



Employee Engagement in Higher Education: Financial impact of engagement in higher education

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Abstract

Employee engagement is a critical issue across many industries, none more critical than in higher education. The examination herein is focused on the financial impact faculty/staff engagement can have on the higher education enterprise and beyond.

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Introduction

Employee engagement is a critical issue across many industry sectors. Engagement has shown to have dramatic impacts on organizations. Demand for a skilled workforce continues to sharpen and the pool of quality candidates is shrinking. Talent management strategies will grow out of necessity to maintain a competitive workforce. The need for talent management is especially sharp in the higher education arena. Most often engagement in higher education focuses efforts on faculty and staff development. In the broader context, engagement involves a unified recruitment, onboarding, retention and succession strategy of staff and faculty. At present, employee engagement is measuring at dramatically low rates both within the higher education arena and beyond. There are a number of factors that are impacted by employee engagement. The question here is around the financial impact on engagement. Specifically, what are the financial implications of a staff/faculty engagement strategy for the higher education enterprise? In response to this query, we will look at the effect engagement has on the individual, the institution, the community and some broader more global impacts.

Materials and Methods

This part should contain sufficient detail that would enable all procedures to be repeated. It can be divided into subsections if several methods are described.

Results and Discussion

The power of engagement

Employee engagement consistently affects key performance outcomes, regardless of the organization, industry, or country as concluded by the Gallup organization's eighth iteration of its research on employee and engagement and productivity (Gallup, Inc, 2013). The Gallup research categorizes the workforce as being "engaged" "disengaged" and "actively disengaged". Research conducted by Gallup (2012), examined 49,928 business, or work units, and included about 1.4 million employees in 192 organizations, across 49 industries, and in 34 countries. This study makes clear that employee engagement strongly relates to key organizational

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outcomes in any economic climate and across all verticals. Even during difficult economic times, employee engagement is an important competitive differentiator for organizations (Baldoni, 2013). According to PricewaterhouseCooper (Hesse, 2014), when companies align around a corporate talent strategy they deliver 85% stronger financial performance, 75% higher revenue growth and 77%

better implementation of corporate vision as compared to companies without this focus on talent. Businesses or work units, that score in the top half of their organization in employee engagement have nearly double the odds of success (based on a composite of financial, customer, retention, safety, quality, shrinkage, and absenteeism metrics) when compared with those in the bottom half. Those at the 99th percentile have four times the success rate compared with those at the first percentile (Gallup, Inc, 2013). Engagement improves the quality of work and health. For example, higher scoring business units report 48% fewer safety incidents; 41% fewer patient safety incidents; and 41% fewer quality incidents (2013). Gallup (2013) found employee engagement affects nine performance outcomes; six of these outcomes had the most relevance to higher education. The results were as follows:

Employees who are engaged are loyal and productive. They are passionate about their work and feel a connection to the company and mission. Those who are not engaged, or "disengaged" per Gallup, are employees who may be productive and satisfied with their jobs, but they are not intellectually or emotionally connected to their work



and workplace. These employees are going through the motions of their respective roles but doing so without the passion and energy of the previous group. While this group may not perform at a level equal to the engaged employees, they are not taking active steps to undermine their work. Here is where employees that are “actively disengaged” can be found. According to Gallup (2013), this group of employees is physically at work, but are not connected to their work emotionally. Essentially this group is unhappy with their work, share their unhappiness with coworkers and can jeopardize the performance of their teams. This group is not just miserable in their work. This group is actively and enthusiastically sharing that misery with others.

Employee Engagement Performance Outcome	Difference between bottom-quartile and top quartile
lower absenteeism	37%
lower turnover (in high-turnover organizations)	25%
lower turnover (in low-turnover organizations)	65%
higher customer metrics	10%
higher productivity	21%
higher profitability	22%

Table 1: Employee engagement outcomes

The research supports processes related to employee engagement that will benefit organizations. Business units in the top performing quartile deliver substantially higher performance metrics than business units in the bottom quartile. For purposes here, the question becomes, does employee engagement have a similar influence in the higher education field? In 2015, Gallup conducted research into the question of faculty engagement with a population of more than 22,500 faculty member in virtually every type of institution. What Gallup (2015) found was that 34 percent of faculty members surveyed are engaged in their job, 52 percent are not engaged and 14 percent are actively disengaged. Engaged faculty are more involved and enthusiastic about their work. Among the engaged faculty members, full-time faculty members (34 percent) are only slightly more engaged in their jobs than are part-time faculty members (30 percent).

Faculty Engagement by Employee Status			
Faculty Type	All Faculty	Full Time Faculty Members	Part-Time Faculty Members
% Engaged	34	34	30
% Not engaged	52	52	53
% Actively disengaged	14	14	17

Table 2. Faculty engagement by employee status



In summary, the engaged employee is a valuable resource for an organization, but these employees face a daunting challenge beyond those presented by their position. Employees who are not engaged and those who are actively disengaged, offer obstacles to individual success and hamper the likelihood of success for the organization overall. Similar trends can be found among faculty members.

As a way to quantify the impact of engagement on the higher education institution, we will look at economic impact that engagement can have on the individual student, the institution itself, and the community. Finally, we will look at the impact of engagement from a broader, global, perspective to complete the review.

Financial impact of engagement on the student

College completion is a measure of success for an institution. This metric could be equated to productivity or profitability in the private sector. These two measures are key components of and benefit from the employee engagement. According to the Gallup (2013) research, there is a clear connection between engagement and performance. Among the study's population, the median differences in productivity and profitability between the top quartile and bottom quartile were more than 20% (21% higher productivity and 22% higher profitability). In fact, organizations in the 99th percentile were found to have four times the success rate of those in the bottom 1%. Imagine the dramatic impact to individual and household incomes if higher education institutions were able to increase graduation rates by 20%. An entirely new population of competitive individuals would enter the workforce and see higher wages, lower unemployment. The question remains, what impact would higher levels of engagement have on students?

For many students, the completion of a college degree is an achievement that should lead to a promising economic future. The investment in an education is expected to put a person on a pathway to a life of economic stability. In large part, this is true. According to the Bureau of Labor Statistics (Bureau of Labor Statistics, 2015) earnings for someone with a high school diploma will have a median weekly earnings of \$678. This compares to the median weekly earnings of someone with a bachelor's degree of \$1,137. For this same

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period, 2015, individuals with a bachelor's degree enjoyed a lower unemployment rate (2.8%) compared to those with only a high school diploma (5.4%). Demand for workers with college educations will outpace supply to the tune of 300,000 per year (A. Carnevale, Smith, & Strohl, 2010). Since January 2010, the economy has added 11.6 million jobs (A. P. Carnevale, Jayasundera, & Gulish, 2016). Nearly

all the jobs created in the recovery, 11.5 million out of 11.6 million, have gone to workers with at least some postsecondary education (A. P. Carnevale et al., 2016). According to the College Board ("Lifetime Earnings by Education Level - Trends in Higher Education - The College Board," n.d.), a typical bachelor's degree recipient can expect to earn about 66% more than the typical high school graduate earns over a 40-year career. When looking at millennial, age 25-32 as a group, the Pew Research Center (Street, NW, Washington, & Inquiries, 2014) found those with a bachelor's degree or more had a median income (full-time workers in 2012 dollars) of \$45,500 compared to \$28,000 for those with a high school diploma. Unemployment rates were dramatically lower (3.8% vs 12.2%) as was the percentage of those living in poverty (5.8% vs 21.8%). With the growing demand for skilled workers, it appears that an educated individual will have much better chances of gaining employment in the current environment than a less skilled candidate (A. P. Carnevale, Jayasundera, & Gulish, 2016). All these support the economic benefits of college completion.

It is noteworthy to point out the impact that completion can have on debt repayment. Between 2000 and 2014, the total volume of outstanding federal student debt nearly quadrupled (Yannelis & Looney, 2015). The total student debt eclipsed \$1.1 trillion, the number of student loan borrowers more than doubled to 42 million, and default rates among recent student loan borrowers rose to their highest levels in twenty years (2015). Other forms of consumer credit declined during the Great Recession and student debt continued to increase (Donghoon, 2013). As a result, student loans, at an average of more than \$25,000 per student, are



now the largest source of household debt, after mortgages, credit cards and auto loans (2013). Today, nearly half of all students who begin college do not graduate within six years. The consequences of taking on student loan debt but never receiving a meaningful degree can be severe. Students who borrow for college but never graduate are three times more likely to default (Haugwout, Donghoon, Scally, & van der Klaauw, 2015). In a study by the Federal Reserve, noncompleters in 2009 had lower rates of employment when they left post-secondary education, as compared to completers at all four institution sectors analyzed in the study. The lower rates of employment affect the ability of noncompleters to pay back loans all while the level of student loans becomes a larger part of going to college ("Federal student loan debt burden of noncompleters," 2013). Student borrowers who do not graduate are three times more likely to default on a student loan than those students who graduate (Hackett, 2015). This unpaid debt can drive down credit scores that further impact an individual to obtain credit to purchase a car, a home, or even lead to individual bankruptcy.

An increase in faculty and staff engagement within a college or university can have a dramatic impact on productivity and effectiveness. Faculty and staff engagement can have a significant impact on student success and long-term impact on individuals beyond their college careers. This translates into higher levels of student success and increasing completion rates. Completing a college degree has a significant impact on an individual's ability to compete in the workforce, unemployment rates, wages and ability to repay student loans.

Financial impact of engagement on the institution

It is evident that a highly engaged faculty/staff can impact productivity which can then equate to higher rates of completion among students. In turn, the financial and economic impact is significant. Here we will look at the financial impact that engagement has on the institution itself. Specifically, in the form higher rates of retention among students and secondly, in higher rates of retention (and lower turnover) among faculty and staff. It might be distasteful for those in academia to look at the value or revenue that is generated for an institution by a student. Institutions are dependent on tuition, student loan proceeds, state/federal grants, among other sources, to drive revenue to pay for faculty, staff, facilities and related operating costs to provide a quality education. The disengaged and actively disengaged employees of any organization have an impact on organizational results. In the private sector, this impacts profits. In higher education, it could be argued that this bottom line is student success. If students withdraw from their studies, this has an impact on the revenue stream on which the institution is dependent on to deliver services. More than 40 percent of first-time, full-time students who enroll in a bachelor's degree program do not complete within six years (Hackett, 2015). With a dropout rate of 40 percent, institutions must work

The Center for American Progress reviewed eleven studies on the cost of employee turnover (Boushey & Glynn, 2012). The estimates of the cost of turnover in the 30 case studies analyzed range from 5.8 percent up to 213 percent of the annual salary of the vacant position, depending on the job and employee skills (2012).

extremely hard to replace these noncompleters each year. Here we will look at the revenue loss related to these students that dropout.

According to the State Higher Education Finance, in 2015, the public, full-time equivalent, educational appropriation and net tuition revenue there is a wide range of funding levels across the states. The average U.S. institution receives \$12,907 per student, with roughly 54% (\$6,966) from state and local appropriation ("State Higher Education Finance FY15 SHEEO," n.d.). With this revenue figure in mind, consider the revenue that is in jeopardy when a student makes the decision to drop out.



State	Total Revenue (Constant Adjusted 2015 dollars for COLA, HECA, EMI)	State Education Appropriation (Constant Adjusted 2015 dollars for COLA, HECA, EMI)	Net tuition Revenue (Constant Adjusted 2015 dollars for COLA, HECA, EMI)
Virginia	\$12,839	\$4,911	\$8,007
California	\$10,870	\$8,522	\$2,349
New York	\$13,903	\$8,830	\$5,073
Minnesota	\$13,435	\$5,695	\$7,740
Kansas	\$12,011	\$5,837	\$8,083

Chart 2: Sample of state revenue sources. Columns do not total due to adjustments of COLA, Higher Education Cost Adjustment, Enrollment Mix Index and debt service on capital projects ("State Higher Education Finance FY15 SHEEO," n.d.)

Now consider an institution with 1000 freshman students and a historic retention rate of 60-70% year over year. That institution would have, on average, over \$5 million (400 students x \$12,907) in tuition and appropriations at risk each year, not considering retention among any upper classmen. If engagement can improve productivity and customer satisfaction, it appears that employee engagement would be a very wise investment for the higher education enterprise. An increase in productivity, in terms of student retention, of just 5 percent, could garner more than \$640,000 in tuition and appropriations (50 students x \$12,907). Clearly, there is opportunity to improve retention rates within the academy. Undoubtedly, improving institutional productivity would have a positive impact on students, long-term. The short-term, financial benefit to institutions is equally clear without considering the cost savings of extraordinary recruiting effort required to replace students who dropout. With this revenue side of the equation in mind, let's turn our attention to another key area where employee engagement can have a significant impact, faculty and staff turnover. Without question, employee engagement has a significant impact on turnover as evidenced by Gallup (2013). As pointed out previously, the Gallup organization (2013) found a reduction of 25-65% in turnover among organizations based on employee engagement. Turnover can be minimized through employee engagement and it is especially poignant when we consider that one-fifth (20%) of employees will leave voluntarily and one-sixth (17%) will leave involuntarily.

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Employee Retention Calculation				
Total Employees	750	1500	2000	3000
Average number of Employees Turnover	35	75	100	150
Turnover Rate (average voluntary turnover for education 15%)	4.67%	5.00%	5.00%	5.00%
Average Salary	\$ 75,000	\$75,000	75,000	\$75,000
Total salary or replacements	\$ 2,625,000	\$5,625,000	\$7,500,000	\$11,250,000
Estimated cost of replacing (20%)	\$ 525,000	\$1,125,000	\$1,500,000	\$2,250,000

Table 3. Sample cost of retention calculator Employee Retention Calculation

As evidenced by this review of the substantive data provided in the eleven studies, Boushey and Glynn (2012) provide a compelling case to calculate the cost of replacing employees in education at 20 percent of the employee annual salary. Further, and of critical importance is the rate (15 percent) of the estimated number of employees in education that leave voluntarily. This turnover rate is roughly three times the turnover rate in the estimate outlined above in Table 2 and a sobering cost to institutions that are clamoring for any savings or revenue source and require, in many cases, a highly skilled worker to fill faculty or administrative positions. In 2003, Academic and Physician Scientist reported that, based on research conducted in two institutions, the recruiting costs for clinical faculty members were \$113,000 per faculty for a Southern, public institution. This compared favorably to the cost of recruiting clinical faculty in a Northern, private institution which cost more than \$260,000 (Wenger, 2003). This compared favorably to recruiting costs for a basic science faculty member which ran \$275,000 and \$388,000 respectively (2003). In a report from the University of Idaho, a budget committee found that the search process included: search costs and moving expenses of \$12,800, committee member time of \$12,000, startup costs of \$2,500-\$600,000 (lab, equipment, computer resources, studio space, membership to associations, etc..) depending on the faculty/department ("Cost of Hiring New Faculty, University Budget and Finance Committee, University of Idaho," 2015). What is more difficult to quantify is the opportunity cost when a new faculty member comes to an institution. According to the report (2015), it takes as many as three to five years for a new faculty member to be productive and contributing to the institution. The lost opportunity for students and colleagues as new faculty members come online would be very difficult to quantify. Knowing that any employee, in virtually any capacity takes time to onboard and become a contributing member of the team, this onboarding process is amplified in situations where the interactions are as personal as a relationship between faculty and student.

Engagement, as noted in the Gallup research can positively influence turnover by reducing turnover and associated costs. Engagement programs might include learning communities, professional development programs, career pathways, or mentoring programs. For example, the University of Louisville Medical School ran a faculty mentoring program, the University saw a decrease in faculty turnover from 11% to 7% proving the investment in a faculty development/retention effort (Wenger, 2003).

Employee engagement has very real benefits and very real costs. Looking at the higher education enterprise, the cost of employee engagement can be seen in the cost of turnover and real costs to recruit students. The



impact of faculty and staff engagement can affect student retention. The lost revenue stemming from a student who leaves college is significant for the student but when taken in total, can be damaging to the institution. Naturally, the inverse is equally profound. When faculty and staff are engaged in their work, the positive impact on students can provide a pathway with very real financial benefits and, as we have seen, can be very beneficial to the enterprise in terms of revenue and cost savings related to the reduction of turnover. There remains, two additional areas worthy of exploration where we can see the reverberation of engagement. These concentric circles started with the student and then flowed to the institution. What lies further out where engagement reverberates is in the community and the global/macro effect of engagement.

Financial impact of engagement in the community

When institutions make investments in engagement of faculty and staff those investment reach students first. Institutions benefit from the investment, presenting substantial rise in productivity and potential improvement in student retention and completion. But what happens when this wave rolls out from the institution and into the community? How does this investment, or lack of investment in engagement, reverberate beyond the campus? Here we look at how the investment in engagement, presents itself in the community.

One of the primary economic development issues for a community or region is job retention and job creation. A stable and diverse tax base are pillars of a sustainable community. In order to retain and grow the tax base, a community must be able to offer a wide range of services, amenities and incentive packages. The one thing that seems to be consistent among corporate relocation professionals and corporate executives, is that access to a qualified workforce is essential in the relocation decision. Where companies locate their operations is dependent in large measure, based on where they can access the talent necessary to operate. Take these examples from the trade website, Talent and Industry Development (Wagner, 2016)

General Electric recently announced its decision to leave Fairfield, Connecticut, and move its headquarters to Boston, Massachusetts. **GE officials pointed to Greater Boston's concentration of elite universities, well-educated workforce and nimble tech firms as the main draws.** As stated by the company's chief executive, Jeffrey Immelt, "We want to be at the center of an ecosystem that shares our aspirations." Company leadership is in the midst of an all-out effort to transform the 124-year-old company and a corporate relocation can be an important cog in the wheels of progress.

Motorola Solutions headquarters is leaving Schaumburg, Illinois, after 50 years, returning to its urban roots. In this case, the company is not leaving the state; it is relocating from its sprawling suburban campus to downtown Chicago. Motorola Solutions Chairman and CEO Greg Brown said the move would allow the company to **"gain the access to talent they need for the future we are all building here in Chicago."**

Arctic Cat (maker of all-terrain vehicles and snow mobiles) is relocating its headquarters from the suburbs to a larger, 107-year-old building in Minneapolis. This is a great example of an urban redevelopment project that will "allow the company's new management to implement their vision of creating a different environment and feel for their employees" said CEO Chris Metz. Metz went on to say the "relocation was necessary because the company is determined to grow significantly over the next few years." Additionally, the Minneapolis location **"should make it easier for the company to recruit engineers and product development pros as well as other executives and administrators."**

Marriot International CEO Arne Sorenson has publicly spoken about the company's plans to relocate its headquarters, which have been in Montgomery County, Maryland, since 1955. With its lease expiring in 2022, Sorenson said, "It's time to start thinking about it." At almost a million square feet, the timeline for decision making will be long and, as outlined here, there are many deciding factors to be considered. Sorenson has indicated that **"in order to attract the best talent, a location that will appeal to young workers will be needed."**



ConAgra Foods, in Omaha since 1922, has made the decision to move to Chicago, Illinois. CEO Sean Connolly believes he's **"got the best shot to attract the kind of talent his company needs to rebuild its brands and come up with new ideas."**

Clearly, these examples illustrate the high value talent is in the decision-making process for corporations that are seeking to relocate their organizations. The top three location selection factors for corporate users rarely tend to change from year to year (Lindquist, 2016):

- Labor — quality and availability
- Cost — employees, real estate, overall occupancy (including taxes, 1x costs, etc.)
- Accessibility — logistics and supply chain networks, access to markets, and inputs/employees, etc.

The growing demand for high skilled labor and the lack of availability will put communities with these resources at the top of the list for consideration from the private sector when looking for a new location. The connection to academia is self-evident as the primary source for the much needed workforce. Partnerships between the private sector and the local institutions is imperative to develop the local talent pipeline and ensure sustainability (Lindquist, 2016). Again, driving engagement among faculty and staff improves individual and institutional performance. The institution with this engaged human capital is well positioned to be a critical resource for economic development locally and regionally.

To summarize what we know, first, there is a growing, global demand for skilled workers. Secondly, when employing talent management strategies in higher education, schools found an association between the talent management processes and successful reform efforts and more ambitious instruction (Smylie & Wenzel, 2006). Third, according to Gallup (2016) employee engagement is at critically low levels and actively disengaged employees, those working to undermine the engaged employees, are at dangerously high level. Fourth, the engagement of employees can have a dramatically positive impact on an organization by lowering turnover, absenteeism, improving customer experience and employee productivity (Gallup, Inc, 2013). Finally, the cost associated with replacing employees, both voluntary and involuntary departures is significant.

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All of these factors impact the performance of the individual contributor and, in turn, the performance of the institutions overall. For higher education, that performance can often be illustrated in graduation rates. We look now at the impact of low graduation rates.

The high cost of low graduation rates

The value of a college degree is well-documented and has deep history. There are numerous sources including the American Association of State Colleges and Universities (1976) the Bureau of Labor Statistics (Bureau of Labor Statistics, 2015), Georgetown Center on Education and the Workforce (A. Carnevale, Strohl, & Melton, 2013), the U.S. Census Bureau (Julian, 2012), and the American Association of Community Colleges ("Earnings by Attainment," 2014). Most of the citations explore both the distinct economic advantages and resulting disadvantages to an education from the individual perspective. That is to say, there is a high correlation between education attainment and income for an individual. With the growing demand for skilled workers, it appears that an educated individual will have much better chances of gaining employment in the current environment than a less skilled candidate (A. P. Carnevale, Jayasundera, & Gulish, 2016). What is often untold and overlooked is the high cost of low graduation and low attainment to the broader community. Here we explore the economic impact from a tax revenue perspective.



In 2011, a study was conducted by the Association for Institutional Research (Schneider & Yin, 2011) looking to gain a deeper understanding of the revenue and tax implications of low graduation rates. The process undertaken was straightforward but resulted in some astounding numbers. Schneider & Yin (2011) looked at a single cohort of students from each of 1636 campuses in the sample. Using the standard IPEDS (Integrated Postsecondary Education Data System) 6-year graduation cutoff, Schneider & Yin compared income, State and Federal income taxes paid for those that graduated versus those that did not with income estimates based on the difference between median earnings for those with some college versus those with a bachelor's degree for 2009. This cohort began its college experience in 2002 to arrive at the 6-years, standard graduation horizon as established and reported by IPEDS. What came out of this research was clear evidence that the cost of low graduation rates to communities, states, and the federal government, in terms of tax revenue was significant. For 2010, the estimated loss of federal income tax payments for a single cohort of students was \$566 million (2011). The lost tax revenue for the state is equally staggering. Schneider & Yin prepared a calculation of the present value of the lost revenue from one year of lost income and lost federal taxes for the cohort of full-time students who started college in 2002 but did not complete within six years. The top five states, that lost more than \$100 million for a single year, were as follows:

State	Income Lost	Federal Taxes Lost
California	\$386 million	\$57 million
New York	\$359 million	\$53 million
Texas	\$341 million	\$51 million
Pennsylvania	\$185 million	\$27 million
Illinois	\$173 million	\$25 million

To reiterate, Schneider & Yin (2011) illustrated both a single year of lost revenue as well as the present value of the lifetime losses. The calculated losses for the present value of the lifetime of losses were well in the tens of billions of lost revenue for states. Every year, thousands of students drop out of college, creating an ongoing stream of lost revenue while at the same time, states are making huge investments to educate students that ultimately will cost the states in lost tax revenue (2011). These same states are funding institutions in a wide array of mechanisms to deliver graduates and a skilled workforce with less than stellar achievement.

Looking at the broader context of faculty/staff engagement presents another consideration around student loan debt. As previously outlined, the amount of student loan debt has more than quadrupled to \$1.1 trillion (Yannelis & Looney, 2015). Among the 42 million borrowers are borrowers who Yannelis & Looney (2015) describe as "non-traditional" because historically there were relatively few for-profit students and because 2-year students were less likely to borrow. During and following the great recession of 2008, the number of non-traditional borrowers became half of all borrowers. With poor labor market outcomes, few family resources, and high debt burdens relative to their earnings, default rates skyrocketed among these non-traditional borrowers (2015). Of all students who left school and who started to repay federal loans in 2011 and who had fallen into default by 2013, 70 percent were non-traditional borrowers (2015). This reconciles with the understanding that students who borrow for college but never graduate are three times more likely to default (Haugwout et al., 2015). The reason this is critical to this question of engagement is related to nature of student debt and its guarantor.

It is important to consider the impact of \$1.1 trillion of student debt on our population and the economy. First, the debt, with interest, on average will total approximately \$38,000 or approximately \$320 month (Denhart, 2013). Clearly, this level of debt burden further hampers access to capital to purchase a home or start a business or begin saving for retirement. Secondly, consider that there is approximately \$1.0 trillion in student



loan debt that is federally guaranteed. That is, the creditor is the U.S. taxpayers. If students are not completing their education, again, they are more likely to default, have lower household incomes, are more susceptible to unemployment and unable to compete for high wage jobs due to a skills gap. The creditor left with the responsibility of this student debt is the U.S. taxpayer.

There are broad implications when considering student and institutional success. The impacts are local, regional, and as illustrated here, have deeper lasting impact across the economic and social spectrum. While the reach is significant, there is little question the consequences of the disengaged workforce within higher education.

Conclusions

There is clear evidence that the global workforce is aging and those coming into the workforce will require a higher level of skills to meet the demands of positions in the future. The shortage of skilled workers is not unique to one industry but may be more intense in some areas. Education is not immune to these global trends. Employee engagement has a significant impact on organizational success. Addressing employee engagement within the higher ed institution can offer substantial benefits to institutions and the broader community. With the considerable amount of funding that supports faculty and staff, it is critical for institutions to glean the very best from their workforce. A strong talent strategy driving an engaged workforce within an institution can have long-lasting effects that benefit the economy for years to come.

Implications

Here we will review the key points and apply these to a hypothetical institution. The intent is to derive some comparative data points and provide additional understanding of the impact of engagement.

What we know:

- The demand for high-skilled workers will continue to impact the labor force and competition for the highest performers;
- turnover cost is significant;
- cost of replacement of faculty/staff is significant
- employee engagement is abysmal;
- improving engagement can have significant impact on production and in the case of higher education, production means student engagement/success.
- if students succeed their individual wealth increases dramatically but also the state/local income tax revenue is dramatically impacted as well.

What might happen for an institution if an employee engagement strategy were employed? Looking at the data outlined here, an illustration can be created.

Assumptions:

- Employee engagement improve 5% from industry average 29% engagement
- Employees "actively disengage" decreases by 5% from 17% to 12%



- Productivity as evidenced by student success and completion rates increase by 5% due to higher levels of engagement across the campus, this increase is well below the 21% increase in productivity due to engagement as found in the top quartile in the Gallup (2016) study
- Turnover decreases by 5% below the average of 15% turnover in education
- First-year retention rates go from U.S. average of 77.1% to 82% driving graduation rates. Graduation rates for Associate degree students climbs from an average of 29.2% to 35%
- The number of degrees per 100 U.S. residents climbs 5% from 2009 average of 33.9 to 39%

Results:

In this scenario, the faculty turnover costs are reduced by approximately \$1.0 million for an institution with 1500 employees. Increasing the retention of first-year students by just 5% would mean, on average an additional \$12,907 per student. For an institution with 5,000 FTE (1250 freshman) to increase retention, year over year, from 77% to 82% would mean an additional \$775,000+ in additional tuition and state funding support based on U.S. state average student support. Graduation rate increases due to higher levels of employee engagement drive local employment, community competitiveness and family income. The U.S. median household income for 2010 was \$50,046. Assuming the increased education as outlined here, a higher median household income, additional state/local taxes would be gained as well. For this example, let's assumed the additional freshman, from our sample institution, were retained from year 1 to year 2 and completed their degree. This is a total of 63 students that were retained. Further, let's assume their household income increased from \$50,046 to \$60,000. Assuming a 26% tax rate (20% federal, 6% state) on the difference in income (\$10,000), this would have an impact of \$163,800 in the first year and each year following.

For this example, the impact of an engaged employee base within our sample institution, the institution could save approximately \$1.0 million in lower turnover costs. The sample institution could generate \$776,000 in additional net tuition and state support annually. Upon graduation, the estimated annual increase in tax revenue would be an additional \$163,800 annually. For a single institution with 5000 students that employs an active employee engagement process, the resulting revenue/savings could be \$1.9 million annually. This should clearly explain the main conclusions of the article, highlighting its importance and relevance.

Conflicts of Interest

Author has no knowledge of existing conflicting interest regarding this work.

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