, I reviewed daily the national headlines on higher education, using two primary sources: *Inside Higher Education* and *The Chronicle of Higher Education*.
- 2) More recently, I sought input from 20 of my associate dean colleagues, plus some veteran chief financial officers at land-grant universities.

As we begin, I will ask you the same question asked of my colleagues. *What are the greatest challenges or issues facing your institution, especially in relation to your college of agriculture and related sciences?* Did you identify any of the challenges or issues targeted by many of the associate deans of academic programs across the country (see Figure 1)?

## Value of a College Education

Before diving into the trends and challenges facing higher education let us renew our belief that a college degree is still one of the best tickets to well-paying jobs and the middle class. Personally, as an educator and parent I place a great value on a college education, as well as do all of us in this room. However, does the general population value a college education as much?

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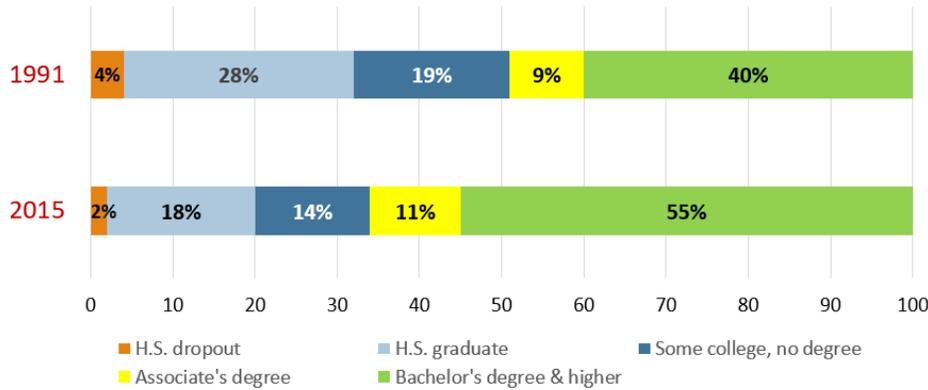


Figure 2. Good job opportunities increase with education. Georgetown University Center on Education and the Workforce.

### Financial Challenges – The Rising Costs of Higher Education

If education is so important to economic growth and personal prosperity...*why is state support and appropriations declining for higher education?* Part of the answer resides in the fact that there is a decline in the public value of higher education, no longer considered by some as a public good (Kolowich, 2018). Unfortunately, this is especially true with select state legislators.

Frank Antenori, a former Green Beret who served in the Arizona state legislature stated, “A lot of Republicans would say they [students] go there to get brainwashed and learn how to become activists and basically go out in the world and cause trouble” (Sullivan & Jordan, 2017, p. 1). Antenori is part of an increasingly negative vocal campaign against higher education in America.

Polls show that the public’s regard for higher education has declined in recent years, especially among Republicans, thus leaving college leaders with fewer allies (see Figure 3). Since 2015, the shift in public opinion has been striking. Research indicated Republican and right-leaning independent voters began losing confidence in colleges leading America in the right direction. In 2017, 58% of them said colleges “have a negative effect on the way things are going in the country” (Sullivan & Jordan, 2017, p. 2).

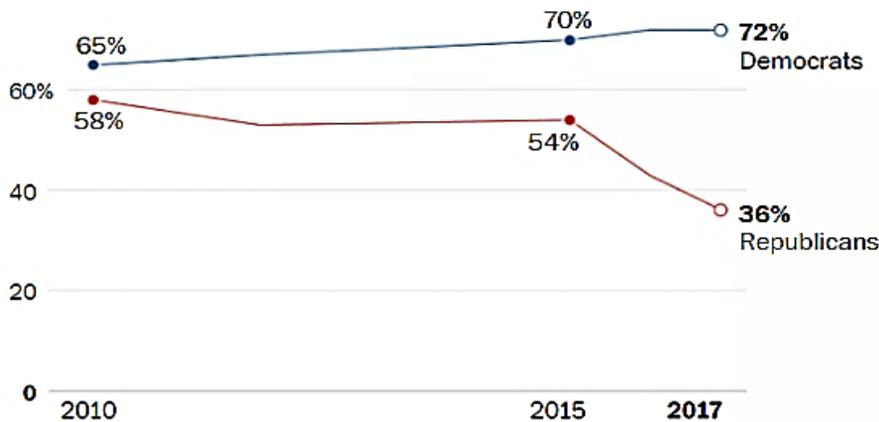


Figure 3. Partisan gap widens in views of college. Pew Research Center.

At 72%, Democrats have a more positive view of higher education than Republicans, at 36%. Over the past seven years, from 2010 to 2017, Democrats have remained relatively stable in their positive view of higher education; however, the Republican positive view dropped 22 percentage points from 58% to 36%. In some states, legislators have lost trust in the university’s ability to manage and govern themselves. An example is faculty workload standards and policies, a major topic of discussion at some of our institutions.

Across the ideological spectrum, people are concerned about the cost of college, skyrocketing debt from student loans, and inequalities to access. Educators are concerned that the reductions in state appropriations are making it more challenging for low- and middle-income families to send their children to college. Others, myself included, have concerns regarding the impact this will have on our ability to recruit a diverse talent pool and provide access to underrepresented populations. Cuts to higher education have been blamed on declining tax revenue and the rising costs of other state responsibilities, such as: Medicaid, prisons, K-12 education, and roads. Most states require an annual balanced budget, which presents recurring challenges.

Since 2008, the state of Arizona has cut per-student funding more than any other state (see Figure 4). In addition to Arizona, seven other states (Louisiana, Alabama, Oklahoma, New Mexico, Illinois, S. Carolina, & Pennsylvania) cut funding more than 30%. Fortunately, five of those states also had smaller tuition hikes. Three states, Wyoming, North Dakota, and Montana actually increased funding to higher education.

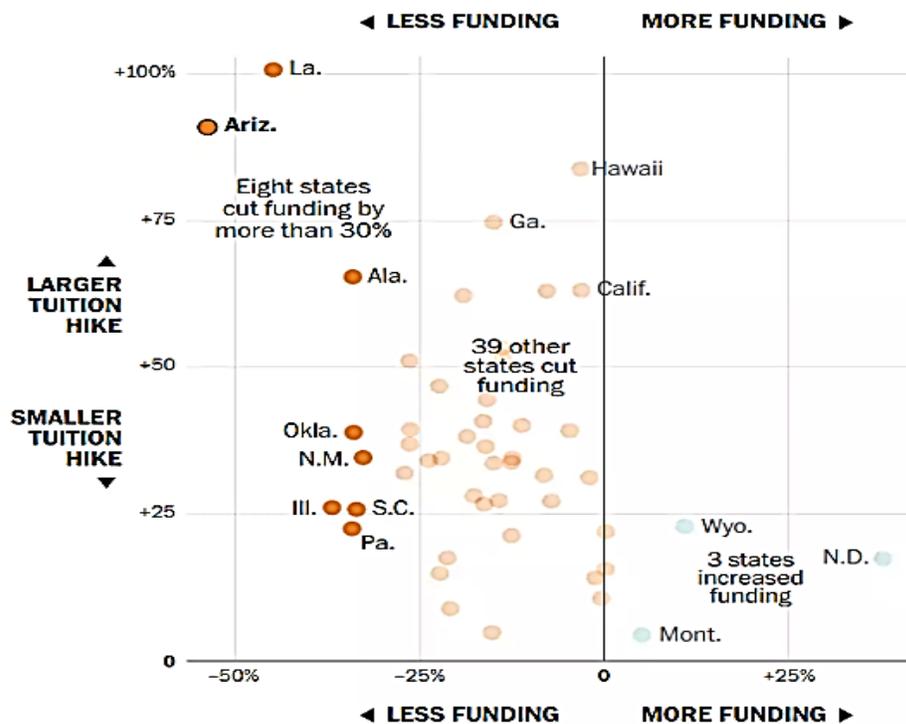


Figure 4. States with large funding cuts and tuition hikes. Center on Budget & Policy Priorities, The Washington Post.

Concerns have been raised regarding the rising cost of higher education and the mission of the land-grant university. In an article titled, *Have land-grant universities lost their way?* Gordon Gee commented that land-grant universities need “to stop chasing rankings and try to solve

immediate problems in their communities” (Wermund, 2017, p. 1). Several of my associate dean colleagues expressed this same sentiment.

Gee argued that land-grant universities were created to be “the people’s universities.” They do not exist “necessarily to do basic research or discover the cure for cancer, but to make sure the people in their state and region were served very well and had access to American opportunity. Over time, I think that has been lost.” Gee went on to communicate that land-grant universities need to find ways to make it easier for people to attend and stated, “you have to create opportunities for people to have access” (Wermund, 2017, p. 1).

Over the past 40 years, the average tuition and fees at four-year public institutions have increased by 215% (see Figure 5). This begs the question, have public funding cuts to higher education caused universities to raise tuition?

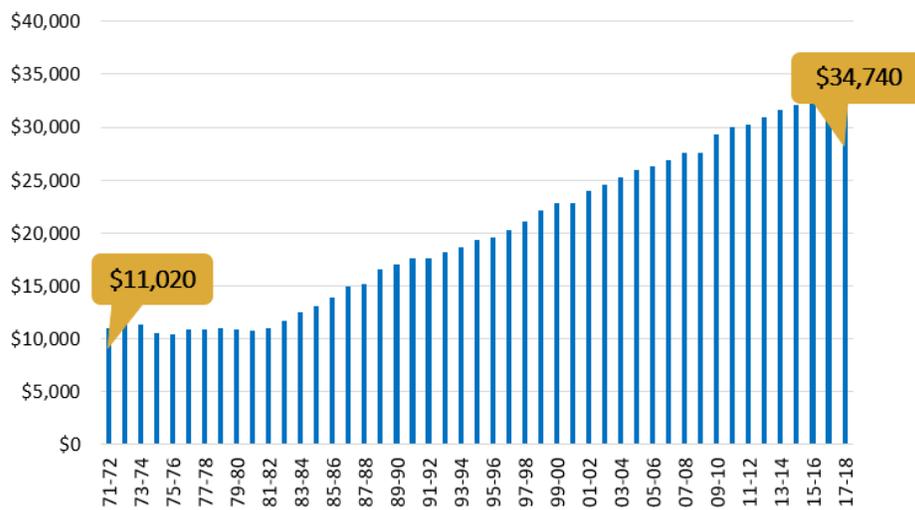


Figure 5. Increases in tuition are unsustainable. The College Board.

It seems to be a relatively simple question; however, there are differing points of view on the matter. One opinion, typically left-wing thinking, is that tuition has increased over the years because colleges have been starved by state funding and reductions. The opposing opinion, more right-wing thinkers, argue that the long-term decline in state funding, or as some call it “the disinvestment in higher education,” has had little effect on tuition. This group argues that tuition has increased for reasons, such as rising cost of salaries and benefits, aging buildings, and excess spending by universities.

Looking at the 50-year trend in state appropriates at the University of Missouri System, a multi-campus institution that mirrors many of the institutions represented today, we see a steady increase in state appropriations from 1965 through 2001, even during some minor recessions (see Figure 6). Each recession of 1991, 2001 and the “Great Recession” of 2008 was followed by a reduction in state appropriations. The first decline in state appropriations without a preceding recession was in 2015.

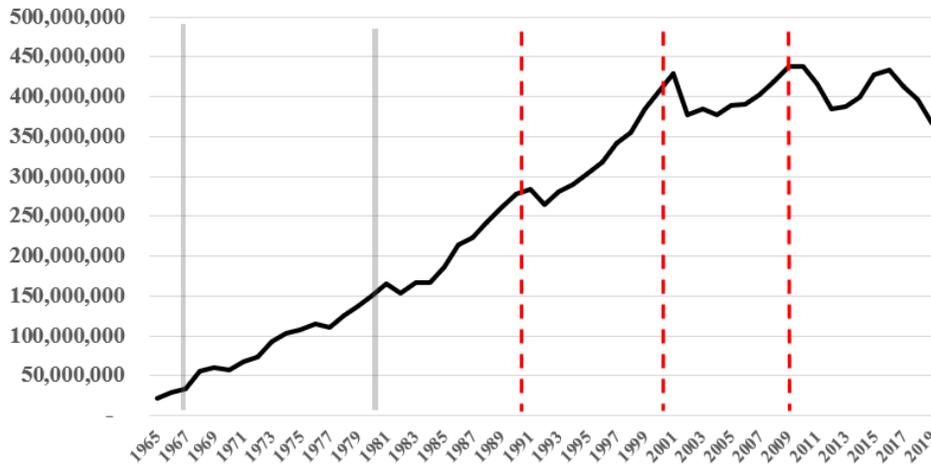


Figure 6. Fifty-year trend in state appropriations at a multi-campus institution. University of Missouri System.

Nationally, tuition has climbed as state support has fallen (U.S. Government Accountability Office, 2014) (see Figure 7). In fiscal year 2012, tuition surpassed state government support in overall college revenue for the first time in our history. Our institutions were once state funded, then state assisted, and now some in higher education say we are simply “state located.”

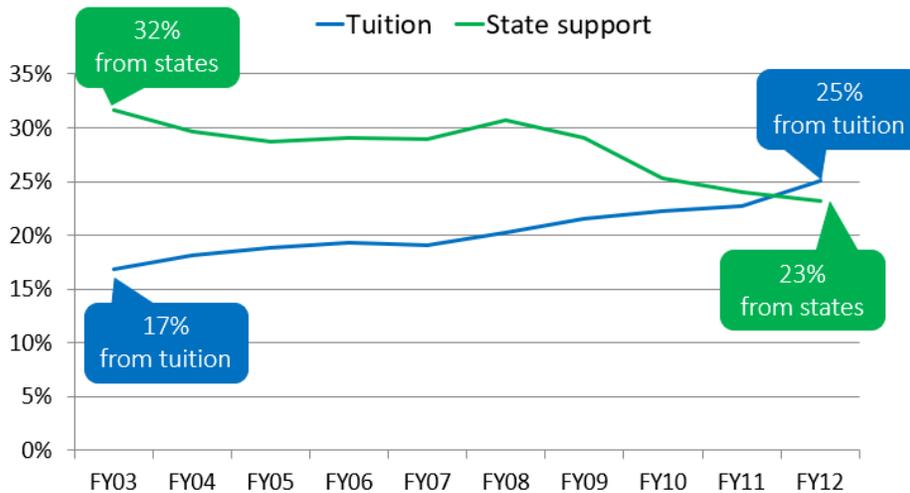


Figure 7. Tuition vs. state support as percent of college revenue. U.S. Government Accountability Office.

In 2011, tuition per student surpassed state appropriations per student (see Figure 8). Research cited in the journal of *Economics of Education Review* determined that the state appropriations cut to tuition pass through rate has averaged 25.7% over the past 30 years (Seltzer, 2017). Another way of looking at this is for every \$1,000 cut from per-student state appropriation, the average student can expect to pay an additional \$257 in tuition and fees.

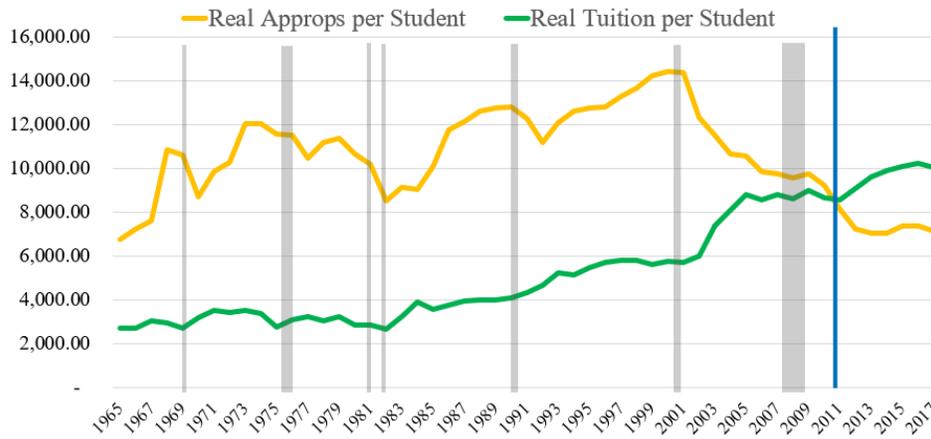


Figure 8. Appropriations and tuition per student. University of Missouri System.

Increasing tuition has a significant impact on student debt, leading to a major national discussion point. College affordability headlines tend to focus on BIG, scary numbers: \$50,000 annually for tuition at private colleges or \$20,000 plus at public institutions. Americans collectively owe \$1.5 trillion in student loans, which is now larger than credit card debt.

In 2016, the average student loan debt for a college graduate was \$37,000. How long will it take to pay off a \$37,000 loan debt? Let's assume a \$40,000 annual salary, an 8% unsubsidized federal loan, and a goal of 8% of annual salary going toward the loan. It would take a little over 16 years at \$266 per month to pay off this debt.

As state appropriations have declined, universities are taking a number of actions to balance the budget. Many of which impact student access to higher education (Seltzer, 2018). A majority of institutions have resorted to tuition increases; however, several states have laws or regulations preventing, or limiting, tuition increases (Seltzer, 2018). For example, in Missouri we are limited by the Consumer Price Index (CPI).

Operating budgets have been reduced, such as funds for teaching and faculty travel. Students' services have been reduced primarily through staff reductions. Some universities have turned to increased fund-raising; however, endowments typically come with restrictions and cannot be used as a source of general revenue. There is a trend to charge students additional fees, particularly by colleges within the university, or by degree programs. New budget models are being implemented, such as Resource Centered Management (RCM) and differential tuition is on the rise with tuition based on the cost of delivering a degree program.

We have seen more degree program modifications, including inactivation & elimination, based on academic data and metrics. Many State Departments of Higher Education have standards and policies regarding the minimum number of graduates a program must produce during a specified time frame or be subject to program closure. Faculty are asked to make curriculum revisions to eliminate content redundancy and the cancellation or discontinuation of under enrolled course offerings (Flaherty, 2017).

We are all aware of the rising cost of college textbooks. A recent American Enterprise Institute report noted that from 1998 to 2016, college textbook prices increased by 90% while recreational book prices fell by more than 35% (Perry, 2016). What can be done to curb the cost of textbooks to our students?

Initiatives, such as the use of *Open Educational Resources*, access to teaching and learning resources that reside in the public domain or have been released under an intellectual property license, are free and available by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, and other instructional materials used to support access to knowledge. Dream a little, be creative, what if you collaborated with your colleagues across the country to share common course materials?

Many of our universities have initiated special scholarships for Pell grant eligible students to increase access to low-income students. In Missouri we call this the “*Land Grant Compact*.” Under this compact, Pell grant eligible students are assured their full tuition and fees will be covered, as long as they remain Pell grant eligible. Several institutions represented in this room offer similar financial aid packages.

### Enrollment Challenges

Another trend challenging our institutions is an overall decline in the number of high school graduates and shifts in ethnic and cultural demographics projected through the year 2030 (Biemiller, 2018; Jaschik, 2018). Following the nation’s highest recorded number of high school graduates in 2013, fewer graduates are projected in all graduating classes through 2023 (see Figure 9).

Following a slight increase from 2023 to 2026, the number of graduates will begin a sharp decline as fewer children were born during and after the “Great Recession” of 2008. This is a result of people deciding to delay starting a family due to uncertainties in the economy (Bransberger & Michelau, 2016).

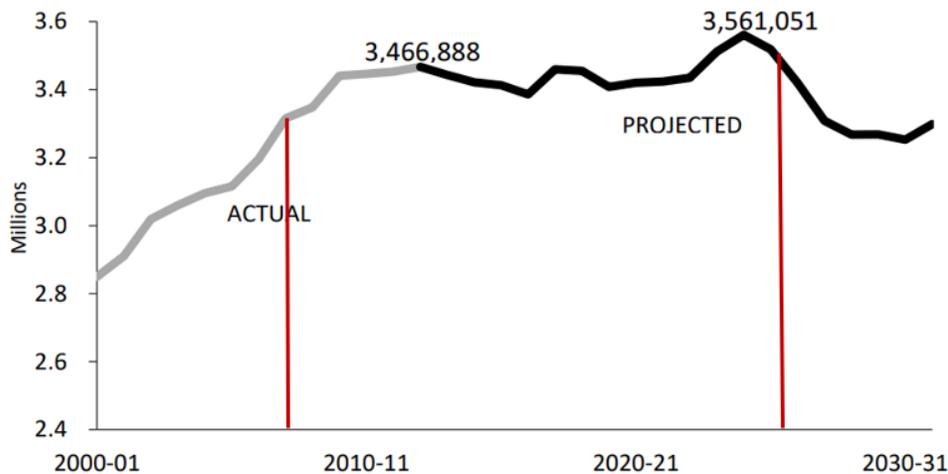


Figure 9. High school graduates: Actual and projected. WICHE Knocking at the College Door.

By 2030, we will experience a national decline of four percent in the number of high school graduates (see Figure 10). However, the decline will not be distributed equally across the country. California alone is projected to have 12% fewer graduates. Virtually all the Midwest and Northeast will experience significant declines. How are institutions preparing for the expected decline in

potential college age student? What are the potential consequences to our disciples if we stand pat and do nothing?

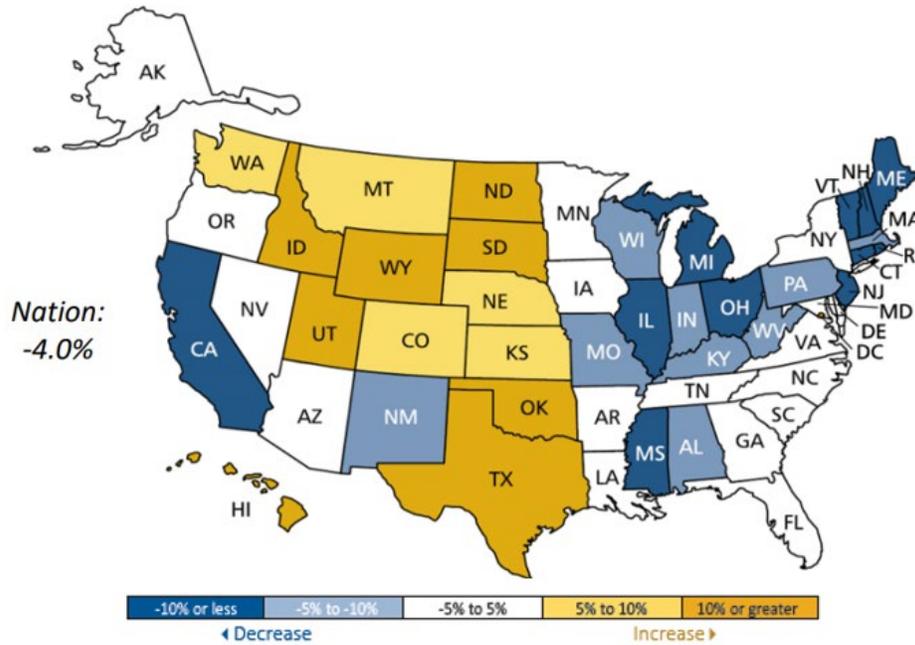


Figure 10. Percent change of high school graduates 2013 – 2030. WICHE Knocking at the College Door.

The primary growth in population and the numbers of high school graduates has been in the southern region (see Figure 11). In 2000 33% of graduates were located in the southern region. By 2025 that percentage will increase to 47%, nearly half the nation’s graduates. Overall, from 2025 to 2030 we will experience a 15% loss in the typical college age population.

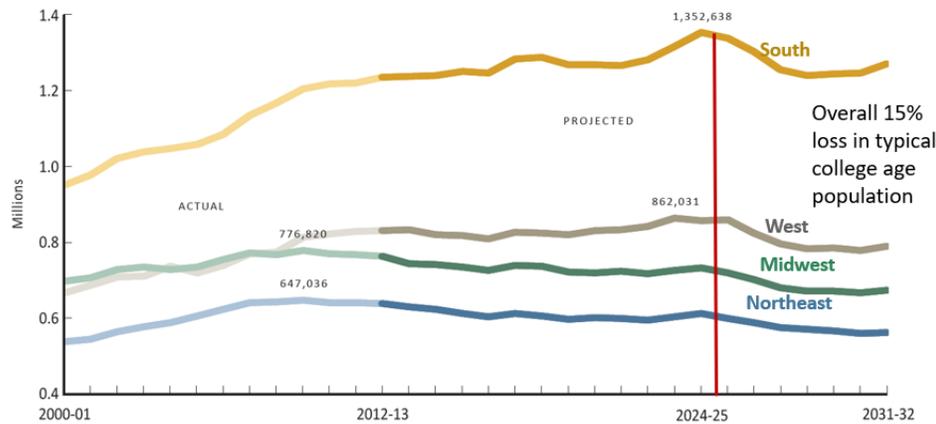


Figure 11. High school graduates by regions of the U. S. WICHE Knocking at the College Door.

By 2030, the number of White high school graduates is projected to decrease by 14%, while the number of Hispanic graduates is projected to increase by 50% or more, after reaching a high point around 2025 (see Figure 12). The Asian/Pacific Islander graduate population is expected to increase by 30% by 2030; however, between now and the 2030 the number of Black graduates is

projected to gradually decline by nearly six percent. A growing Hispanic population presents us with a challenge, as well as an opportunity. We must address the “inclusion” opportunity at all levels of education and industry.

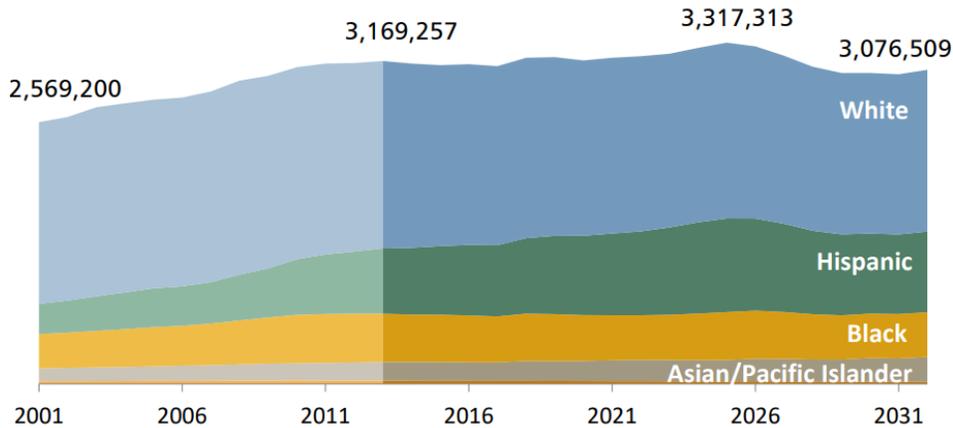


Figure 12. High school graduates by race/ethnicity. WICHE Knocking at the College Door.

Decades of research by organizational scientists, psychologists, sociologists, economists and demographers show that diverse groups are more innovative than homogeneous groups. I have had the privilege of serving on a national consortium of agricultural industries, midwestern universities, educational organizations, such as FFA and 4-H, and government agencies addressing this challenge. The *Together We Grow Consortium* was put together by executive leaders at Archer Daniels Midland (ADM). During discussions we heard reports and testimonials from industry as to how diversity drives innovation, creativity and excellence.

What are the implications for high school agriculture programs? Our university programs? What are our student organizations, FFA and 4-H, doing to prepare for this ethnic and cultural shift? What steps are we considering to prepare our teachers for this ethnic and cultural transformation that will necessitate the creation of an education system to serve an evolving population?

How are we going to recruit an ethnic population whose perception of “agriculture” is not positive? Overall, I conclude we are not prepared; but the real question is, will we be prepared?

Across our nation, 42% of the 18 – 24 year-old population are enrolled at institutions of higher education (Marcus & Krupnick, 2018). However, only 29% of the rural college age population pursue a college education compared to 48% from urban and suburban populations. Once again, is this an ACCESS issue for our rural stakeholders? What are we doing to change this narrative?

**Student Success – Academic Metrics will Drive Decisions**

Our institutions are under great stakeholder pressure to ensure the academic success and career readiness of our students (Supiano, 2018; The Chronicle of Higher Education, 2018). Institutions have been challenged to develop strategies to ensure students from all backgrounds have a successful path to earning a degree in a timely manner and be gainfully employed upon

graduation (Flaherty, 2017). In some situations, this challenge has come in the form of state appropriations.

For example, Missouri's Department of Higher Education has six performance indicators linked to future state appropriations. Three indicators are directly related to student success and outcomes: 1) Student Success and Progress (retention), 2) Degree Attainment (graduation rates), and 3) Graduate Outcomes. I would argue stakeholder pressure and funding formulas are not necessary to do what I perceive as the "right thing to do."

Let us revisit two previous trends and challenges: The rising cost of an education and the impending enrollment changes. Many students graduate with large financial debt, but no degree to seek one of those "Good Jobs" we discussed earlier. The federal government spends \$30 billion per year on Pell grants for lower-income students, but studies show that half of Pell grant recipients drop out before earning a degree. These are complex, multifaceted challenges that will require data and tracking of students and the implementation of interventions to ensure student success.

We need student success data driven approaches, based on predictive analytics, to assist students, especially low-income and underrepresented student populations, achieve academic success, earn a degree, and obtain one of those "good jobs." What programs have we put in place to assist student success? Many of our institutions have developed such programs that we can utilize and there's a great deal of literature on successful and not so successful programs.

For example, in some cases, the difference between dropping out or graduating could hinge on a student's ability to come up with just a thousand dollars. The University of Central Florida found that "completion grants," of as little as \$1,000, can make a difference between graduating or not (Supiano, 2018). We have tried to implement a similar program at Missouri, but have significantly more work to do, especially in securing a stable funding source.

The good news is employment opportunities and demand for our graduates continue to remain high. We need to work on getting them in our doors, ensure academic success, provide quality learning experiences, engage with industry partners, and assist students in obtaining those "good jobs."

Today I have shared with you a few of the trends and challenges facing higher education...fiscal, including state funding and costs, student debt, upcoming enrollment challenges, and student success. Some will argue there has not been a more challenging time in higher education. There are several uncertainties ahead; however, I am confident that good, strong leadership will be required to guide us to solutions to the challenges we face.

As a profession, we must be willing to change and lead change or we run the risk of being left behind or even left out. Therefore, I ask you...Who wants change? Who wants to change? Who wants to lead change?

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