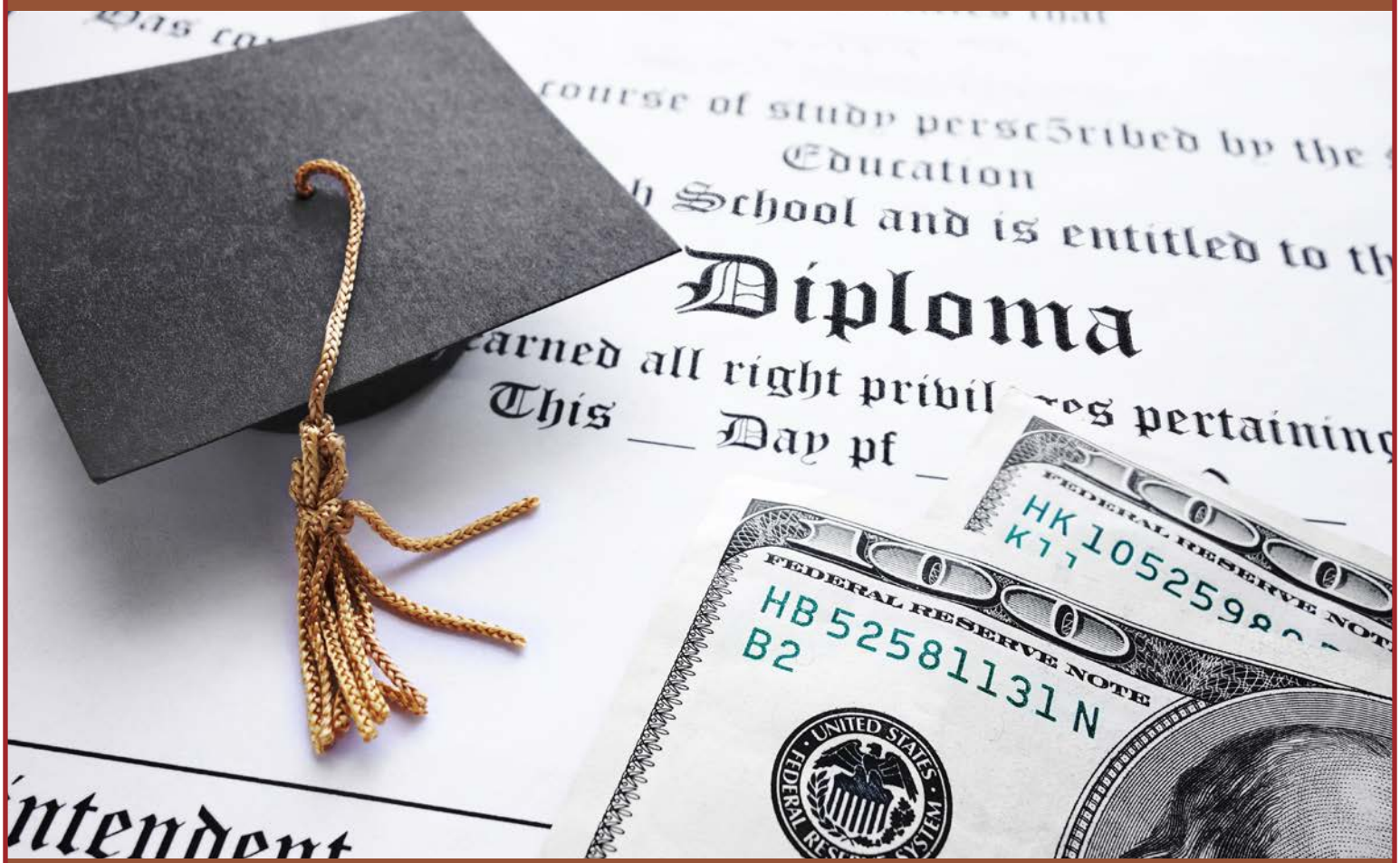
Texas Public Policy Foundation

Career and Financial Outcomes of Graduates of Competency-based Higher Education Programs

CBE GO I



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CBE GO I

by Thomas K. Lindsay, Ph.D.; Joseph Goldman; Phoebe Long; Lillian Leone

EXECUTIVE SUMMARY

Due to the increased attention from Texas policy professionals on education access and affordability, the Texas Public Policy Foundation (TPPF) commissioned a study on the outcomes of graduates of competency-based education (CBE) programs. The Competency-Based Education Graduate Outcomes I (CBE GO I) study includes the analysis of graduates of three different competency-based programs in teaching, nursing, and organizational leadership.

The CBE GO I study consisted of a survey-based, quantitative study of graduates from two prominent competency-based courses of study, the Associate Degree in Nursing (ADN) from Institution X and the Bachelor of Arts degree from the Teachers College at Western Governors University (WGU). By comparing the responses of these samples with those of graduates from other comparable traditional nursing and teaching programs, outcomes of both groups were evaluated with respect to comparable nurses and teachers. Organizational Leadership graduates from South Texas College (STC) participated in qualitative interviews about their experiences at STC and their career outcomes.

The findings of the CBE GO I study suggest that CBE degree programs such as the ADN at Institution X and the BA degree at WGU's Teachers College may be financially more attainable for students from a lower socio-economic background, thus opening the door for more Americans to pursue registered nurse (RN) and teaching credentials. The qualitative portion of the study focusing on STC graduates yielded a great deal of insight about the communities that CBE programs could serve, the challenges that new programs confront, and areas for further research.

INTRODUCTION

Over the last 30 years, the average tuition for a U.S. bachelor's degree at a traditional four-year college has increased more than 15 times faster than the average household income in the United States.[1] Students who borrow graduate with an average of $27,000 in student loans.[2] Student loan defaults slow economic growth by limiting access to credit, stifling entrepreneurship, and reducing long-term buying power.[3] Both policymakers and educators are exploring alternatives to traditional higher education in order to combat the rising cost of higher education and the accompanying debt problem.

1 White House Press Office, 2013
2 Haughwout et al., 2015
3 Gorman, 2015

Overview of Findings

- Both WGU and Institution X graduates self-reported that they are at least as work-ready, if not more so, than traditional teaching and nursing graduates, respectively.
- Both Institution X and WGU graduates completed their degrees with less debt than those who attended traditional institutions.
- The annual income of WGU graduates is 21 percent higher than that of non-WGU graduates, and WGU graduates reported higher average salaries across all workplaces.
- Of the STC graduates who were interviewed, many participants reported being viewed more favorably in the workplace after receiving their degree and indicated they would not have received a recent promotion without it.
- Common complaints among STC graduates interviewed include unclear financial aid advising, high instructor turnover and a high dropout rate within their institution.

Key Findings

NURSING (INSTITUTION X)

- Institution X graduates scored significantly higher in all work readiness areas, including social intelligence, organizational acumen, work competence, personal management, grit, and work readiness overall.
- Non-Institution X graduates surveyed who borrowed money accumulated 2.3 times more debt during their nursing education than Institution X graduates.
- While fewer graduates from Institution X received financial assistance toward their tuition, more graduated debt-free than non-Institution X graduates.

TEACHING (WGU)

- WGU graduates scored significantly higher on work readiness overall as well as grit, organizational acumen, and personal management.
- 25 percent more WGU graduates utilized loans to pay for their degree. Of participants who took out loans while pursuing their teaching degree, non-WGU graduates graduated with 49 percent more student debt.
- Annual income of WGU graduates is 21 percent higher than that of non-WGU graduates, and WGU graduates reported higher average salaries across all workplaces.

ORGANIZATIONAL LEADERSHIP (STC)

- Many participants reported being viewed more favorably in the workplace after receiving their degree.
- Majority of participants said they would not have received a recent promotion without their degree.
- Common complaints among graduates interviewed include unclear financial aid advising, high instructor turnover, and a high dropout rate.

Leveraging competency-based education methods to increase the number of graduates and reduce costs is an option that has received a great deal of attention from many stakeholders. Already used by primary and secondary schools for decades, innovative technology can be utilized by higher education to create CBE programs that promise a more flexible and less expensive route to a college degree. Competency-based bachelor's degree programs offer an alternative for nontraditional students who may not have the time or resources to complete a four-year program yet still desire a rigorous, meaningful education.

HISTORY OF CBE

Although many people are unaware of the competency-based model of education, the practice of CBE is more than 100 years old. The traditional model of measuring educational attainment, known as the Carnegie Model, was implemented in the early 1900s when unprecedented numbers of children began attending school during the Industrial Revolution. The Carnegie Model advanced students based on contact hours with instructors and was well-suited to handle the surging student population with a limited number of teachers.[4]

However, even in its early days, many educators disagreed with the Carnegie Model. In the early 1900s, John Dewey wrote about the importance of experience and stressed the fundamental need for reflective thinking in students versus rote learning from an authority figure.[5] In 1919, the school district in Winnetka, Illinois experimented with allowing students to advance at their own pace. Under the Winnetka Plan, school days were divided in half, with students working on core subjects in the morning at their own pace and then coming together in the afternoon for group sessions. This experiment was the first time a competency-based model was implemented in the classroom. Thirty years later, Ralph W. Tyler introduced a dynamic curriculum model, claiming that educators should develop objectives that focused on the needs and interests of students, a further step in personalizing education.[6]

In 1963, John Carroll challenged previous notions of learning by saying that aptitude was a measure of how quickly an individual mastered a skill as opposed to a sign of innate intelligence. This statement helped spark the then-radical idea that not all students progress at the same rate, a central element of CBE. In 1968, Benjamin Bloom echoed John Carroll's work with his paper *Learning for Mastery*. He believed that the vast majority of students could master any skill granted appropriate instruction and time. To implement this new type of

4 Sullivan and Downey, 2015
5 Miettinen, 2009
6 Le, Wolfe and Steinberg, 2014

education, he proposed a learning system where students who did not initially comprehend a lesson would get additional material designed to further their understanding. That same year, Fred Keller developed a Personalized System of Instruction (the Keller Plan) where students completed modules at their own pace and instructors provided feedback.[7]

In the 1970s, CBE began expanding across higher education. Several colleges such as Thomas Edison State College and Empire State College developed programs that allowed students to receive credit through Prior Learning Assessments (PLAs). PLAs are earned college credits based on learning from work experiences, professional training, military training, or open source learning.[8] In 1997, Western Governors University (WGU) established the first CBE degree program where students individually worked through competencies, although credits were still awarded according to time spent in the classroom. In March 2013, the Department of Education invited colleges and universities to create competency-based bachelor's degree programs. Later that year, College of America became the first school to award degrees solely based on competency measures such as projects and tests.[9]

CORE VALUES OF CBE

Mastery of a Skillset

Unlike the Carnegie Model, CBE emphasizes students' mastery of specific learning objectives, or competencies, rather than subject material. Traditional credit hour programs operate on a time-based schedule. If students attend a certain number of classroom sessions and make a minimum score on tests and papers, they can pass to the next level.

The competency-based model attempts to solve a concern many employers express about graduates not having the skills expected after completing coursework. In many universities that offer traditional, four-year programs, students need only a grade of "D-" or higher to receive credit for a course. Because each course can cover a wide range of topics and skills, students are not guaranteed to have achieved mastery in every section. In addition, if a student receives a failing grade, they are often required to retake the entire course, even if they only missed mastery in a couple of areas. This method of awarding credit does not ensure that students have a solid foundation that they can build on with further learning.[10]

Alternatively, CBE programs require students to master specific, more granular competencies before they advance. At Institution X, evaluators measure mastery through a variety of assessment options, including tests, papers, projects, and practical exercises. Students of higher education CBE programs may apply their past experiences and acquired knowledge on PLAs to show mastery of a competency in which they already have experience. Examples of PLAs include program-run examinations, Advanced Placement (AP) tests, foreign language assessments, and credit for past internships or jobs that demonstrate a specific skill.[11]

Advance at Own Pace

CBE philosophy holds that every student learns different material at varying speeds, a topic discussed at length by John Carroll.[12] Students in CBE programs complete material at an independent pace, moving on to the next course only when they have achieved sufficient mastery of a competency.

Competency-based higher education programs also offer flexible course completion, allowing students to work through modules on their own schedule. Students may retake assessments and repeat lessons until mastery is achieved. For students who fail to pass a particular competency on their first attempt, programs offer additional material to encourage successful completion of the section.

Many competency-based higher education programs price courses in a similar fashion to traditional colleges and universities. Students pay for the number of credits they earn or attempt. These students are usually permitted to take as many courses as they can handle in each term. This ability to take unlimited courses falls under the CBE principle of being able to complete coursework at "one's own pace," without being limited by restrictions or "overload" fees imposed by traditional institutions.

In addition to the ability to take unlimited credit hours per term, some CBE programs offer an "all-you-can-eat," or subscription pricing option where students pay a base fee and work through as many courses as they can in each term.[13] Instead of paying per credit, students pay the same amount whether they take one credit or 20 credits. This cost scheme particularly benefits students who can move quickly through the competency requirements of the program and/or those who can devote significant amounts of time to their studies. For example, under the Texas Affordable Baccalaureate program at South Texas College, students pay $750 per six-week term.[14] During each term, students can complete as many competencies as their schedule and abilities allow. Potentially, students would pay less in tuition at a community college that

7 Le, Wolfe and Steinberg, 2014
8 The Council for Adult & Experiential Learning, 2015
9 Kamenetz, Are You Competent? Prove It., 2013
10 Sullivan and Downey, 2015
11 Kelchen, 2015
12 Le, Wolfe and Steinberg, 2014
13 Kelchen, 2015
14 Klein-Collins and Glancey, The Texas Affordable Baccalaureate Program, 2015

charges less than $100 per credit hour if they completed only two competencies in a term (the equivalent of just over 2.5 credit hours). However, students who can complete more than two competencies in the same timespan save money by working through the subscription model.

Feedback and Support

CompetencyWorks, an online resource for CBE materials and research, states that CBE programs should offer students meaningful assessments with constant feedback on their work and progress.[15] Instructors are expected to focus on areas where students are struggling to help them advance and succeed.[16] Competency-based higher education programs offer feedback in a variety of ways such as student-appointed mentors and course-specific assessments that identify problem areas.[17]

Personalized

CBE programs are tailored to the individual receiving the education and students have the option to self-direct portions of their learning. Education is personalized to each student as they move at their own pace through material to meet competency requirements.[18] Subscription-based pricing, PLAs, and learning experiences outside of the classroom, such as internships or volunteer work, are examples of how CBE can be personalized to meet the unique requirements of students.

Application of Knowledge

CBE stresses the importance of clear competencies that reflect required knowledge for a skillset, normally related to a career. Learning is assessed through the application of knowledge. Programs such as the Texas Affordable Baccalaureate program (TAB) at South Texas College and Texas A&M University-Commerce (TAMUC) implement this component of CBE by researching and developing competencies that reflect the needs of the workforce and degrees they design. For example, the TAB program included competencies identified through the Lumina Foundation-funded Texas Tuning project.[19] CBE programs may also accept workforce experience as credits in the form of PLAs if students can demonstrate specific skills they learned. For example, some military personnel develop skills in specific areas, such as Information Technology (IT), but never receive third-party certification. PLAs, in the form of exams or portfolios, give these students the opportunity to receive credit for competencies they have already mastered, speeding up their path to a degree.[20]

TARGET POPULATION

CBE programs specifically target students for whom the traditional model is not ideal. These students are usually older than traditional, first-time undergraduate students (25+) and have prior work experience. They typically work at least part time and require a flexible schedule to balance their degree program with other obligations. CBE programs help them acquire specific skillsets to advance their careers.[21]

CBE IN TEXAS

In 2011, Gov. Rick Perry issued a challenge to schools of higher education in Texas: create a bachelor's degree that would cost $10,000 or less. From this challenge, the Texas Higher Education Coordinating Board (THECB), STC, and TAMUC partnered to create the first CBE degree program in the state, the TAB program. The Lumina Foundation, historically supportive of CBE, began a study in 2009 that researched specific skillsets students needed in the workplace. This study, completed in 2013, helped the TAB program create learning objectives and design its CBE degree.

To develop relevant degree programs, the team behind the TAB program also surveyed the areas around TAMUC and STC to find what skills were needed by employers and what qualifications workers needed to advance their career. The results of their work showed a need for mid-level managers who had a bachelor's degree. From this finding, STC and TAMUC developed the Bachelor of Applied Science in Organizational Leadership (BASOL) and launched the program at the beginning of 2014.[22] The degree program at STC is a hybrid of in-person and online classes while the TAMUC version of the degree is entirely online.[23] Other schools that offer CBE programs in Texas include Austin Community College, Texas State Technical College-Harlingen, and Lone Star College.

FIELDS

There are abundant CBE programs offered at different schools across the United States. A quick glance into different competency-based education programs reveals that education, health sciences, IT, nursing, business, and criminal justice are among the most popular CBE programs. The next section of this report will explore two popular fields, teaching and nursing,

15 CompetencyWorks is a project of iNACOL (International Association for K-12 Online Learning), (iNACOL 2016)
16 Le, Wolfe and Steinberg, 2014
17 Western Governors University, 2015
18 Le, Wolfe and Steinberg, 2014
19 Klein-Collins and Glancey, The Texas Affordable Baccalaureate Program, 2015
20 Haynie, 2014
21 Rivers, 2016
22 At TAMUC, this degree is called the Bachelor of Applied Arts and Sciences in Organizational Leadership.
23 Klein-Collins and Glancey, The Texas Affordable Baccalaureate Program, 2015

Table 1: Differences between LPNs and RNs

	Licensed Practical Nurse (LPN)	Registered Nurse (RN)
Job Requirements	• Provide basic care (take blood pressure, help patients bathe/change) • Report to RNs and doctors	• Administer care (medicine and treatment) • Run diagnostic tests and analyze • Instruct patients • Oversee LPNs and other aides
Education Requirements	*Post-secondary non-degree award*	*Bachelor's or Associate degree*
Median Annual Pay	$42,490	$66,640

Source: Bureau of Labor Statistics [24]

and the TAB program in more depth. Three institutions that offer CBE programs collaborated with Goldman Insights to provide graduate contact information for the CBE GO study. Following data collection, analysis, and report writing, the institutions discussed in this report were granted the right to redact their name from the published report. One institution chose to do so and will be referred to as Institution X.

Nursing

Pay and responsibilities for nurses largely depend on the type of license they hold and where they live. With significant salary increases available for those who attain a higher level of education, many nurses seek to advance their career through additional education. However, many nurses with less advanced qualifications often work long hours and lack the time necessary to successfully complete a degree program. Programs like those at Institution X offer competency-based, online learning options for practicing nurses who need theoretical training to obtain additional certification.

Institution X

Institution X's mission is to expand education opportunities to students historically underrepresented in higher education.[25] Their nursing program is unique, as students can receive the degree necessary to become a registered nurse (RN) through a competency-based program offered online. Institution X's system is controversial because students receive little practical experience. Some states, such as California, have placed restrictions on Institution X graduates, requiring them to complete additional clinical requirements elsewhere before they are eligible for licensure as an RN. However, Institution X graduates are required to have practical experience, as only those who are already licensed vocational/practical nurses (LVN/LPNs), emergency medical technicians (EMT), or specific military corpsmen can be admitted to the program.[26] The school claims that they ensure students can meet the demands of a clinical environment by requiring students to pass a final, comprehensive nursing exam. Once students successfully complete the exam, they have earned their degree from Institution X and are eligible to take the NCLEX-RN, the nationwide examination for the licensing of registered nurses in the U.S. and Canada. [27]

Table 2 outlines the NCLEX-RN pass rates for ADN graduates between 2013 and 2016 for Institution X compared to the United States and New York state. Importantly, the proportion of Institution X ADN graduates who pass the NCLEX on their first attempt has been at least 5 percent lower than the passing rates of ADN graduates in the United States overall since 2013. While New York state's first-time pass rates improved by over 5 percent between 2013 and 2016, Institution X's pass rates hovered around only 76 percent each year throughout that period.

Because Institution X's program is nontraditional and has alternative requirements for admission and graduation than typically required of nursing program graduates, more

Table 2: NCLEX-RN Pass Rates (Institution X Graduates)

Year	Institution X	United States	New York State
2013	76.14%	81.42%	76.95%
2014	74.06%	79.27%	76.05%
2015	74.45%	82.00%	79.75%
2016	75.53%	81.68%	82.00%

Source: Institution X

24 Bureau of Labor Statistics, 2015b
25 Institution X, 2016
26 Institution X, 2016
27 Institution X, 2016

research is necessary to understand how Institution X graduates compare to graduates of other nursing programs. In 2009, SRI International conducted a study on CBE nursing program graduates to measure their competency in the workplace compared with RNs from traditional programs. The research involved interviewing nursing supervisors, whose contact information was obtained through graduates and a panel of nursing supervisors. The supervisors were then asked questions about the students who had become nurses through the CBE program and their clinical competency. SRI found that both samples of nursing supervisors thought that CBE graduates were just as competent as RNs from traditional programs.[28]

TEACHING

Like nurses, teachers obtain licensure by the state before they may be hired by a public school. In all states, K-12 teachers must hold a bachelor's degree. They must also complete a certain number of supervised hours of student teaching and pass the appropriate examinations for the grade or subject that they wish to teach.[29] Teachers must also complete continuing education and professional development requirements to maintain their licensure, and many teachers continue to a master's degree or seek higher levels of certification such as National Board Certification. These career advancements often result in higher pay, more flexible hours, and the possibility to advance into administrative positions.

Western Governors University

WGU was the first exclusively online university to receive accreditation from the National Council for Accreditation of Teacher Education (NCATE) for their degree programs leading to teacher licensure.[30] They offer bachelor's degrees, post baccalaureate teacher certification programs, and master's degrees. All coursework is completed online prior to the supervised student teaching component, which must be completed in a classroom.

The average time it takes to complete the Bachelor of Arts in Interdisciplinary Studies (K-8) at WGU is 2-2.5 years for students with an associate degree or equivalent and 4-5 years for students with little or no prior college experience.[31] To complete the degree, the student must complete a total of 122 Competency Units (CUs), WGU's equivalent to the traditional credit hour, with each class representing 3-4 CUs. Students who have prior credit from other institutions may receive transfer credit.

The BA program for teachers begins with general education requirements such as world history, English composition, fitness, and natural sciences. The coursework culminates in one term of demonstration (student) teaching and the completion of a professional portfolio. Students who achieve a grade of "B" or higher in the course are awarded a grade of "pass," signifying that the student has demonstrated competency in that subject. Once all coursework and student teaching are completed, the student may take the required licensure exams for their state.

Studies by Gallup and the Harris Poll show positive employment and well-being outcomes of WGU graduates compared with graduates of teaching programs at other universities. However, the demographics of WGU make comparison with traditional programs difficult. The average age of WGU students is 36.8 years old, much higher than that of students in traditional programs. Additionally, students come to WGU with significantly more work experience and maturity than most students under 25 years old who begin their undergraduate education.

ORGANIZATIONAL LEADERSHIP

Texas Affordable Baccalaureate Program

On February 8, 2011, Texas Gov. Rick Perry issued a challenge to Texas universities to create a $10,000 bachelor's degree program.[32] Given the comparatively high tuition charged by most Texas universities, numerous publications speculated that this task would be very difficult to implement.[33] However, colleges and universities have taken on this challenge by leveraging modern technology and competency-based education principles.

The TAB program is the first competency-based bachelor's degree at a Texas public higher educational institution. Offered by TAMUC and STC, this program aims to provide non-traditional students an affordable, flexible option to achieve a bachelor's degree. While not accredited by the American Association of Colleges and Schools of Business, the coursework involved in earning the Bachelor of Applied Arts and Sciences in Organizational Leadership degree strongly resembles that of a traditional Bachelor of Business Administration (BBA).[34]

Students in the TAB program can begin their studies in any one of six seven-week terms offered throughout the year. During these terms, students can take as many courses as their schedule allows for a flat fee of $750 per term. Subscription

28 SRI International's findings were significant at the 0.05 significance level; (Gwatkin, Hancock and Javitz 2009)
29 The number of hours and the regulations related to the specific licensing exams required vary by state.
30 Western Governors University, 2016a
31 Ibid.
32 Ramsey, 2011
33 Haurwitz, 2011
34 Texas A&M University-Commerce is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award the Bachelor of Applied Arts and Sciences in Organizational Leadership degree.

pricing enables students to move through the coursework at their own pace, enabling some students to graduate earlier than expected.

Coursework is divided into three divisions: core, lower-division, and upper-division. The core curriculum focuses on Texas state-required courses including Texas government, writing composition, and other arts and sciences. After completion of the core requirements, students advance to lower-division coursework. Through PLAs, students may be able to establish competency in one or more areas using prior experience and mastery of course objectives to satisfy requirements without taking the course. Lower-division classes closely resemble numerous components of a BBA program, including finance and economics courses.

Students then progress into the upper-division requirements. These courses are specific to the Organizational Leadership degree and cannot be substituted with other coursework. Like the lower-division requirements, the coursework in the upper-division is similar to that of upper level business courses, including management theory and leadership classes.

As of January 2016, the TAB program at TAMUC has only 42 graduates, but the rate of growth in the program has been substantial. Starting with under 30 students in early 2014, overall enrollment has grown to more than 500 students in just two years. Measuring the workplace outcomes of TAB graduates will become more important in determining the quality and benefits of the program.

The TAB program has, by many measures, exceeded affordability expectations: the average cost of a TAB degree earned at TAMUC is just $4,339.[35] While this number is substantially lower than the $10,000 goal set by Gov. Perry, the true cost of an entire degree competed with the TAB program is not below $10,000. Though in theory a student with no prior credit completing the equivalent of nine credit hours per term could graduate with a degree for around $10,000, the current average pace for students is six credit hours per term, pricing the full degree at around $15,000. While this figure is higher than Gov. Perry's original goal, the cost of a bachelor's degree from the TAB program is still lower than the full price of just one semester at some of Texas' private colleges.[36]

OPPORTUNITIES FOR CBE

Cost Savings

In the public sector, higher education institutions aim to use CBE to lower the costs of degrees. A breakdown of the soaring costs of higher education reveals that administrative spending has skyrocketed in comparison to the costs of hiring faculty, with a 235 percent increase in administrative spending, a 128 percent increase in faculty spending, and a 148 percent increase in overall university spending.[37]

This administrative bloat can be greatly reduced in competency-based programs, as there are fewer social activities, housing, and other expenditures found in traditional four-year universities. Further savings come from not having to maintain dorm rooms or provide staffed student activities, as these students typically take classes online. Empirical research has not yet been conducted on the costs of implementing or running a CBE program, but initial results from TAMUC are promising.[38] A comparative glance at traditional and CBE programs shows that CBE programs are cheaper per term, providing an affordable opportunity for individuals without access to significant financial resources.

Mastery of a Skillset

Students advancing upon mastery of a competency is a key component of CBE. These competencies are often designed to reflect skills necessary to a specific career, such as teaching and nursing. Proponents of CBE argue that while a transcript may reveal general topics that a student has studied, his/her ability to complete certain tasks or perform specific skills is not revealed until after hiring. Ideally, a CBE transcript would portray to an employer the skills a graduate mastered to earn their qualification.

CHALLENGES FOR CBE

Accountability

Corinthian College, a for-profit college, offered seemingly inexpensive degrees for students and published promising employment prospects after graduation. This promise of a quick, cheap, career-ready degree ensnared thousands of students. However, their impressive placement rates were entirely falsified. While Corinthian published an 85 percent placement rate for medical assistant graduates, the actual placement rate was zero.[39] Corinthian College was subsequently shut down by the federal government for fraud and taking advantage of their students. The school currently owes $531 million to students for reparations and was fined $30 million by the Department of Education for lying about statistics to recruit students.[40]

Additionally, some students filed a class action lawsuit in 2014 against one CBE nursing program on the grounds that students were not given adequate material to pass the program's

35 Rivers, 2016
36 Austin College, 2016
37 Lindsay, 2015b
38 Kelchen, 2015
39 Kamenetz, Corinthian Colleges Misled Students On Job Placement, Investigation Finds, 2015
40 Green, 2015

clinical performance assessment for which the school charges over $2,000 per attempt. With a pass rate of just over 60 percent, some students felt that the high cost of the assessment incentivized the school to inadequately prepare students in order to force them to retake the assessment. The school settled with the students.[41]

Given the lack of standardization among CBE and non-CBE programs, accountability is an important issue facing online and competency-based education. If promises on degrees or career outcomes are not delivered, who is to be held accountable? The Department of Education regulates for-profit institutions by requiring their graduates to have "gainful employment" upon completion of their degree.[42] With online nonprofit and public degree programs entering the field, who ensures that the standards are fair for everyone? How are the quality and integrity of these programs going to be maintained? To what national or state standards should these schools be held? These are all difficult questions that CBE programs and policymakers must answer to ensure that all students in these programs receive a quality education.

Implementation

Educators in New Hampshire, where CBE is implemented statewide at the high school level, experience a significant software lag associated with CBE programs. Software has not yet been developed to allow schools to measure students' progress against indicators linked to competencies. Instead, schools in New Hampshire, such as Next Charter School, have had to resort to using cumbersome Excel workbooks to track students' progress. Other schools in New Hampshire, noting the same difficulty, save data inconsistently across various platforms, as software has not yet been developed to store and access student progress information in a user-friendly way.[43]

This problem is not isolated to K-12 education. A survey of CBE in higher education by Public Agenda found that data systems were the biggest barrier to implementing CBE programs. Seventy-eight percent of respondents who were designing or managing a CBE program said that proficient data systems were a barrier or extreme challenge to implementing CBE.[44] The gap between the capabilities of developed software and the technological requirements of CBE is a significant hurdle for colleges and universities wishing to create and run a CBE program.

Among many competency-based online programs at for-profit institutions, the phrase "Credits Earned Are Unlikely to Transfer" appears in small print on virtually every television commercial, brochure, or postcard. Owing to relatively weak standards set by the Department of Education on program quality at for-profit, online institutions, many public and nonprofit universities generally do not recognize credit from for-profit programs. As CBE adoption grows among more established universities, these institutions may be faced with similar concerns about the quality of transfer credit. In an environment where credits earned can (and should) easily transfer between institutions, the advent of CBE poses a problem for higher education. Rather than offer standardized credit hours for courses with virtually identical curricula, competency-based programs measure progress through competencies that may not align with other programs.[45] In order to ensure fluid credit transfers by students in and out of the CBE model, how should these competencies be standardized across institutions? Determining who regulates these programs and enforces CBE standards is a key component of ensuring quality across these institutions.

Once these set competencies are determined, the standards at which students pass them must be generally agreed upon to ensure that achieving mastery in a competency is equivalent to mastery of the same material at another program. How do educators define mastery of each skillset and how is it measured? These elements of CBE must be standardized and quantifiable to ensure the quality of a program. Has a student mastered content if they know 80 percent of the material? Are standardized tests the best way to measure this or do projects reveal more? A Public Agenda survey found that creating assessments that measured competencies is extremely or moderately challenging to 80 percent of respondents involved in implementing CBE.[46]

Funding

Currently, Texas state and federal funding for public institutions of higher education is based on contact hours between faculty and students and functions on a semester model. Because competency-based programs, such as the TAB program, use a different model for instructor-student interaction and follow a six-week term schedule, determining the appropriate level of funding for these institutions is difficult. Given high start-up costs of content development and technology associated with initiating a competency-based program, lack of

41 This information draws from an article written about Institution X that, due to the institution's redaction, cannot be named.

42 In order to provide "gainful employment," programs must ensure that "the estimated annual loan payment of a typical graduate does not exceed 20 percent of his or her discretionary income – what is left after basic necessities like food and housing have been paid for – or 8 percent of his or her total earnings," Department of Education, 2015

43 Freeland, 2014

44 Public Agenda, 2015a and 2015b

45 Given the limited number of texts and broad consensus on the ordering of teaching material in a variety of courses, many students are able to easily move between universities as they progress through courses like the calculus sequence and U.S. History.

46 Public Agenda, 2015a and 2015b

flexible funding is a significant obstacle for public institutions trying to implement CBE.

Perceptions

Though competency-based programs have been around for decades, the programs are not widely known and have little name recognition among employers. This obscurity creates a knowledge gap between potential students and public institutions, like TAMUC and STC. Potential students tend not to understand the program, and traditional channels of marketing higher education programs (such as high school counselors and college fairs) are not effective for nontraditional students. Furthermore administrators and faculty at other institutions are skeptical of CBE. Without full buy-in from faculty and college leadership, competency-based higher education programs may be relegated to "alternatives" and not receive the same marketing attention and funding that traditional programs receive.

Another obstacle for CBE in higher education is the stigma associated with online education. For example, an online degree from Western Governors University does not, and may never, have the same prestige as a degree from Harvard. Famous scandals associated with some online programs, such as the fraud committed by Corinthian College, do nothing to instill confidence in this new type of education. In order to convince students, employers, and institutions of higher education that a quality bachelor-level education can be delivered online, competency-based higher education programs will need to work to fight stigma by producing and publicizing strong graduate outcomes rooted in data-driven research.

SUMMARY

For-profit, nonprofit, and now public universities are offering competency-based education programs in an attempt to provide educational opportunities that are more flexible, relevant and cost effective for nontraditional students. Unfortunately, issues of fraud and stigma have kept CBE programs from being viewed as legitimate, competitive educational options. In order to help make data-driven assessments of CBE, more research must be done on the graduate outcomes of these programs to ensure that they are an affordable path to earning a quality education.

CBE and Organizational Leadership

As of 2016, the graduate of a U.S. bachelor's degree program is saddled with an average of $37,172 of debt[47] ($26,250 for graduates of Texas programs).[48] Gov. Rick Perry responded to this issue in 2011 with a call to action challenging Texas public colleges to ensure 10 percent of their bachelor's degree programs cost no more than $10,000.[49] In his state-of-the-state address, the governor encouraged institutions of higher education to "leverage web-based instruction, innovative teaching techniques, and aggressive efficiency measures to reach that goal." He emphasized that such a bachelor's degree program would have significant benefits beyond increasing the affordability of higher education, positively affecting the nation's graduation rates and the number of skilled workers in our economy.[50]

In response to this mandate, South Texas College (STC) partnered with Texas A&M University-Commerce (TAMUC) and the Texas Higher Education Coordinating Board (THECB) to create the Texas Affordable Baccalaureate (TAB) program in 2014. To ensure that the program aligned with the needs of the Texas workforce, the Lumina Foundation funded the Texas Tuning project to identify precise knowledge and skills that were attractive to employers in a variety of fields.[51] This research was used by STC to develop the Bachelor of Applied Science in Organizational Leadership (BASOL).

Unlike STC's other three bachelor's degree programs, the BASOL was the first competency-based education (CBE) degree program in Texas.[52] Through the CBE model, coursework is tailored to each student through pre-assessment tests, and, upon completion of all coursework, students demonstrate competency by earning a score of 80 percent or higher on a post-assessment test.[53] Additionally, students can earn credits towards the completion of their degree for knowledge from work, military, and other experiences through prior learning assessments (PLAs).[54] Finally, projects and assignments completed in upper division courses are collected in an electronic portfolio, allowing students to demonstrate their knowledge

47 Powell, 2016
48 "Student Debt," 2015.
49 Lindsay, 2015a
50 Address by Gov. Perry, 2011
51 Klein-Collins and Glancey, 2015a
52 STC has been accredited as a level II baccalaureate degree granting institution by the Texas Higher Education Coordinating Board and the Commission on Colleges since 2004.
53 Klein-Collins and Glancey, 2015a
54 Ibid.

and skills to future employers.[55] Enrollment in the BASOL program grew from 13 students in the spring of 2014 to 240 in spring 2016. As of December 2015, a total of 71 students have graduated from the program.[56]

Students pay a $750 flat rate per seven-week semester, and may earn as many credits as they can successfully complete within the term through online and hybrid (online and in-person) courses.[57] The STC model allows students to earn their degree in a shorter period than a traditional bachelor's program: students who enroll with 90 or more college credits can graduate in just one year, and those enrolling with no college credit can graduate in three years.[58]

Online, competency-based programs are becoming an increasingly popular option for students to earn a bachelor's degree quickly and inexpensively. However, several critics have expressed concerns about the cost, quality, and outcomes of such a degree. While lowering tuition costs is an admirable goal, some critics question whether the educational quality of a bachelor's degree can be maintained for a fraction of its typical price.[59] Others have noted that massive institutional change is required for designing an individualized, competency-based program.[60] The changes include overhaul of technology in institutions of higher education, a redefinition of faculty roles, and a shift away from education funding based on faculty-student contact hours. Research is needed to understand how BASOL students are affected by these institutional changes as well as to understand the issues BASOL students encounter when navigating the highly technological program.

Additionally, while the BASOL degree was created in alignment with the Texas Tuning project research findings regarding Texas' workforce needs, little is known regarding whether TAB graduates receive jobs or promotion in their current jobs following the completion of their degree. As Berret (2015) asks of the competency-based program, "if a degree is currency, will this one convert?" The answer is likely to emerge from studying how BASOL graduates' preparation for the workforce and employers' perceptions of CBE graduates compares to those of traditional baccalaureate programs.

In many applied fields, a four-year degree is necessary for job security and advancement. By providing a flexible way to earn college credits—through online classes and prior work or military experience—the BASOL program may offer students an alternative way to acquire the qualifications they need to support further career growth. Access to CBE may be particularly meaningful in a relatively impoverished area whose residents have a relatively low level of education: the south Texas border region.[61]

The Competency-Based Education Graduate Outcomes study (CBE GO) presents the results of qualitative interviews with ten STC BASOL graduates. Consenting participants were asked questions about their educational and career backgrounds, their decision to pursue the BASOL at STC, their impression of the classes, faculty, and organization within the program, and whether they would recommend BASOL to other students. Their responses provide insight into areas of online competency-based education programs that need investigation, including the experience of earning the BASOL degree as well as the social and financial impact of the degree.

METHODS

After receiving formal Institutional Review Board approval from South Texas College, Goldman Insights staff attempted to contact all 71 program graduates for study recruitment. At first, graduate recruitment was conducted through email, but only one graduate responded and several emails bounced back. Study staff then switched to phone calls as the primary recruitment tool. Calling cards and scripts were used during phone calls to recruit and inform participants about the study. Recruiters called 71 graduates at least twice; 12 graduates had disconnected phone numbers and three had outdated contact information. Thirty-one graduates did not answer the phone or return recruitment calls. Of the 25 graduates that answered the phone and spoke with study staff members, 13 declined to participate and 12 agreed to meet for an in-person interview. Of those 12, ten were interviewed.

The majority (80 percent) of interviews were completed in person at an STC campus classroom. One interview was conducted at a fast food restaurant near the participant's place of residence upon their request, in Harlingen, Texas. The other interview took place through Skype, a video messaging service, because the participant lived in Florida. No other graduates in the Harlingen-Brownsville area were available for an interview.

All interviewed graduates read and listened to study information, signed formal consent forms prior to participation or provided verbal consent, and received a $50 cash incentive upon completion of the interview. During the data collection process, interviews were recorded and participants responded to a list of semi-structured interview questions to collect

55 *Ibid.*
56 Peek, 2016
57 *Ibid.*
58 Lindsay, 2015a
59 *Ibid.*
60 Klein-Collins and Glancey, 2015a
61 Bernardo, 2016

qualitative and quantitative information. The purpose of the interview was to collect data on the following topics:

1. Prior educational experiences (high school, other college coursework)
2. Experiences at STC (admissions, financial aid, relationships)
3. Professional history and experience
4. The impact of the BASOL degree on their career (promotions, advancement)
5. Financial impact (cost of degree, student loan debt)

General Description of Participants

Ten participants agreed to a 45 minute, in-person interview. Everyone identified as Latino/Hispanic; six were female, four were male; all had been or are currently married. Two worked in law enforcement (both male); two were stay-at-home parents (both female); two worked at STC (one male, one female); two worked or were looking for work in school administration (both female); one worked as an occupational therapist (male); and one worked in safety operations in construction (female).

Participants were divided into three groups, based on when they entered the program: those in the first cohort attended STC when the BASOL program first opened; the second cohort attended a year after the BASOL program opened; and the third cohort began the program any time after the first year.

Table 3 further outlines their names (pseudonyms), age, cohort, current employment, and other pertinent descriptive factors.

RESULTS

Upon completion of the interviews, the participant responses were analyzed according to the methods of content analysis. First, respondents' interviews were read and coded line by line, then common categories among respondents' answers were developed and revised. Finally overarching themes and categories were developed to reduce the large amount of data into smaller, more meaningful categories of information. This process followed Mayring's description of the six stages of the content analysis approach to analyzing qualitative data.[62] Analysis of the responses identified two principal themes common in each interview: the experience of earning the BASOL degree and the perceived value of the degree. These themes have been further divided into subcategories and are discussed in detail below. The pseudonyms in **Table 3** will be used to reference all stories and quotations from the 10 participants.

62 Mayring, 2000

Table 3: STC Participant Profiles by Cohort (pseudonyms used)

NAME & AGE	COHORT	PROFILE
Beatrice, 33	I	**Education**
		Earned two associate degrees from STC
		Brief attendance at local university (UT Rio Grande Valley)
		Returned to STC for BASOL program
		Career
		Former Lead Teacher working at a Head Start school
		Left after earning BASOL because no room for advancement
		Currently unemployed
Esther, age not reported	I	**Education**
		Earned associate degree in math from STC
		Transferred to a local university twice, but returned to STC to earn BASOL
		Career
		Tutored Math at STC with associate degree
		Earning master's degree

Table 3: STC Participant Profiles by Cohort (pseudonyms used) continued

NAME & AGE	COHORT	PROFILE
Hakim, 30	I	**Education**
		Earned associate degree in occupational therapy at Del Mar College
		Graduated from STC BASOL in 2015
		Career
		Worked after graduating high school to save money for college
		Works in occupational therapy. Plans to get master's degree.
Jacqueline, age not reported	I	**Education**
		Graduated high school in 3.5 years
		Attended STC right after high school
		Transferred to a larger university, but dropped out
		Career
		Wokred as a freelance graphic designer
		Worked in the construction industry
		Recruited to out-of-state company as a safety manager after earning BASOL
Clara, 49	II	**Education**
		Earned a certificate from Texas State Technical College
		Earned associate degree in accounting from STC
		Went back to school to earn bachelor's degree 20 years after graduating high school
		Career
		Original goal was to be a wife and mother
		Worked in human resources for over a decade
		Had hoped to find a job that aligned with degree and work experience after earning BASOL
		Decided to prioritize family; stay at home mom
Gabby, age not reported	II	**Education**
		Attended college immediately after high school in another Texas city, but dropped out for "logistical" reasons
		Earned associate degree in accounting from STC
		Currently earning MBA
		Would like to earn Ph.D.
		Career
		School administration as head of attendance for school district
		Hopes to teach at the college level
Anthony, 35	III	**Education**
		Immediately after high school completed lower division coursework at STC
		Transferred to a Texas university for one year, but dropped out for logistical reasons
		Returned to STC to advance career
		Career
		Worked in law enforcement after dropping out of university

Table 3: STC Participant Profiles by Cohort (pseudonyms used) continued

NAME & AGE	COHORT	PROFILE
Daila, 48	III	**Education**
		After high school graduation, earned a data entry certificate
		Later earned an associate degree from STC (took 6 years)
		Earned BASOL in 2 years
		Career
		Worked at a student loan servicing company for 22 years, worked up to being a supervisor
		Currently works at STC in administration
Frederick, 33	III	**Education**
		Attended Texas State Technical College for two semesters after high school
		Returned to school in 2010 to earn associate degree in law enforcement to advance career and earn BASOL
		Career
		Started as a police dispatcher after dropping out of school
		Worked up to lieutenant police officer
Ignacio, 36	III	**Education**
		After moving from Mexico, earned GED at 17
		Attended Laredo Community College and then a technical program for an HVAC certificate
		Career
		Works at STC as a maintenance technician

Experience Earning the Degree

Participants discussed their experiences earning the BASOL at STC in terms of program organization, the relationships they made with administrators, instructors, and academic advisors, and applying for and receiving financial aid. Participants in the first cohort experienced more logistical struggles associated with attending a nascent program than participants in the second and third cohorts. In general, participants related many positive experiences regarding the responsiveness of their instructors and many recommended STC to future students.

Program Organization

Jacqueline, Beatrice, and Esther, all of whom were first cohort participants, noted several organizational problems with the BASOL program when they first began. These problems included inconsistent teacher attendance throughout the seven-week semester and teacher confusion about the curriculum requirements of the overall program. Jacqueline and Beatrice described instances in which teachers never showed up to teach a class or left halfway through the semester. For example, when a professor stopped working at STC mid-semester, the dean had to step in and teach the class.

Jacqueline, Beatrice, and Esther also recalled unclear expectations for coursework, such as being given a 20-page assignment the day before it was due. Jacqueline reasoned that because the program was new, "professors still weren't all up to par, … there was a lack of communication between the professors telling the students what we needed." Ester felt particularly frustrated in one class because she believed that, "nobody knew what [they] were doing, including the teacher." As Beatrice noted, first cohort participants seemed to experience "growing pains" while in the program, since "everything was brand new … [it was] very rocky at the beginning."

In contrast, participants in the second and third cohorts did not recall the same program difficulties. The difference in cohort experiences is likely due to STC efforts to make the program more cohesive after the first group of graduates. For example, Frederick entered in the second year of the program and noted that during the "two and a half years that I was there, I saw so much growth in the school." In sum, graduates who began their BASOL coursework after the first cohort revealed improved learning and classroom experiences as the program matured.

Relationship with Instructors and Advisors

Despite differing experiences between the three cohorts, all study participants repeatedly reported positive relationships with their content instructors and academic advisors. Nine participants commented that BASOL program support staff were responsive, helpful, accommodating, and knowledgeable. For example, Clara, Daila, Gabby, and Frederick noted their teachers and/or advisors were responsive in person or via email if they had questions or needed help. Being responsive to emails was especially important as many BASOL classes are taught through an online platform. "They were easy to talk to, easy to go up to and say, 'Hey, I need you to explain this maybe a little different to me because it's been so long,'" Clara said. Gabby agreed, "They were always there when you needed them. [My advisors] were great."

Esther, Jacqueline, Gabby, and Ignacio also described their teachers as "helpful." Esther noted three instructors who mentored her in writing and navigating the school system, without being officially assigned to do so. In terms of being accommodating, Dalia noted the professors were willing to work with students' schedules when assignments were due: "They were determined to make the program work for the students, which was a big plus, because they understood that most of us were actually working full time." In fact, nine of the ten participants worked full time while completing the BASOL program, and all of the participants also had families. Clara, for example, gave birth to a son during her program and stated that, "the professors were very understanding" and "they would work with [her]," on homework assignments and providing flexible due dates. Maintaining positive relationships with professors was one way participants managed to balance work, school, and their personal lives.

The responses of two participants indicated that not all teachers were praise-worthy, however. Beatrice, who was one of the first BASOL students, was the only participant to report negative qualities in the teachers, recalling that of all the faculty she met and classes she took, she only liked one professor. She goes on to say that it was only in this professor's class that she learned the material, while she struggled with her other teachers. Additionally, Clara noted of the first classes she attended, "Our professor … was very knowledgeable, but he wasn't in it. It wasn't his passion." In contrast, her favorite teacher was passionate and knowledgeable, "She studies what she's gonna teach you."

Participants reflected favorably on the individual advising component of the BASOL program. Gabby was particularly grateful that her advisors did not waste her time or money signing her up for unnecessary classes: "sometimes you talk to advisors and you take all these classes and then you wind up, 'I didn't need that class.' Well *this*, when I got into this program, they're gonna tell you exactly what you need. (sic)" Although Beatrice repeatedly stated that her experience in the first cohort was "rocky," she agreed that the "advisors were still awesome." She described her difficult experience at the University of Texas-Rio Grande Valley, where "you were just walking through school on your own, and no advisor," revealing that the strength of the advising within the STC BASOL program sets it apart from other institutions in the region.

Relationship with Administration

When participants were asked about their experiences with school administration, the graduates revealed both positive and negative experiences. As the BASOL program uses an online platform, some of them never interacted in person with program administration staff. For example, Frederick mentioned that he did not interface with administration, since most of the course registration and advising was simple and online.

Of the graduates who had direct experience with administration, response was generally positive. Clara and Gabby reported, "never having problems" working with administration and that, "they were willing to help" and "were always there when you needed them." Jacqueline noted that, "they were very friendly and they were very willing" to work with the students. Hakim illustrated his experience with STC administration with a particularly positive memory: "there was one time that I did meet with a dean and he was really nice, friendly, we sat almost for a whole hour and talked about past experiences, where he came from, where I came from, and he was very encouraging about continuing my education and he geared me towards the right people so that way I can get in the right track to take care of the difficulties that I was having."

However, Esther described facing obstacles from the administration of both STC and the University of Texas-Rio Grande Valley with regards to transferring credits. "I had to take my papers three times before they actually recognized some courses. So I got laid back a lot because of a lot of paperwork," she remembered.

Financial Aid

BASOL program graduates pay a flat rate of $750 to earn as many credits as they can complete within a seven-week period. STC offers six of these seven-week semesters per year. Only one participant (Anthony) paid for his STC degree completely out-of-pocket, without any financial aid, and graduated without any student loan debt. The nine other graduates that participated in this study qualified for and received financial aid at some point during the program. Participants described their experiences with the three types of financial aid:

scholarships, grants, and loans. This section outlines the types of financial aid and how these ten graduates paid for their BASOL degrees.

Scholarships and grants are awarded to students without expectation of repayment. For example, the Pell Grant is a form of financial aid provided by the U.S. Federal Government to those who have not yet received their first bachelor's degree and demonstrate financial need. While amounts fluctuate yearly, the maximum Pell Grant for the 2016 academic year was $5,815. Clara stated that, "if you qualify for Pell Grants, you don't need a student loan and most people graduate without debt." Four participants, Clara, Daila, Gabby, and Jacqueline, received Pell Grants for their BASOL coursework. Although Daila and Jacqueline did pay $1,000 and $2,000, respectively, out-of-pocket for books and materials over the course of the program, all four participants who received Pell Grants earned their bachelor's degree without taking out student loans and graduated debt-free.

Ignacio also graduated from BASOL debt-free without taking out student loans; he received funding in the form of grants and scholarships. Ignacio paid for coursework supplies and part of his tuition out-of-pocket. "Overall I don't think that I spent more than a thousand [dollars] … because I had this financial aid and also my employee benefits. … But no I didn't get any loans."

Student loans, both subsidized and unsubsidized, are available to any student pursuing higher education. There are many types of loans, and some have need-based eligibility requirements. Unlike grants or scholarships, all loans must be paid back through monthly repayment plans following graduation. Three of the participants graduated from BASOL with outstanding student loan debt: Beatrice, Frederick, and Hakim. Prior to the BASOL program, Beatrice earned two associate degrees, which she paid for using financial aid in the form of scholarships and grants. She recalls that, "I had already practically used it all up," when she began her bachelor's degree. Thus, she took out additional student loans and graduated with $6,000 of loan debt, for which she has deferred repayment.

Similarly, Hakim related: "Financial aid was actually pretty good for the first couple of years. But then I had maxed it out … because I have been taking courses part-time, part-time and then when it came to taking on full-time with seven-week terms, I already had kind of exhausted most of the financial aid. [sic.]" He paid partially out-of-pocket and graduated with $10,000 of student loan debt. Finally, Frederick explained that, "[he] and [his] wife make a decent living," and thus did not qualify for scholarships or grants. Frederick paid partially out-of-pocket and graduated with a student loan debt of $5,000.

Unfortunately, the research cannot show a more detailed breakdown of how the graduates paid for their BASOL coursework. Continued research is necessary to comment on the extent of their debt-burden in relation to their income or how earning their bachelor's degree affected their broader monthly expenditures. This would be an important area for further research in the future.

Nevertheless, that seven participants (70 percent) graduated without student loan debt and nine participants (90 percent) received grants and scholarships illustrates the quality of the financial aid advisors at STC. Overall, the participants described the process of applying for and receivin participants recommended STC participants recommended STC participants recommended STC participants recommended STC g financial aid as smooth, although difficulties did arise for some of the graduates. Students who received financial aid described having a "smooth interaction" (Ignacio), and an "excellent" experience (Jaqueline) with STC financial aid advisors. For example, Daila described applying for financial aid as "pretty easy. I did it all online. If something got flagged, I would bring in my documents. The worst thing was being in line to turn in the documents, but other than that it was fairly easy." Jacqueline echoed similar experiences, stating, "it was easy to complete financial aid, offices were always open and willing to help. For the most part, the vast experience of online was super easy [sic.]."

However, two participants expressed frustration that they did not qualify for aid because of the financial aid cap. Beatrice and Hakim qualified for aid initially, but because both had previously transferred back and forth between schools, they reached their "enrollment cap" prior to the conclusion of the BASOL program. The federal government only offers financial aid for a particular number of credits toward a bachelor's degree; after the number of credits has been met, federal aid is exhausted and students must file an appeal. Both Beatrice and Hakim had to appeal for further aid, but, unfortunately, no longer qualified. Despite these difficulties, Beatrice echoes the satisfaction of the other graduates with the financial aid advisors in the BASOL program: "the financial aid people were really helpful in helping me find any scholarships or anything like that to help me pay. Eventually, I had to pay for a few semesters out of pocket but they tried."

PERCEIVED VALUE OF THE BASOL DEGREE

Participants were asked about the benefits they received or hoped to receive from earning their BASOL degree at STC. Seven sub-themes emerged from their responses: promotions,

improved work skills, employers' and co-workers' perceptions, being a role model, pride and self-confidence, and pursuing further education. Participants also discussed the value of their degree in comparison to other programs, for example discussing the relative knowledge and experience they gained in comparison to the time and money they put into earning the degree. Each of these categories reveal how participants felt they benefitted from earning two more letters (BA) on their resume, quickly and inexpensively. However, participants also discussed the limitations of earning a nontraditional degree from a lesser known school.

Promotions

Participants discussed promotions they have already received or expect to receive after earning their BASOL in the form of increased pay, career growth, and workforce opportunities. All 10 graduates commented on the positive value of the BASOL degree as a catalyst for advancement in their respective professions.

Pay

Three participants discussed salary increases that were a direct result of earning their BASOL degree. Anthony, a police officer, had previously applied for a promotion within his department, but was disqualified because he did not have a bachelor's degree. He described the "magic" impact of the BASOL on his resume: "I got my degree, magically, I got a position and I'm happy to say I was just promoted with a $10,000 pay raise … and I wasn't even getting looked at until they saw that I had a [bachelor's] degree." Frederick, also a police officer, received a pay increase upon completing his bachelor's degree, noting that, "any type of education, any type of degree is considered as a justifiable pay increase [sic.]" in his profession. Similarly, Jacqueline contrasted her salary before earning her BASOL ($26,000) to her current salary ("almost 6 figures"). She recalled that within a month of earning her degree and posting her resume online, she was recruited by an out-of-state company to a well-paid position as a manager, which was a significant promotion for her.

Daila also stated that earning her BASOL led to a promotion within her company, but did not state whether this promotion included a pay raise. While Gabby had not yet received a pay raise since graduating in 2015, she said that the primary impact of having a bachelor's degree in her line of work was an increase in pay. She hoped to earn more money as a school administrator once the 2016 school year started. She noted that, "I get $13 an hour, and then the max is $16, so we'll see if I get that." Similarly, Esther said that tutors with bachelor's degrees make more per hour than those with associate. While she is not currently working, she was confident that if she had stayed at STC working as a tutor, her BASOL would have allowed her to increase her hourly tutoring rate.

The BASOL degree quickly and directly led to a pay increase for three graduates who participated in this study. For police force employees Anthony and Frederick, the BASOL allowed them to fulfill pre-determined requirements for a pay raise. Jacqueline stated that her degree, combined with her work experience, made her eligible for a well-paid position in an industrial setting as a safety manager. Among those in the workforce who expected to receive pay increases upon earning their BASOL, Daila, Gabby, and Esther all worked in school settings as administrators or teachers.

Career Advancement

Four participants discussed the title promotions they had received upon earning their bachelor's degrees. Similar to Anthony, Daila discussed the effect of adding BASOL to her resume: "as soon as I finished my bachelor's, it's just magically, a Specialist position came open in the same department that I'm in. I applied for it and I got it [sic.]" Frederick said that his BASOL degree put him on a fast track for promotion. Despite having 11 years of experience, Frederick could pursue a Masters of the Peace certificate after graduating, usually only awarded to those with 20+ years of experience. Additionally, Jacqueline said her BASOL degree, in combination with her work experience, made her resume attractive to recruiting agents. After graduating, she left her job as an operations manager to become a safety operations manager at a different company. She reflected that in her line of work, "to climb the corporate ladder you do need the degree. … You need that piece of paper and that's why … it doesn't matter if it was … Harvard or not."

While Daila, Anthony, Jacqueline, and Frederick received career promotions after earning their BASOL, other participants either expected to be promoted soon, or left their job for lack of career growth opportunities. Esther, for instance, said that if she had continued to work, she probably would have had a "better position." Hakim was also hopeful that he would be qualified if a managerial position opened within his company, even though he did not yet have the graduate degree necessary to advance in his line of work as an occupational therapist.

Clara also felt that having a bachelor's degree on her resume would "open doors" in the future if she decided to return to work in human resources. However, she reflected on the following anecdote: "A friend said to me, 'I have friends that have bachelor's degrees that specialized in HR, but between them and your knowledge and your experience, you do a lot better than they do without a degree,' and for the sense that, because of my experience, I was able to do the job...So I'm thinking

that, yes, it's helpful in the sense that having an educational degree, or a bachelor's degree, or master's degree helps you in the sense that you go up in the income gap, but it doesn't necessarily mean that you're able to do the work." While Clara agreed that her degree could act as a springboard to better employment opportunities, the BASOL degree is primarily a source of external validation representing the knowledge and experience she has gained throughout her professional life.

Workforce Opportunities

Participants also discussed the value of their BASOL in terms of the wider opportunities of jobs that had become available to them. Anthony discussed the necessity of "having a piece of paper" to be a more competitive job applicant. Ignacio also spoke about "the options to go to different paths, paths that [he] didn't have before or [he had] not even considered [sic.]." While Ignacio has not been selected for other positions where he currently works in maintenance, he has received employment inquiries from companies in other fields, such as insurance and teaching. He noted that with a bachelor's degree, "you are now considered for different opportunities that someone without a degree won't have." Frederick also said earning his BASOL inspired him to apply for a federal agency, where bachelor's degrees are a prerequisite for all positions. Jacqueline, who had been recruited by several companies after posting her resume online, noted how quickly the BASOL degree widened her career options: "the minute that you got it opened a lot of doors." Having worked for a decade with the same company, which she suspected would soon go under, earning her BASOL allowed her the flexibility to change careers and companies.

However, Beatrice, Clara, Esther, and Hakim also discussed the limitations of having a bachelor's and no further education. Beatrice had experienced significant difficulty finding work in educational administration over the past two years, despite earning the BASOL degree. Clara, who worked in human resources before dedicating herself full time to her family, explained that, although a bachelor's degree in her field was beneficial, "most people now in the future need to go back and consider a master's program, and graduate from that, and then that will be more helpful in advancement, in pay, in benefits."

Similarly, Hakim said that in occupational therapy, a bachelor's degree does not qualify employees for career growth; rather, he would need to earn a master's to receive a promotion. His BASOL has not, therefore, "had a huge impact."

Attainment of a degree may not lead to more opportunities in all industry areas, as Esther worried that her ability to apply for service industry jobs, such as McDonalds, would be limited if they saw she had a bachelor's degree. She recalled a story in which someone without a degree received a bank telling job over someone with a bachelor's degree so that the company would not have to pay them as well.

Although attainment of a bachelor's degree may not lead to more opportunities in all industries, participants generally felt their BASOL degree had "opened doors" to more diverse job opportunities. Several noted the need to earn a graduate degree due to education inflation in the job force or the requirements for their particular career.

Promotions Summary

For the ten participating graduates, the possibility of career growth was a fundamental part of the value of earning a BASOL degree. BASOL led to pay increases for some, title promotions for several, and, in most cases, a wider array of job opportunities. For all of them, earning a bachelor's degree served as recognition for years of previous experience and skills they had already gained in the work force.

IMPROVED WORK SKILLS

Participants also noted the ways in which their BASOL coursework improved their performance in the workplace. Professional skill improvement was discussed with regards to improved leadership, task knowledge, organizational understanding, and teamwork.

Leadership

Seven participants reported that earning their BASOL had improved their leadership skills. Daila, Frederick, and Jacqueline spoke in detail about how their courses improved their ability to supervise their employees. Daila said the BASOL coursework, "definitely teaches you about management and what it takes to be a good manager, how you need empathy and you need to be connected with your employees so that you have a good environment." Frederick said he had "learned little tricks on how to make their time at work more satisfying, more enjoyable. … It was something that I was blind to before that." Jacqueline reflected that the BASOL degree was useful in any business situation, but that it particularly helped her understand how to manage employees in her line of work: "I think that I'm able to … conduct myself in a manner that is … welcoming and not overbearing. … I think that the organizational leadership degree has taught me, … how to … lead and manage the department." Additionally, while he did not discuss the concrete leadership skills he had learned in the program, Ignacio also reflected that he became a leader among his co-workers after earning his BASOL. For example, his co-workers started to ask him more questions about their work and asked him to speak on their behalf because "you are well educated, you will represent this."

Furthermore, Anthony discussed how learning about transformational and transactional leadership allowed him to recognize the strengths and weaknesses in the management style of others: "Well, this individual's a bad leader because of some of the stuff that I've learned and the way that we react to that form of leadership, or that form of management." Similarly, Beatrice described her role as a lead teacher at Head Start: "I help other teachers that are struggling in their classroom. I give them other methods, and a way to become successful in their class." She continued to say that, "having all this education … put me in the place where I was as a lead teacher, and helped others with everything that I learned outside of work, helped take it back over there and help them out."

In summary, the participants who worked as supervisors illustrated that their BASOL training had improved their managerial skills. After graduating, they were more knowledgeable about how to create a more welcoming and satisfying environment for their employees. For those who were not employed in leadership positions, the BASOL coursework improved their understanding of the positive and negative leadership qualities in others and taught them how to help colleagues seeking advice. Regardless of their role, these skills helped BASOL graduates stand out in the workplace.

Organizational Understanding

In addition to becoming better leaders, five participants discussed how earning their BASOL improved their knowledge of job-specific tasks. Beatrice noted that learning particular terms in her courses and "how things work, why they work, and why things happen in a company the way they do" helped her become "more knowledgeable about what you're doing … knowing the correct methods, how to go about things." Frederick discussed how the skills he had developed through coursework allowed him to create new systems of documentation for "making things … easier [for] everybody" in the police department.

Similarly, Jacqueline reported that she still references projects and homework from her BASOL coursework when writing reports, analyzing statistics, and making recommendations as a safety operations manager. Esther reflected that earning a bachelor's degree, in general, helps people develop their communication skills, "they do know how to write, or they know how to speak well, or they know how to express themselves better." Participants generally felt that the coursework they completed to earn their BASOL improved their job skills in important daily tasks, including organizing and understanding information, analyzing data, and verbal and written communication.

Four participants also discussed how earning their BASOL had improved their understanding of how organizations operate, valuable knowledge they often share with their co-workers. For example, Beatrice reflected that her comprehension of "the chain of command" in her company helped her explain company changes and protocols to co-workers. Similarly, Ignacio discussed how his knowledge about leadership theories helped him articulate to his co-workers "what's happening right now." Daila described her improved understanding of her workplace as being more analytical than her colleagues and being able to "see the bigger picture a lot better with [her] education."

Frederick reflected: "Now I kind of have an open perspective to things, I'm able to identify many different solutions to a problem as opposed to thinking one sided in the past." Gabby, who is the head of attendance at a school, also discussed being able to both initiate and adapt to change: "How can I change my department around? How can we deal with these different changes? Well, I was able to use what I was learning [in school] towards my position."

Earning their BASOL helped many participants better understand the organizations in which they worked. In some cases, this broadened organizational perspective helped participants solve problems in the workplace, such as by explaining why changes were occurring to their co-workers, finding alternative solutions to particular problems they encountered, and initiating changes to improve the efficiency of their job.

Teamwork

Five participants discussed how their BASOL coursework taught them interpersonal communication and morale-building skills that led to improved relationships with co-workers. For example, Hakim noticed how he could shape his workplace environment with knowledge he had gained in the BASOL program: "I kind of try to take what I've learned here, throw it into the workplace, and … I would notice there was a change in the environment, the collaboration that we'd have as professionals." Frederick attributed his improved ability to resolve issues with co-workers to what he had learned at STC.

Gabby and Daila also discussed how the BASOL program coursework had helped them learn to reduce negativity in the workplace. Similarly, Ignacio recalled instituting lunch time activities and writing inspirational quotes for his co-workers—techniques he had learned from his coursework—to improve their morale and increase their interaction. In total, participants generally noticed changes in the way they communicated with others and, in turn, how others responded to them, by utilizing the interpersonal communication skills they had learned in the BASOL program.

Improved Work Skills Summary

All the participants reported that their BASOL degree had positive effects on their professional skills. With regards to leadership, specific aspects of the coursework such as learning about management theories, allowed participants who were supervisors to better attend to the needs of their employees. Participants also reported positive effects on their ability to complete job-related tasks, such as communicating in written and verbal forms and organizing, reporting, and analyzing information. Additionally, from studying organizational and leadership theories, participants were better able to understand the organization in which they worked, allowing them to initiate positive change and find new solutions to problems they encountered in the workplace. Finally, improved interpersonal communication and morale-building skills were also attributed to the BASOL program.

EMPLOYERS' AND CO-WORKERS' PERCEPTIONS

Another important commonality between the interviews was that six graduate participants spoke of increased respect from their employers and co-workers since earning their BASOL degree. Both Ignacio and Gabby recalled being asked for advice by their employers regarding workplace tasks after they had graduated from STC. Daila felt her co-workers were more likely to respect her opinion and treat her as a "professional" in the way they speak to her now that she has a degree. Anthony and Frederick, both police officers, also spoke about being treated differently by co-workers after earning their degrees. Anthony said people in his department are aware of who does and does not have a degree; those who do have a degree are known for being "smart." Frederick similarly felt that people at work perceived him as a more competent detective now that he has his BASOL and "look up to [him] more."

However, future employers' perceptions of the BASOL degree were a concern for Beatrice and Clara. Clara worried that because STC is relatively unknown, employers may not view the BASOL as equivalent to "a university degree." She commented that, "if you're staying in the [Rio Grande] Valley, it doesn't matter, because they're familiar with South Texas College, but if you're leaving the Valley, or you're going out of state, it'll make a big difference," and even remembered debating with members of her cohort whether they should transfer to the more widely recognized TAMUC program. Beatrice also discussed concerns that "businesses or companies don't know how to utilize that type of a bachelor's." She has had difficulty finding a job since earning her BASOL.

Despite this worry that their bachelor's degree from STC would be viewed as less valuable to employers in the future, most participants felt that earning their degree made their employers respect and seek out their opinion on important issues, helped them be treated more professionally, and helped them be seen as more competent overall in their jobs.

Recognition

Participants discussed the ways in which their bachelor's degrees allowed them to be recognized for their workplace skills and years of experience. Several participants (Gabby, Esther, Clara, Ignacio, Jacqueline) noted that a degree in and of itself cannot necessarily improve an employee's skills and knowledge, but it can help them to be recognized for skills they already possess. For instance, Gabby noted, "there's a lot of people that have degrees, but they don't really implement what they know or show what they know." Esther also noted that in her line of work as a math tutor, the tutors with a bachelor's degree were "like the gods of the area" and were expected to know what they were talking about, even if those without a bachelor's degree were as or more knowledgeable.

Clara recalled that before earning her bachelor's degree, she had been told that she performed better than those who had a degree, because of her knowledge from years of experience working in human resources. She described the degree, then, as "compensating" for the skills and experience she already had. Similarly, Gabby summarized the value of a bachelor's degree as helping one, "get paid what you're worth." It was the belief that she deserved to be paid more upon earning her bachelor's degree that led Beatrice to give up her previous job. Finally, Jacqueline relayed that while the BASOL was not specific to her current job in safety management, it did make her eligible for her current managerial position above others with similar work experiences who did not possess a bachelor's degree.

While many participants felt that earning a bachelor's degree did not make them more skilled than someone else, being able to put their BASOL degree on their resume improved the recognition from their employers and colleagues of their competencies, skills, and workplace experiences.

ROLE MODELLING

Being a role model to community members, family, co-workers, and children also contributed to the value of participants' BASOL degrees. Daila, Hakim, Clara, and Gabby discussed inspiring their children to attend college in the future. For example, since his own family did not attend college, Hakim reflected that his degree will shape his children's educational aspirations, "they … have that same mindset, from an early age, that I didn't have." Similarly, Clara said she hoped attending STC and earning her BASOL degree would "inspire" her children to attend college. She predicted her children would say, "If Mommy could do it, and she was older, I can do it."

Gabby also spoke of how going to college had inspired her two grown children: following her and her husband, both of her daughters attended STC. Moreover, Daila also remembered a woman she barely knew in her office approached her after graduating and told her that, "I see you doing great things here, … just the way you carry yourself and how professional you are, it really encourages me to go back to school."

Many participants were the first in their family to attend college. Earning their degree not only benefitted them individually, but had a positive ripple effect in their communities: it inspired their families, friends, acquaintances, and co-workers to more readily consider pursuing higher education. Seeing proof that attaining a bachelor's degree is feasible can be especially powerful in communities of first generation college graduates.

PRIDE AND SELF-CONFIDENCE

While, in many cases, earning a BASOL conferred external rewards, such as pay increases and promotions, six participants also discussed the sense of internal accomplishment they gained from their degree. For example, Hakim discussed how his educational experience at STC contributed to his sense of self-worth: "I would say … I do feel better about myself, just because I know that I've worked so hard, and I've finally achieved it." Similarly, Anthony discussed feeling proud of the hard work he put into balancing his work, family, and school life: "just earning the degree … all while having a family, and working 50 hours a week. It's pretty freaking valuable to me … it's pretty priceless, just to know I finished." Gabby also reflected that "it feels good … [to know] I accomplished a goal, I did it."

Daila discussed how the degree program had contributed to fulfilling her sense of self: "I feel personally that I was born to lead, so the more background and education and experience that I get in that, the more powerful I feel." Finally, Jacqueline noted that being the only person in her immediate family to have earned her bachelor's degree was "a personal accomplishment within my family and, you know, in our culture."

Each of the participants felt proud that they had overcome certain obstacles, such as being the first in their family to graduate from college, or balancing family, work, and school, to achieve their goal of earning their bachelor's degree. Proving to themselves and others that they could accomplish a long-term goal was another important reason they considered the BASOL valuable.

Overall, these graduates show that completing the BASOL program increased their confidence, in some cases pushing them to want more from their careers and raise their career goals. Confidence, aspirations, and drive certainly have positive impacts on performance and achievement in the workplace.

FURTHER EDUCATION

Earning their BASOL also encouraged and enabled some participants to pursue a graduate degree. At the time of the interviews, four participants were enrolled in master's programs, while four others discussed plans to attend graduate school in the near future. Gabby was enrolled in an online master's program, which had recruited her after she graduated from STC. Having a graduate degree was important to her because she hopes to eventually teach business at the college level. Jacqueline was also enrolled in an online master's program. While having her BASOL was sufficient for promotions in her current state of residence, she said that, "The only reason I'm pursuing my master's honestly is to make the money I'm making in Florida right now to go back and return home to Texas. It's so competitive right now with the careers up there I would need a master's degree to make what I'm making up here with a bachelor's."

Anthony, Esther, Frederick, Gabby, Hakim, and Ignacio also spoke about how earning their bachelor's degree had led to feelings of empowerment to continue their education. For example, Anthony remarked that earning the BASOL had "revitalized [his] career," giving him the confidence to consider getting a graduate degree in the future. Hakim said, "I think it made me a stronger person and it also allowed me to think more, continue my education towards my master's or doctorate degree." While earning their bachelor's degree in and of itself was beneficial, it was also valuable as fulfilling the criteria needed to pursue their graduate education in the future.

PROGRAM COMPARISON

Participants also discussed the value of the BASOL in terms of the time and money it took to complete relative to 1) other programs at STC and 2) other bachelor's programs at larger universities. For example, Daila noted that the BASOL degree cost her 35 percent less than a bachelor's at the nearest university (University of Texas - Rio Grande Valley), a 25-minute drive from STC. Combined with the convenience of not having to move, and therefore relocate her teenage son, the cost of STC's BASOL was what "enticed" her about the program. Hakim also noted how "much faster it was, how much cheaper it was," than even other degrees at STC (it took him only a year to earn his BASOL after transferring his associate degree). In addition to being able to quickly complete the degree, Beatrice felt she had more personal time than other people she knew taking classes at a nearby university, who were constricted to long commutes to attend class.

Participants also compared the skills they developed in the hybridized degree program to those skills graduates from in-person programs developed. For example, Esther reflected on how people who went to "other colleges … they don't have a problem speaking in front of people. So, they shine a little bit more." However, while Esther may not have had the opportunity to develop her public speaking skills, overall, she felt her education was equivalent to an education she would have received at any other college: "I really think that every college, every degree from here or from Kingsville is gonna be the same."

Similarly, while Anthony felt like others "talked down" about STC, he said the credential he could put on his resume was just as valuable as any other bachelor's degree. Echoing the sentiment that the BASOL degree is as valuable as a degree from a larger university, Frederick noted, "I feel the quality of my education was just as great through STC as [it would] have been through a larger university or a larger local school." In contrast, Clara regretted that, had she enrolled in the same program at TAMUC, the university's name would have been written on her diploma.

Finally, Ignacio noted a way in which the BASOL program surpassed non-hybrid programs in which his colleagues at STC were enrolled. Noting the comparative technological sophistication of his hybrid classes, he said of his colleagues' programs, "they are not up-to-date or they are still using whatever they used 10 years before."

Overall, participants felt they had gained comparable skills from attending STC as they would have if they had attended another program at a larger university. However, participants also noted the ways in which the BASOL program surpassed other bachelor's programs, for example by costing less, being more accommodating for students working or taking care of families, taking less time to complete, and being technologically more advanced than other programs.

DISCUSSION

Graduates from the first cohort recalled the "rocky" beginnings of STC's BASOL program and revealed informative insights about where the STC program needed to improve. Beatrice described the first semesters as "a big mess," with regards to teachers and program organization. And several other participants had trouble with logistical aspects such as transferring course credits, as well as broader issues such as feeling uninspired by instructors. However, the interviews collected here demonstrate that the experiences of graduates in the second and third cohorts were far more satisfactory, suggesting that positive adjustments had been made.

Positive experiences while attending STC were described in relation to applying for and receiving financial aid; the responsiveness of the administration, advisors, and instructors; the relationships built with fellow classmates; and the inspirational value of achieving higher education. Participants found the tuition affordable and felt they could meet the BASOL program requirements while also working and/or being involved with their families.

The value of the BASOL degree was discussed in terms of helping participants earn promotions, improve their workplace skills, and earn recognition from their employers and co-workers. The degree also led participants to inspire others in their communities as role models, and gave them a sense of personal accomplishment, boosting their self-confidence. Finally, the value of the degree as fulfilling a prerequisite to attend graduate school was also discussed.

In regards to promotions, several participants earned pay increases and title promotions upon earning their BASOL, felt they were more likely to be recognized by their employers for their workplace skills, and many discussed the wider array of job opportunities that were now available to them as college graduates.

All the participants noted the ways in which earning their BASOL degree had benefitted their work performance. They discussed these improvements in the areas of leadership, job-specific tasks (such as communicating, organizing, reporting, and analyzing information), organizational understanding, and interpersonal communication. In addition, many participants felt that earning their degree made their employers respect and seek out their opinion on important issues, led to being treated more professionally, and allowed others to perceive them as more competent.

Participants also reflected that earning their degree not only benefited them individually, but also served to inspire their family, co-workers, and communities to pursue higher education as well. In addition, while participants experienced an array of external benefits from earning their degree, several also spoke of the pride they felt upon accomplishing a long-term goal, often after overcoming certain obstacles such as being the first in their family to attend college, or balancing family, work, and school. Earning their bachelor's degree was also a way to fulfill the qualification to attend graduate school. Finally, overall, participants felt they had gained similar skills from attending STC as they would have if they attended another program at a larger university, but a few worried the unknown name of STC and the BASOL program would affect future job opportunities. Nevertheless, considering the graduates' location, time constraints, and professional and personal

circumstances, they are generally satisfied that the BASOL degree is an affordable and effective avenue for higher education.

LIMITATIONS

The findings based on these interviews have several limitations. Lincoln and Guba (1985) define four features of qualitative research that determine its quality: credibility, transferability, dependability, and confirmability. Related to the credibility, or trustworthiness of the data, findings regarding the impact of the BASOL degree are self-reported. Conclusions about participants' job skill improvement or employer perceptions have not been compared to observer reports (such as current or previous supervisors), and participants' desire to be perceived as competent may have influenced their responses during interviews. Interviewing participants' supervisors to obtain an outside observer's perception of how the BASOL has impacted participant workplace skills could improve the credibility of these findings.

Second, with regard to the issue of transferability (that these findings transfer to other BASOL or TAB graduates), 10 participant interviews do not represent the personal experiences of the 71 students who have graduated from STC's BASOL program. Graduates willing to meet for an interview may share characteristics that are not representative of the population (positive perception of the program, free time during their day to meet, etc.). Additionally, four people (40 percent of the sample) worked at STC while attending the program, a position that may have contributed to their experience during and after enrollment at STC and may not be representative of the overall student population.

Third, regarding the dependability of the findings, participants were interviewed only once. Conferring with participants about researchers' interpretations of their words may have added to the richness of the data and the dependability of the results. Finally, participants were asked specific questions developed by the researchers during semi-structured interviews. If different questions had been asked, different answers and findings would have emerged about the social and financial impact of the BASOL program.

OPPORTUNITIES FOR FURTHER RESEARCH

While this study presents the experience of attending the BASOL program and the outcomes of earning a BASOL degree among graduates, it can provide no insights about the experience of students who enrolled in the BASOL program but did not finish. More research should be conducted to assess the experience of BASOL program dropouts to understand why they do not finish the BASOL program, whether for personal reasons or what they considered to be insurmountable problems with the STC program. Doing so may aid in understanding the typical characteristics of those likely to benefit from the BASOL program, as well as offering insight into how to broaden the target audience and increase the success of the students.

Additionally, this study only assessed participants who currently reside in Texas (except for one). Following participants' concerns that the program may not be perceived well nationally, further investigation is necessary to determine the national reception of the BASOL program.

Furthermore, as technology continues to impact society, it seems appropriate that education adapts to meet and incorporate this change. It would be particularly interesting to compare the role of technology in the BASOL or other competency-based education programs with traditional higher education institutions. Are BASOL graduates equipped with superior technology skills that can be transferred to the workplace than graduates from more traditional programs? The internet has been shown to be a promising tool to induce social change, especially in low socioeconomic areas. The internet as a primary mode of education delivery should continue to be explored.

Finally, because the BASOL program began enrolling students so recently (2014), the extended effect of the program on graduate's salary, job opportunities, and workplace skills is difficult to measure. Research should be conducted in the future to investigate the program's long-term impact. To better assess how the program affects graduates' workplace skills and employers' perceptions, supervisors of BASOL graduates should be contacted and interviewed. Further investigation and analysis could also be conducted on how BASOL students pay for their tuition and their debt-burden upon graduation. The data could lead to insightful findings regarding the affordability of the BASOL degree for students with different backgrounds.

CONCLUSION

Many educators are interested in developing bachelor's programs that prepare students to be successful in the workforce, without graduating with significant amounts of debt. Doing so has increased the educational opportunities in a region of the country where, previously, there were few flexible and affordable degree options. The experiences of BASOL graduates, presented here, reveal some of the ways the program has affected the region in terms of educational opportunity and workforce preparation and advancement.

The BASOL program experienced many "growing pains" when it first started. However, improvements have been made

since the first cohort of graduates, and some participants were pleased to recommend the program to others in their communities. They were generally enthusiastic that the BASOL program surpassed other bachelor's programs, took less time to complete, and incorporated more technologically advanced methods than other programs—with relatively low student debt burden upon graduation. The reported feelings may be biased since the study does not include the large number of students who dropped out of the program. Despite the initial challenges, graduates believe the BASOL program provided them opportunities that were previously unavailable for non-traditional students. These students earned their degrees while either working full time, taking care of families, or both.

Students reported that earning their degree complemented and validated their many years of prior work experience. Most interestingly, graduates believed they had access to previously unattainable career and salary advancements, a wider range of workforce opportunities, improved workplace skills especially in management, and an increased sense of job-specific task knowledge. Some graduates likened obtaining two letters after their names (BA) to be a sort of professional magic. In addition, graduates noted experiencing an elevated social status in the workplace and their families, such as being a role model for others, being treated with more respect and inspiring others to also pursue a bachelor's degree. With the increased sense of personal accomplishment and witnessing the professional benefits from having a bachelor's degree, several graduates have also pursued further education by enrolling in master's degree and Ph.D. programs. However, despite these perceived benefits, some graduates still worry that their degree will not be acknowledged by employers beyond Texas.

This study serves as a baseline for future exploration, while also providing previously unknown insights to educators, government entities, and organizations skeptical of the value of competency-based education programs. Graduates perceive high social, professional, and personal benefits to completing this program. To verify the effects of these benefits, workplace supervisors should be interviewed and asked about their management experiences of BASOL graduates. Those who began but did not complete the BASOL program should also be interviewed to better understand the barriers to completion.

Nursing and CBE

Nursing is one of the fastest growing occupations in the country; yet the U.S. is potentially facing a nurse deficit. The aging population, aging workforce, increasing prevalence of chronic disease, and limited nursing education opportunities have left health care providers in certain areas of the country struggling to fill RN positions. In a 2012 article in the *American Journal of Medical Quality*, researchers investigated the national nursing shortage and created state "report cards" based on current and projected RN job shortage trends. The number of states receiving a "D" or "F" is forecast to increase from five in 2009 to 30 in 2030. In the next 15 years, Texas is projected to have the third greatest number of vacant RN jobs (109,779 jobs) after California and Florida. Texas' report card is projected to worsen from a "C-" to an "F," based on the predicted 2030 change in the RN shortage ratio (RN shortage per 100,000 people) and in contrast to the national shortage ratio.

Among the long-term solutions recommended in the Institute of Medicine's *The Future of Nursing* report, the authors stress the need for additional pathways for nursing education. Providing viable educational opportunities is particularly important in rural, low income areas, where recruiting nurses is a challenge. Given that nurses tend to work near where they received their nursing education, Institution X's Associate Degree in Nursing (ADN), an online, competency-based program, allows nurses to attain their ADN degree and RN license from anywhere with internet access.

Admission eligibility to Institution X's ADN program is restricted to those who already have practical and clinical nursing experience: the application is only open to licensed vocational/practical nurses (LVN/LPNs), emergency medical technicians (EMT), or specific military corpsmen. To graduate, students must pass eight nursing theory examinations and one focused clinical competencies assessment. The program culminates in an exam which was developed by nursing faculty who hold master's and doctoral degrees. Institution X claims the exam ensures that each graduating candidate possesses the skills required of an RN, including critical thinking, the application of technical knowledge, and diagnostic reasoning in lieu of requiring supervised clinical hours. However, as of 2016, only 70 percent of Institution X's graduates passed the final exam on their first attempt.

Once students successfully complete the exam, they have earned their associate degree from Institution X and are eligible to take the National Council Licensure Examination-Registered Nurse (NCLEX-RN), the standard examination for RN licensure in the United States and Canada.

Despite receiving accolades from nursing organizations and associations, several questions and concerns have been raised about the competency of ADN graduates from associate programs, like Institution X's competency-based education (CBE) degree program. The preparedness of associate CBE nursing graduates has been discussed by nursing educators, institutions, and state governing bodies in the U.S. since the early 1990s, when state legislatures began regulating the nursing profession by establishing education and licensure requirements. Institution X has been challenged by various state boards of nursing that question the academic preparedness of CBE graduates and degree compliance with state-specific legislation. There are no uniform processes among the 50 states to assess the competence of RNs and 16 states have limited the licensure of ADN graduates.

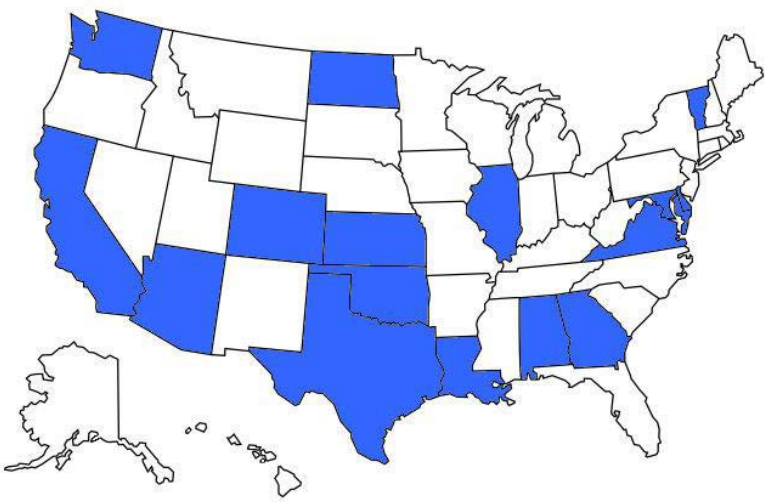
In 2001, concerns began to circulate about the preparedness of graduates from online nursing schools and the California Board of Registered Nursing investigated the compliance of Institution X's ADN program. The board found that the program did not meet California's minimum education requirements for nursing licensure, which requires 810 hours of supervised clinical practice to demonstrate competence. While these hands-on hours are integrated into traditional ADN degrees, Institution X claims their graduates prove clinical, hands-on experience when taking and passing their final, comprehensive exam. In 2004, the California Board of Nursing issued the following decision regarding Institution X graduates:

> *like other out-of-state graduates, [they] must meet the requirements set forth in California Business and Professions Code Section 2736(a)(2) and California Code of Regulations Section 1426, including the requirement of supervised clinical practice concurrent with theory, in order to be eligible for examination and licensure as a California registered nurse.*

Students enrolled at Institution X on or after December 6, 2003 must adhere to the eligibility requirement for licensure. As a result, the California Board of Registered Nursing will consider licensure for new Institution X graduates who have completed the ADN degree and the NCLEX-RN on a case-by-case basis. California is projected, in 2030, to have the largest nursing shortage of any state, with over 193,100 unfilled RN jobs.

Following California's ruling, Georgia and Virginia instated similar restrictions for obtaining an RN license. House Bill 1041 in Georgia, passed into law in 2008, states that an applicant for nursing licensure must have graduated from a "nursing education program approved by the boards or which meets criteria similar to, and not less stringent than, those established by the board." Similarly, the Regulations Governing the Practice of Nursing in Virginia were also changed in 2008, mandating that nursing education programs must provide a minimum of 500 hours of direct client care supervised by qualified faculty.

Figure 1: **States with Additional Regulations on Granting Licensure for People Degreed through Online Programs**



In 2009, House Bill 3961 passed in the Texas Legislature, including a proposal to conduct a "study of alternative ways to assure clinical competency of graduates of nursing educational programs," to determine if "the graduates of a clinical competency assessment program are substantially equivalent to the graduates of supervised clinical learning experiences programs in terms of clinical judgments and behaviors." Although the bill passed, the proposed study was not funded or completed.

Given the concerns about the preparedness of nursing graduates from online programs, more evidence is needed to determine if students who graduate from an online, CBE program are as prepared for their nursing careers as their counterparts who graduate from traditional degree programs. The Competency-Based Education Graduate Outcomes study (CBE GO) compares the self-reported career outcomes of graduates from Institution X's ADN program with the self-reported career outcomes of graduates from traditional, four-year programs.

Participants in the study completed a web-based survey informed by the Work Readiness Scale (WRS), developed and verified by Dr. Arlene Walker, and the Short Grit Scale (S-Grit), developed and verified by Dr. Angela Duckworth. These scales were adapted to CBE GO to measure self-reported career

outcomes across four subscales (social intelligence, organizational understanding, personal management, and work competence), and graduates' perseverance toward long term goals. Questions about other graduate outcomes such as income, financial aid and debt information, work experience before and after earning the ADN degree, and further educational attainment were also included in the survey that Institution X graduates responded to.

A similar study was conducted by SRI International in 2009, comparing the performance of CBE graduates to the performance of similar ADN graduates from traditional institutions. Unlike the CBE GO study, the survey evaluated supervisors' perceptions of CBE graduates. The SRI International study concluded that CBE "ADN graduates are as well prepared, and often better prepared, than graduates from traditional ADN programs." The SRI International study did not test graduates directly and only surveyed nursing supervisors nominated by CBE graduates. CBE GO was designed to address the concerns highlighted by the SRI study.

The CBE GO study provides an outline of the survey methodology and demographic makeup of the participants, including distinct samples of non-Institution X graduates and Institution X graduates. Extensive statistical analysis was conducted on the data and significant results about traditional and Institution X nursing graduates are discussed in detail. Understanding graduate outcomes can inform state licensing boards of the competence of associate graduates before receiving licensure, as well as provide evidence for data-driven policy in Texas and beyond.

Since Gov. Rick Perry's challenge for schools of higher education to develop a bachelor's degree with tuition under $10,000 in 2011, many more CBE programs have been made available in Texas. Competency-based and hybrid programs are currently offered at Austin Community College, Texas State Technical College-Harlingen, South Texas College, Western Governors University-Texas, and Lone Star College. The results of this study may also be helpful for other institutions developing their own CBE programs.

METHODS

Research Question

This study was designed to answer the following research question: are graduates of online competency-based education programs as prepared for their careers as their counterparts who graduated from comparable traditional degree programs? The study hypothesis is that Institution X Associate Degree in Nursing graduates are as prepared for their nursing careers as graduates of traditional nursing ADN programs.

Participants

Participants included 1,372 registered nurses recruited during a six-week period. All participants had at minimum an ADN, passed the National Council Licensure Examination - Registered Nurse and are licensed to practice by at least one state board of nursing in the United States. The Institution X participants, called the Institution X group, were eligible to participate if they graduated from Institution X and consented to participate in the survey. A comparison group of RNs (non-Institution X group) was recruited through SSI, an external survey panel provider, and RNs were eligible to participate if they did not attend Institution X and consented to participate.

Procedure

All participants were randomly selected to take the survey and were recruited through email. SSI incentivized participants to take the survey by providing participants "5 Opinion Points." Participants accumulate "Opinion Points" to purchase goods or services. Institution X emailed their graduates to participate but Goldman Insights provided a $5 Amazon Gift Card as an incentive to participate. Participant recruitment was conducted in multiple waves for both groups. Institution X recruitment was completed in four waves, with three reminder emails sent per wave, and participation is outlined in the table below. Emails were sent to 14,070 Institution X graduates and 812 graduates participated, resulting in a 6 percent response rate. SSI emailed 1,488 non-Institution X participants and 525 participated, resulting in a 35 percent response rate. The wave method was used to better monitor response rates.

Measure

The web-based survey was hosted and built on the SurveyGizmo digital platform. Participants were emailed a link to the survey and answered 51 questions on the following areas: general demographics, work history, education history, personal financial history, work readiness, and grit. The average participation time was between 14 and 16 minutes. The Institution X group had a 67 percent completion rate, while the non-Institution X group completion rate was 42 percent. The study survey can be found in the appendix.

The work readiness and grit components of the survey were selected to measure career outcomes. Work readiness is defined as "the extent to which graduates possess the attributes that prepare them for success in the workplace."[63] Measures such as the NCLEX assess specific nursing skills, such as the ability to provide safe and effective care, through a wide range of questions that ask candidates to apply what they know to various scenarios during a computer adaptive test. However, Walker and Campbell (2013) argue that a wider array of skills

63 Walker et al., 2012, p. 116

such as being able to "prioritise tasks, accept responsibility, convey confidence, and to think critically within, and about, one's work" are crucial for long term success and retention in the field of nursing.[64] Considering all participants had passed the NCLEX, work readiness and grit measures provided additional means with which to compare the two groups on workplace competency.

Table 4: Response Rates among Institution X Respondents

	CONTACTED	PARTICIPATED	RESPONSE RATE
WAVE 1 (PRETEST)	1,000	80	8%
WAVE 2	6,383	482	8%
WAVE 3	3,505	187	5%
WAVE 4	3,182	63	2%
TOTAL	**14,070**	**812**	**6%**

Table 5: Response Rates among Non-Institution X College Respondents

	CONTACTED	PARTICIPATED	RESPONSE RATE
WAVE 1 (PRETEST)	100	60	60%
WAVE 2	1388	465	34%
TOTAL	**1488**	**525**	**35%**

The work readiness scale (WRS) was developed by Cabellero et al. and was revised by Dr. Arlene Walker of Deakin University.[65] Prior research has found the scale to predict work engagement and the intention to remain in one's job[66] and to reflect the skills both employers and health care graduates deem important for success in the health care workplace.[67] The WRS includes 46 questions measuring four subscales: social intelligence, organizational acumen, personal management, and work competence. Social intelligence refers to being adaptable in social situations and developing relationships with others; organizational acumen refers to motivation, taking responsibility, and commitment to one's workplace; personal management includes resilience and commitment to personal development; and work competence refers to the self-perception of one's work-specific knowledge and skills.[68] For the original scale, each question was asked on a 10-point scale (1 = completely disagree, 10 = completely agree).

A modified version of Walker's WRS was developed for the CBE GO study (mWRS). Eighteen questions, four or five questions per subscale, were selected from the original scale based on having the highest factor loadings for each of the different subscales and their applicability across different professional fields. Original factor loading information can be found in the appendix. Four questions were reverse coded to improve data response quality. Additionally, the original scale was narrowed from a 10-point scale to a 5-point Likert scale (1 = completely disagree, 3 = neither agree nor disagree, 5 = completely agree).

In order to provide additional validity and reliability for the abbreviated mWRS scale, an exploratory factor analysis of the 18 questions was performed on data from two separate studies of nursing and teaching professionals, N = 2,147. Prior to running the analysis, the data were screened by examining descriptive statistics on each item, interitem correlations, and possible univariate and multivariate assumption violations. From the initial assessment, all items were found to be interval-like, responses were normally distributed, and all cases were independent. The Kaiser-Meyer-Olkin measure of sampling adequacy was .914 and indicated that the present data were suitable for principal component analysis. Similarly, Bartlett's test of sphericity was significant ($p<.001$), indicating sufficient correlation between variables to proceed with the analysis.

A total of four factors had eigenvalues greater than 1.00, cumulatively accounting for 59 percent of the total variance. The mWRS is said to have four subscales measuring social intelligence, organizational acumen, personal management, and work competence, so the factor extraction was as expected. The correlations between the factors supported an orthogonal rotation strategy; thus, varimax rotation was used to determine factor component loadings. However, two of the 18 questions presented problems. One question ("I juggle too many things at once") resulted in a communality extraction of .272, making it well below the threshold of acceptable variance. A second question ("I am always working on improving myself") showed high factor loadings onto two components, organizational acumen and work competence. A review of the theoretical understanding of this question suggested that it could reasonably load onto either factor. Thus, both questions were removed from the subscales to explore how this might impact the factor analysis.

The data were then rescreened for possible concerns and were again found to be appropriate for a factor analysis. With the 16 mWRS questions, the Kaiser-Meyer-Oklin measure

64 Walker & Campbell, 2013, p. 1491
65 Cabellero, Walker, & Fuller-Tyszkiewicz, 2011
66 Walker & Campbell, 2013
67 Walker et al., 2012
68 Cabellero et al., 2011

Table 6: Internal Consistency of Work Readiness Subscales

SUBSCALE	CRONBACH'S ALPHA
SOCIAL INTELLIGENCE	0.728
ORGANIZATIONAL ACUMEN	0.801
PERSONAL MANAGEMENT	0.787
WORK COMPETENCE	0.785

Table 7: Demographic Makeup of Institution X and Non-Institution X Groups

	NON-INST. X; N = 493	INST. X; N = 822
Gender	Female = 452 (91.7%) Male = 41 (8.3%)	Female = 649 (79%) Male = 170 (20.7%) Missing = 3 (0.4%)
Age	MIN = 20, MAX= 65 MEAN = 44.43 SD = 11.86	MIN = 18, MAX = 79 MEAN = 45.10 SD = 9.50
Race/ethnicity White or Caucasian Multiracial Black or African American Asian or Pacific Islander Latino or Hispanic Native American or Aleut Other	 N = 383 (77.7%) N = 16 (3.2%) N = 50 (10.1%) N = 17 (3.4%) N = 18 (3.7%) N = 2 (0.4%) N = 7 (1.4%)	 N = 608 (74%) N = 52 (6.3%) N = 97 (11.8%) N = 24 (2.9%) N = 26 (3.2%) N = 3 (0.4%) N = 12 (1.5%)
First generation **Not first generation**	N = 138 (28%) N = 355 (72%)	N = 259 (31.5%) N = 563 (68.5%)

of sampling adequacy was 0.879, still indicating the data were suitable for principal component analysis. Additionally, Bartlett's test of sphericity was still significant (p<.001), indicating sufficient correlations to proceed.

Again, four factors had eigenvalues greater than 1.00, cumulatively accounting for 60.8 percent of the total variance, an increase from the original 18 mWRS question scale. An orthogonal rotation strategy was deemed appropriate and a varimax rotation extraction was used. With the removal of the two questions, all remaining questions showed factor loadings above .50 in support of the identified subscales from the prior, un-abbreviated version of the measure.[69] The internal consistency of each subscale, as assessed by coefficient alpha, seen in the table below, all exhibit acceptable internal consistency.[70] Thus, for the purposes of the abbreviated mWRS measure, the two questions were removed from subscale analyses, leaving a validated, abbreviated 16 mWRS scale. The selection questions, factor loadings, and variance accounted for can be found in the appendix.

The survey also measured participants' grit. Grit is defined as "the ability to persevere during difficulties and maintain a sustained effort over an extended period of time."[71] As a measure of resilience and persistence, grit is inversely related to burnout among health care professionals[72] and positively related to teaching effectiveness and retention among first year teachers.[73] Dr. Angela Lee Duckworth created and validated the grit scale with 12 questions and later developed an abbreviated version with eight questions.[74] The four questions with the strongest item-level correlations from the Short Grit Scale were selected to measure grit. To provide additional validity for the abbreviated measure, correlations between all four questions were calculated. All correlations were significant at the p<.01 level.

Two questions from each grit scale with the highest level of item correlation were taken and incorporated into the CBE GO study. In the four grit items, the language on two questions were inverted to improve data quality.

RESULTS

Sample Characteristics

The majority of participants in both the Institution X and non-Institution X groups were female (79 percent and 92 percent, respectively). Nationally, females make up 91 percent of the nursing workforce. Therefore, the Institution X sample represents a larger proportion of male nurses (21 percent) than the national average (9 percent). The disproportional male sample could be due to the high percentage of U.S. military members enrolled at Institution X. In 2016, 35 percent of Institution X graduates were members of the U.S. military. In the Institution X group, 73 percent of prior military members were male.

First-generation college students (FGCS) made up nearly one third of the Institution X sample (32 percent) and slightly fewer of the non-Institution X sample (28 percent). Comparatively, in a 2016 national survey of college students, 38 percent of health/nursing majors were FGCS.

Education level

As **Table 8** shows, while a similar proportion of each group earned only an associate degree, significant differences were found between groups on the proportion of bachelor's and master's degree holders. More non-Institution X graduates earned their bachelor's (40 percent) than Institution X graduates (31 percent), however, more Institution X graduates earned a master's degree or higher (20 percent) than non-Institution X graduates (13 percent).

69 Pituch & Stevens, 2016
70 Remler & Ryzin, 2015
71 Halliday, Walker, Vig, Hines, & Breknell, 2016, p. 1
72 Ibid.
73 Robertson-Kraft & Duckworth, 2014
74 Duckworth & Quinn, 2009

Table 8: Highest Degree Level Obtained among Inst. X and Non-Inst. X Graduates

Highest Degree Level Obtained	Non-Inst. X; N = 493	Inst. X; N = 508 (318 Missing)	Percent Difference
Associate degree	N = 223 (45%)	N = 244 (48%)	+3%
Bachelor's degree	N = 195 (40%)	N = 155 (31%)	-9%**
Master's degree or higher	N = 64 (13%)	N = 102 (20%)	+7%**
Unsure	N = 8 (0.02%)	N = 1 (0.02%)	--

** Significant at p<.01

NCLEX Pass Rates

T-tests[75] were run to examine how Institution X and non-Institution X graduates compared on 1) the average number of times they had taken the NCLEX and 2) the proportion of individuals who had taken the NCLEX only once. No significant differences were found between groups on the number of times individuals had taken the NCLEX. However, a statistically significant difference was found when analyzing the portion of respondents who only took the NCLEX once; t(1373)=3.42, p<.001. While 84 percent of non-Institution X graduates took the NCLEX once, 90 percent of Institution X graduates only took the NCLEX once.

Career Outcomes

Career outcomes were measured by job turnover, employment status, desire to change careers, and responses to measures of work readiness. Because these factors are likely to be influenced by years of workforce experience, an initial analysis was run to determine if groups varied on average years of work experience in the health care field prior to and after earning the ADN. Findings are presented in **Table 9**.

Institution X graduates had worked in the health care field nine years on average prior to earning their ADN, a significantly longer period than non-Institution X graduates, who had worked only three years on average before earning their ADN. In contrast, after earning their degree, Institution X graduates had worked only seven years in the health care field on average, less than half as long as non-Institution X graduates, who had worked 16 years on average since earning their ADN. This difference was also statistically significant. On average, non-Institution X graduates worked 2.5 years longer than Institution X graduates, a difference that was also statistically significant. To summarize, while non-Institution X graduates may have had fewer years of experience prior to earning their ADN degree, they graduated less recently and have worked in the field longer.

Job Turnover

Because the Institution X and non-Institution X samples varied by the number of years since they had graduated from their ADN programs, job turnover was calculated by averaging the number of jobs held by individuals within specified segments since graduation. Seventy-seven individuals opted not to complete the question. None of the differences between the average number of jobs in each time segment were statistically significant. These data suggest job turnover is equal for both Institution X graduates and non-Institution X graduates.

Employment Status

Respondents identified if they were working as a nurse or nurse practitioner or employed as something else, in addition to their employment status. A higher proportion of the Institution X graduate group was not presently employed; t(1313) = 2.61, p<.001. A higher proportion of the non-Institution X group were nurses or nurse practitioners than the Institution X group; t(1313) = 2.99, p<.01. Of those who identified as being a nurse or nurse practitioner, Institution X graduates were more likely to work full time as compared to their non-Institution X counterparts; t (1202) = 2.66, p<.01.

Work Readiness

T-tests were performed to compare Institution X graduate and non-Institution X graduate responses on work readiness and grit measures. **Table 11** portrays the results of the analysis.

As indicated in **Table 11**, Institution X graduates outperformed non-Institution X graduates on work readiness overall and on all work readiness subscales (social intelligence, work

Table 9: Average Years of Health Care Work Experience Prior to and after ADN Degree

	Non-Inst. X graduates; N=493	Inst. X graduates; N=822	Mean Difference
Average years of health care work experience prior to earning ADN	M = 3.11 SD = 4.38	M = 9.12 SD = 5.84	+6.01***
Years of health care work experience since earning ADN	M = 15.79 SD = 12.14	M = 7.20 SD = 4.22	-8.59***
Total years of experience in health care work	M = 18.90 SD = 12.23	M = 16.33 SD = 6.96	-2.57***

***Significant at p<.005

75 The t-test calculates group mean differences divided by a standard error. The p-value indicates the probability of observing the t-statistic if no group differences exist. In this case, there is less than a .1 percent chance of observing these values if there are no differences between groups (Stevens, 2007).

competence, organizational acumen, personal management). Institution X graduates also outperformed non-Institution X graduates on measures of grit. All group mean differences were significant at the p<.001 level. Cohen's d, an effect size measure, was calculated to determine the degree to which Institution X graduates outperformed non-Institution X graduates. All effect sizes were small, with Institution X graduates outperforming non-Institution X graduates by between .20 and .40 standard deviations.

T-tests were run to compare group differences among FGCS. As was the case for the entire sample, FGCS Institution X graduates scored higher on work readiness overall. They also performed higher than FGCS non-Institution X graduates on the subscales of social intelligence and organizational acumen. No significant differences were found between groups on the subscale measures of work competence and personal management. FGCS Institution X graduates outperformed FGCS non-Institution X graduates on grit.

FINANCIAL OUTCOMES

Financial Aid

To understand how nursing degree graduates funded their studies, the survey asked participants to select whether they received financial assistance and, if so, to identify all sources of assistance they received to pursue their degrees. The survey allowed students to select all that applied from a list with the following types of financial assistance: scholarships, grants, subsidized federal loans, private loans, military-related tuition assistance, employer-related tuition assistance, and family assistance (including from a spouse).

The bar chart below shows the breakdown of the different forms of financial assistance received by the Institution X and non-Institution X graduates. Only 16 percent of the non-Institution X group indicated they did not receive any financial

Figure 2: Average Number of Jobs by Years Since Graduation

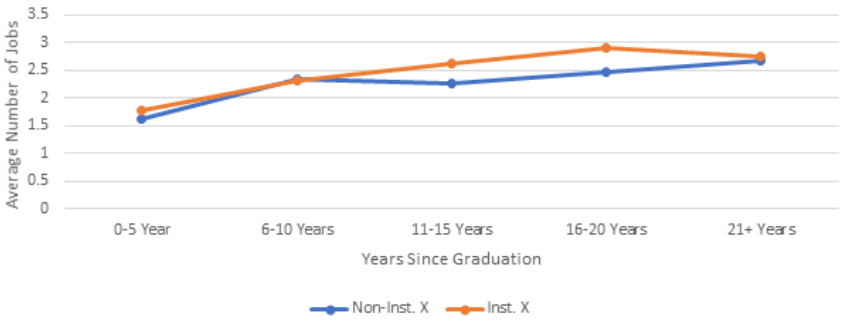


Table 10: Employment Status

	Non-Inst. X; N = 493	Inst. X; N = 822	DIFFERENCE IN PERCENT
Not employed	N = 10 (2.03%)	N = 40 (4.87%)	-2.84**
Employed but not as a nurse	N = 17 (3.45%)	N = 44 (5.35%)	+1.90
Working as a nurse	N = 466 (94.52%)	N = 738 (89.78%)	-4.74**
Working Full Time (30 or more hours per week)	N = 397 (85.19%)	N = 666 (90.24%)	+5.05**
Working Part Time (1-29 hours per week)	N = 69 (14.81%)	N = 72 (9.76%)	-5.05**

**p<.01

Table 11: Work Readiness Means and Effect Sizes

MEASURE	Non-Inst. X; N=493	Inst. X; N=822	MEAN DIFFERENCE	COHEN'S D
Work Readiness	3.85	4.02	+0.17***	.37
Social Intelligence	3.93	4.11	+0.18***	.27
Work Competence	4.22	4.34	+0.12***	.20
Organizational Acumen	3.94	4.09	+0.15***	.24
Personal Management	3.51	3.74	+0.23***	.29
Grit	3.59	3.83	+0.24***	.40

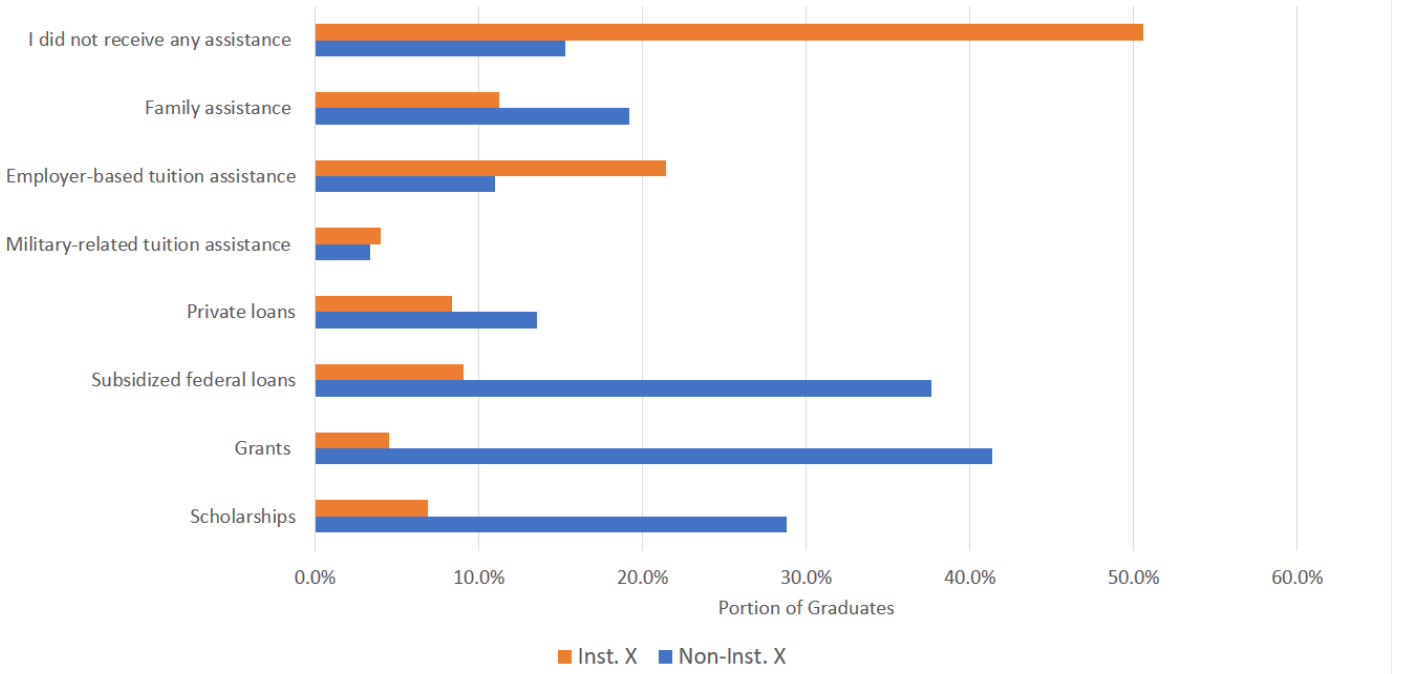
***p<.001

Table 12: Work Readiness and First Generation College Student Status

MEASURE	NON-Inst. X; N=138	Inst. X; N=259	MEAN DIFFERENCE	COHEN'S D
Work Readiness (overall)	3.86	4.00	+0.14**	.31
Social Intelligence	3.95	4.13	+0.18**	.27
Work Competence	4.22	4.32	+0.10	.15
Organizational Acumen	3.95	4.09	+0.14*	.20
Personal Management	3.53	3.67	+0.14	.19
Grit	3.61	3.82	+0.21**	.34

*Significant at p<.05
**Significant at p<.01

Figure 3: Forms of Financial Assistance Received by Graduates



assistance for their nursing degrees, as compared to 50 percent of the Institution X group.

Of those that did receive financial assistance, the chart illustrates that significantly smaller proportions of Institution X graduates received assistance from all sources, excluding military and employer-based assistance. A lower proportion of Institution X graduates received scholarships, grants, and both federal and private loans. While 29 percent of the non-Institution X group were awarded scholarships and 41 percent received grants, only 7 percent of Institution X graduates received scholarships and 5 percent received grants. Similarly, a combined 51 percent of the non-Institution X group funded part of their studies with federal or private loans, but only 18 percent of Institution X graduates took out loans. While 19 percent of non-Institution X graduates were given something from their families to fund their degrees, only 11 percent of Institution X graduates received such assistance.

Institution X graduates received more financial assistance than non-Institution X graduates from two sources: military-related tuition assistance (4 percent vs. 3 percent, respectively) and employer-related tuition assistance (22 percent vs. 11 percent, respectively).

Student Debt

Given the increasing burden of student loan debt and its impact on graduates as well as on national economic outlook, the CBE GO survey included four questions about student loan debt. These questions covered student loan debt at the start of the degree program and at the end of the degree program, as well as participants' current amount of student debt and the amount spent monthly on student loan payments.

More than half the samples for the Institution X and non-Institution X group had $0 in debt for every one of the four questions. When analyzing average debt amounts at these time points, average debt amounts would be much lower than median debt amounts. While this presents an insightful picture as to the overall financial situation of graduates, it does not provide accurate information for those who have accumulated debt. As such, debt variables were analyzed twice, once with the entire sample, and once with only those who had debt, where those with $0 in debt were eliminated from the analysis, to present the clearest interpretation of the data.

When those with $0 were considered, the non-Institution X group had a statistically significant higher average debt at the start of their ADN program; $t(656.78) = 1.97$, $p<.05$. The non-Institution X group also had a statistically significant higher average debt upon graduation of their ADN program; $t(689.99)=2.90$,$p<.05$. On average, the non-Institution X graduates accumulated $5,321 in debt during their degree program, compared to Institution X graduates who accumulated $2,958.

Table 13: Debt and ADN Graduates

	ENTIRE NON-Inst. X GROUP	ENTIRE Inst. X GROUP	DIFFERENCE IN MEANS
Debt at start	Mean: $11,928 Median: $0	Mean: $7,925 Median: $0	-$4,003*
Debt at graduation	Mean: $17,249 Median: $0	Mean: $10,883 Median: $0	-$6,366*
Current debt	Mean: $11,026 Median: $0	Mean: $12,794 Median: $0	$1,768
Monthly loan payments	Mean: $136 Median: $0	Mean: $126 Median: $0	-$10

*Significant at p<.05

Table 14: Comparing Debt Amount in ADN Graduates with Debt Burden

	NON-Inst. X GROUP WITH >$0 DEBT	Inst. X GROUP WITH >$0 DEBT	DIFFERENCE IN MEANS
Debt at start	Mean: $28,662 Median: $15,000	Mean: $24,659 Median: $13,000	$4,003
Debt at graduation	Mean: $29,533 Median: $18,500	Mean: $26,698 Median: $15,000	$2,835
Current debt	Mean: $28,462 Median: $20,000	Mean: $31,639 Median: $21,000	-$3,177
Monthly loan payments	Mean: $338 Median: $250	Mean: $345 Median: $270	-$7

Table 15: Salary among ADN Graduates by Workplace

WORKPLACE	NON-Inst. X GROUP	Inst. X GROUP
Hospital	Mean salary = $70,396 SD = 28,448.14 Median salary = $68,500	Mean salary = $70,759 SD = 35,670.13 Median salary = $70,000
Doctor's office or clinic	Mean salary = $62,078 SD = 28,343.17 Median salary = $60,000	Mean salary = $68,454 SD = 31,264.36 Median salary = $70,000
School/University	Mean salary = $60,647 SD = 26,341 Median salary = $63,000	Mean salary = $65,526 SD = 32,594.48 Median salary = 69,880
Nursing home	Mean salary = $52,354 SD = 21,402.93 Median salary = $54,000	Mean salary = $67,233 SD = 30,957.40 Median salary = $68,830
Home health care	Mean salary = $61,658 SD = 27,598.90 Median salary = $62,500	Mean salary = $65,875 SD = 33,894.45 Median salary = $70,000
Other	Mean salary = $71,500 SD = 15,774.86 Median salary = $67,000	Mean salary = $72,907 SD = 32,809.27 Median salary = $72,000

The differences in current student loan debt and current monthly payments on student loan debt were not statistically significant.

Fifty-eight percent of the non-Institution X group began with $0 of debt, which went down to 41 percent without student debt upon graduation. A larger proportion of Institution X students both began and completed their ADN degrees debt-free: 68 percent and 59 percent, respectively. These results align with the financial assistance results, which indicate that a greater proportion of non-Institution X graduates took out federal and private loans than Institution X graduates.

When graduates without debt were removed from the analysis, no significant differences were found in debt amounts between groups at the start of their ADN program, upon graduation from their ADN program, current student loan debt, or current monthly payments on student loan debt.

Income

In the analysis of income differences between groups, only respondents who identified that they worked as nurses or nurse practitioners were included. Institution X graduates reported higher average incomes than non-Institution X graduates, with mean annual incomes of $69,436 and $67,223 respectively, although this difference was not statistically significant.

Income differences were also assessed according to workplace category, as detailed in **Table 15**. Average Institution X graduate incomes—both mean and median—are higher in every job category. The greatest difference in income is among graduates working in nursing homes, where graduates from Institution X make $67,233 and those from traditional degrees make $52,354. However, the variation in incomes reported by the graduates is considerable, as illustrated by the large standard deviation (SD) values of this data.

To better understand income differences between the groups, income was analyzed[76] in relation to the number of years in the workforce, self-reported work readiness, prior nursing experience, and the length of time that participants had been with their current employer. No statistically significant relationships were found between income and these variables.

Finally, a large proportion of both groups received a promotion with a wage increase following graduation from an ADN program. Of the non-Institution X group, 71 percent received promotions with a higher income, similar to the 67 percent of the Institution X group who also reported receiving promotions. No statistical significance was found between promotion rates in the Institution X and non-Institution X groups.

DISCUSSION

Sample Differences

The Institution X and non-Institution X samples were relatively similar with regards to many demographic attributes (i.e., race, marital status, FGCS status) but varied in work experience. First, the Institution X graduates had worked in the health care field for a longer period of time before obtaining their ADN degree (9 years, on average) than the non-Institution X graduates (who had worked only 3 years). However, at the time of data collection, Institution X graduates had worked in health care for significantly fewer years (7 years) than non-Institution X graduates (16 years) since earning their degree. These sample differences represent features of the nursing program that are specific to Institution X. For instance, only applicants with significant experience as practical nurses, EMTs, or military corpsmen are admitted. These work experience differences are important to keep in mind when comparing graduates on work readiness, grit, and other outcome measures of the degree program.

Cost of the Degree

In the 2013-2014 academic year, the National Center for Education Statistics (NCES) reported that 85 percent of full-time American undergraduate students paid for a four-year degree with the help of financial aid. This aligns with data from the non-Institution X graduates, in which only 84 percent reported receiving financial assistance.

The NCES also reports that the percentage of first-time, full-time students at two-year degree-granting postsecondary institutions who received financial aid was 78 percent, while 92 percent of students at private nonprofit institutions, such as Institution X, received financial aid. However, half of Institution X graduates who participated in the survey reported that they did not receive any financial assistance. This discrepancy can likely be attributed to the fact that most of the graduates from Institution X in the sample were not first-time students: 90 percent of Institution X graduates attended a prior institution. One explanation might be that the Institution X students had exhausted their gift aid from sources such as the Pell Grant at previous institutions.

According to the Health Resources and Services Administration (HRSA), 31 percent of all ADN graduates used federal or private loans to pay for the tuition and fees for their degree. One explanation is that the cost of the Institution X ADN degree offered is lower than a traditional four-year degree at a public or private institution. According to the U.S. Department of Education, the average annual cost for two-year RN associate programs is $19,397, significantly higher than the annual full-time tuition at Institution X of roughly $7,267, including the cost of the CPNE. The cost of the Institution X program is also less than the average annual cost of two-year ADN programs in Texas ($12,221).

A larger proportion of the Institution X graduates received military-related or employer-based tuition assistance. A likely explanation for the higher proportion of Institution X graduates that received military-related funding, such as from the GI Bill, is that 34 percent of Institution X graduates in 2014 were members of the U.S. military.

According to the HRSA, 15 percent of ADN graduates in 2008 received tuition reimbursement plans from health care-related employers. The proportion of Institution X graduates that received employer-based tuition assistance (22 percent) was higher than the national average and almost double that of the non-Institution X group (11 percent). CBE programs like Institution X's ADN degree target associate students who are older and have additional professional or family responsibilities. A greater number of Institution X graduates could have received financial assistance from their employer because more of them were working in a relevant field while pursuing their ADN degree.

Despite that a greater proportion of non-Institution X graduates received more financial assistance than the Institution X graduates, a larger proportion of the non-Institution X group accumulated student loan debt upon graduation. Fifty-nine percent of the non-Institution X group graduated with student loan debt, compared to only 41 percent of the Institution X group. The average total loan debt upon graduation is higher for non-Institution X graduates ($17,249) than for Institution X graduates ($10,883), a statistically significant difference. On average, non-Institution X graduates accumulated 80 percent

76 In a regression model, income was modeled as the outcome variable, while all other variables were entered simultaneously as predictors. None of these variables were significant predictors of income.

more student debt than Institution X graduates between the start and end of their ADN degree.

When the graduates without any student loan debt were removed from the groups, the debt-burden upon graduation of the non-Institution X graduates remained greater than that of the Institution X graduates ($29,533 and $26,698, respectively). However, between the start of their degree and graduation, both groups accumulated similar amounts of debt, according to the statistical analysis ($2,039 on average for the Institution X group and $841 for the non-Institution X group).

The Institution X website claims that the median debt per graduate is only $9,600. The median student debt of all Institution X graduates that participated in CBE GO is $0, which increases to $13,000 when considering only the Institution X graduates with more than $0 of student debt. These results may differ from those published by Institution X because the latter takes into account all degree programs offered, not only the ADN in nursing. Another reason for the difference could be that only 10 percent of Institution X graduate participants received all their ADN credits from Institution X, and accumulated debt at other institutions. The CBE GO results may also be higher because the results do not show how much debt graduates accumulated for their ADN degree specifically. They may have accumulated additional debt while paying for further education. The results do not show a granular breakdown of debt for graduates' additional degrees, but this extension would be an interesting area for further research.

While fewer ADN graduates from Institution X received financial assistance toward their tuition, more of them graduated debt-free. Overall, Institution X graduate indebtedness is less than those who pursued a traditional four-year degree. This finding suggests that CBE degree programs such as the ADN at Institution X may be financially more attainable for students from a lower socio-economic background, thus opening the door for more Americans to pursue the RN credential.

Preparation/Competence (NCLEX, Work Readiness, Grit)

Work readiness and grit represent a wide array of work-related skills relevant to the nursing profession, including confidence in one's clinical knowledge, ability to work well with others, manage multiple tasks, and complete tasks with diligence. In previous research, the work readiness subscales of work competence and organizational acumen were related to worker engagement and job satisfaction among first year graduate nurses. Because nursing is a highly demanding job that requires organizational, social, and clinical skills, confidence in one's abilities may improve individuals' satisfaction with the daily tasks required of their profession.

Institution X graduates self-reported higher work readiness than those of the non-Institution X group. For instance, they responded more positively to questions about their social intelligence, organizational acumen, work competence, personal management, and grit. The magnitude of the differences on work readiness measures between groups was small and ranged between 0.2 and 0.4 standard deviations. A 0.2 difference between groups indicates that 92 percent of the total sample's scores will overlap while a 0.4 difference indicates that 84 percent of the sample will overlap.[77] Therefore, differences in work readiness scores, while statistically significant, may not indicate a large practical difference between the work preparedness of non-Institution X and Institution X graduates.

However, given widespread concern that online, CBE programs may not prepare graduates as well as a more traditional, in-person education, these results do not indicate Institution X graduates are less prepared for the complex demands of being a nurse. Given the requirement that admitted students have practical nursing experience, those who graduate from Institution X may possess work readiness and grit qualities before starting the program.

OUTCOMES

Income

Overall, Institution X graduates reported similar average incomes as non-Institution X graduates ($69,436 and $67,223 respectively). These results suggest that income is neither a determinant of skill and experience in nursing, nor determined by skill and experience. Instead, nursing salaries may be influenced by factors related to geographic location, such as differences in cost of living. The Department of Labor reports that while the national, mean annual wage for nurses is about $69,000, nurses living in California may earn more than $133,000 while those in Puerto Rico might earn less than $24,000. Other variables that affect income include the supply and demand for RNs in local markets, RN specialty, and the wide variety of jobs within the nursing field. While there is usually a notable difference between nursing workplaces (i.e., hospitals, home services, doctor's offices, etc.), the results of this study do not show statistically significant differences in income between these work environments.

Employment

A significantly smaller proportion of Institution X graduates reported they were currently working as a nurse (90 percent) than non-Institution X graduates (95 percent) and

77 Magnusson, 2014

more Institution X graduates reported they were not currently working (5 percent) than non-Institution X graduates (2 percent). Of those employed as nurses, a higher proportion of Institution X graduates reported working full time (90 percent) than non-Institution X graduates (85 percent). These differences may be due to selection criteria of the samples: the non-Institution X group was selected from a panel that all reported an occupation related to "nursing," while the Institution X group was selected from a group that had merely received an ADN.

The significantly lower rates of employment in the nursing profession, compared to both the non-Institution X and the national average, point to a need for further research to understand why Institution X graduates are not utilizing their ADN degree in similar proportions as traditionally educated ADN holders. For instance, researchers should investigate whether Institution X graduates who are not employed as nurses choose not to work, or work in a different field, and whether they have more difficulty finding employment because of where they earned their degree.

Four-year and Graduate Degrees

While a similar proportion of individuals in each group had obtained only their ADN degree (48 percent of Institution X graduates and 45 percent of non-Institution X graduates), there were significant differences in the proportions of bachelor's and graduate degree holders. More non-Institution X graduates earned their bachelor's degree (40 percent) than Institution X graduates (31 percent). However, more Institution X graduates earned a graduate degree (20 percent) than non-Institution X graduates (14 percent).

Further research needs to be conducted to determine whether Institution X ADN graduates face barriers to earning a terminal BSN degree, or whether they choose not to pursue a BSN because the ADN degree itself facilitates their career goals. Recent trends in hiring practices and graduation rates of BSN degree holders suggest an ADN degree is no longer sufficient to obtain work in the most desirable health care settings.[78] As of 2013, the unemployment gap between BSN and ADN educated nurses was much higher than in previous years (1.2 percent versus 1.9 percent, respectively), and hospitals prefer to hire BSN over ADN degree holders. Seventy-two percent of BSN educated nurses work in hospitals as opposed to 61 percent of ADN educated nurses.[79] Further, the Institute of Medicine set a goal for 80 percent of RNs to be BSN educated by 2020, making hiring much more competitive for graduates with only their ADN degree.

78 Auerbach, Buerhaus, et al., 2015
79 Ibid.

On the other hand, significantly more Institution X graduates earned a graduate degree than non-Institution X graduates, and taken together the data shows that a similar proportion of non-Institution X graduates (54 percent) and Institution X graduates (51 percent) earned a degree higher than an ADN. These results suggest that Institution X graduates do go on to earn more competitive degrees. Perhaps the relatively lower cost of earning their ADN degree facilitated Institution X graduates' higher rates of earning their graduate degrees. On the other hand, a graduate degree may be more necessary for Institution X graduates if their ADN degree program is perceived to come from a lower quality program. Further research should be conducted to determine whether Institution X graduates are as prepared to enter competitive BSN and graduate programs as their non-Institution X counterparts, or whether they enter less competitive programs due to their initial ADN training.

LIMITATIONS

There are several limitations regarding the conclusions that can be drawn from this study. Due to self-reporting of data, the estimates provided by graduates from both the Institution X and non-Institution X group on levels of debt accumulated, financial aid received, worker readiness, job turnover and employment rates could have been influenced by social desirability bias or user error. The validity of self-reported data could be improved by obtaining proof of employment and debt, as well as by gathering observational reports, such as from supervisors, about worker competency. However, many of these methods are intrusive to participants and would significantly reduce participation.

The sample of participants for this study may not be representative of Institution X graduates overall. For example, while Institution X graduates passed the NCLEX at a rate of 75 percent in 2016, in this sample, 90 percent had passed on their first attempt. In contrast, the non-Institution X graduate sample NCLEX pass rate of 84 percent was much closer to the 2016 national average of 82 percent. The sample of Institution X graduates in the current study may possess different characteristics that are correlated to measures of work-readiness, income, and employment outcomes than the population of Institution X graduates as a whole. Future researchers should attempt to pull from a representative sample of the Institution X graduate population, including those who may not have passed the NCLEX on their first or second attempt. Such studies may improve understanding of the factors that influence Institution X students to successfully graduate from the school and pass the NCLEX, and those factors, at the individual or school level, that prevent graduates from being successful.

Non-significant differences between groups of graduates may indicate there are numerous factors that contribute to one's salary level, including work experience, location of work, highest degree obtained, etc. While none of these variables were significantly correlated to levels of income in the two samples, because the samples were composed of registered nurses across the U.S., income may have been influenced by local cost of living.

Finally, conclusions about the effectiveness of the Institution X nursing program on work readiness are limited by the characteristic differences of the sample. Matching participants on years of work experience and other characteristics would strengthen the argument that outcome differences may be attributable to the Institution X nursing program, rather than differences in characteristics of the samples. In this study, these analysis options were not available as samples by year of graduation and other characteristics were very small (n<20), limiting the statistical analysis options.

OPPORTUNITIES FOR FURTHER STUDY

Further research on the financial aid access by CBE students could better inform policymakers about how to most efficiently allocate funds toward these nontraditional learners. For example, exploring why relatively few Institution X graduates utilized financial aid to pay for their degree would provide valuable insight into how graduates use their financial assistance and could lead to improvements that help graduates use available funding most efficiently. Challenges experienced by these graduates could offer insight to better assess the effectiveness of financial aid and financial aid advising.

Another area for further research would be to investigate the large differences in annual income within the nursing profession. Understanding the factors that influence income for nurses from both traditional and associate ADN programs, such as workplace, professional experience, academic performance, specialty, and work readiness would be extremely valuable. Exploring these factors in depth would provide additional understanding about the determinants of nursing income and further insight into the return on investment of a nursing degree.

CONCLUSION

Promoting quality nursing education opportunities that reduce student debt burden is essential to tackling the worsening nursing shortage and student debt crises in the U.S. Institution X's ADN program uses 21st century educational tools to offer a lower-cost, flexible option to prepare nursing students for licensure and careers in health care. However, the associate program has faced increasing challenges about the compliance with state licensing regulations and the competence of its nursing graduates compared with those who graduate from traditional degree programs. The Competency-Based Education Graduate Outcomes (CBE GO) study contributes to the wider discourse by comparing outcomes of Institution X graduates with those that graduated from traditional programs. The study reveals four key findings.

First, a significantly lower percentage of Institution X graduates utilized financial assistance than non-Institution X graduates from scholarships, grants, federal loans, private loans, and family. The results reveal that Institution X graduates are over three times more likely not to use any financial assistance for their tuition than non-Institution X graduates. Additionally, a greater proportion of the Institution X group graduated debt-free and reported less debt burden upon graduation than traditional graduates. These data suggest Institution X is a lower cost option for earning an ADN degree.

Second, Institution X graduates reported higher work readiness and grit than non-Institution X graduates across every subscale and work readiness overall. Institution X graduates scored significantly higher in the areas of social intelligence, organizational acumen, work competence, grit, and personal management. In the workplace, these traits may translate to many positive outcomes, including confidence in one's clinical knowledge and the ability to practically apply that knowledge, as well as inter-personal skills and the ability to work well with others. However, differences between groups were small, and scores may not indicate practical differences in work readiness between groups. Still, the data suggests Institution X graduates are no less work ready and likely to persist in their jobs than non-Institution X graduates.

Finally, the results of the CBE GO study reveal that while Institution X graduates have slightly higher income than traditional graduates, there is no statistically significant relationship between degree program and annual income. This finding suggests that those who attend CBE nursing programs like Institution X's may receive similar wages after graduation as those who attend traditional nursing programs.

While more research is needed to determine Institution X graduates' level of competency with observational measures, based on the self-reporting of graduates who had passed the NCLEX, the Institution X ADN degree program appears to offer a cost-effective pathway toward nursing preparation and careers in health care that are at least comparable to those from more traditional programs.

Teaching and CBE

The Learning Policy Institute (LPI) estimates that at the beginning of the 2015-2016 academic year, schools in the U.S. were short of 64,000 qualified teachers. The number of qualified teachers has steadily decreased since 2010 and demand for teachers started to outstrip supply in 2013 due to increasing student enrollment. The shortage is also driven by a reduction in the number of students enrolling in teacher preparation programs and high attrition rates among current teachers. In 2014, 35 percent fewer students attended teacher preparation programs than in 2009, resulting in 240,000 fewer qualified teachers entering the workforce in 2014. The teacher shortage is exacerbated by teacher attrition. Eight percent of teachers in the U.S. leave the profession every year. Poorly prepared teachers are two to three times more likely to turnover than their well-trained counterparts. These trends are expected to continue unless measures are taken to increase the supply of well-trained teachers.

The availability of local opportunities to attend teacher preparation programs also influences teaching shortages at the state level. Teacher shortages are higher in states with fewer teacher preparation programs. In areas with the greatest teacher deficit, schools often hire less educated or less certified instructors. For example, one-third of California's teaching force in 2015 worked with substandard credentials. Poorly prepared teachers and high rates of teacher turnover negatively impact student achievement.

A solution to the increasing shortages of well-qualified teachers may be to increase access to teaching education. Western Governors University (WGU) was created in 1997 to address workforce shortages by providing higher educational opportunities to working adults in underserved areas. WGU's Teachers College was established in 2003 and offers the only competency-based teacher education program in the U.S. The Teachers College is also the only online institution certified by the National Council for the Accreditation of Teacher Education (NCATE). The National Council on Teacher Quality (NCTQ) has highly ranked several of WGU's teacher training programs based on a global assessment of their admissions criteria, content preparation, assessment, cultural competency, and hands-on teaching experience. In 2013, WGU's Teachers College was placed on the NCTQ honor roll, a distinction given to only 105 of 1,200 programs. In 2014, the NCTQ ranked their undergraduate, math secondary teacher training program first in the country out of the 2,400 programs evaluated.

Despite the high need for teachers, employers may still be hesitant to hire graduates from a nontraditional teacher preparation program. A survey study conducted in 2007 revealed 95 percent of principals (or 71 of 75 surveyed) responsible for hiring new teachers did not think an online degree in teaching carried as much credibility as a traditional teaching degree. However, recent research suggests that the reputation of nontraditional, largely online programs may have improved among employers. A 2014 Gallup survey found that WGU graduates indicated a relatively high full-time employment rate (79 percent of WGU bachelor's degree holders versus 66 percent of college graduates across the U.S.) and a relatively engaged workforce (46 percent versus 40 percent nationally). No prior research has assessed WGU's teacher training programs in comparison to more traditional degree programs in terms of work readiness, income earned after graduation, student debt, and other financial and career outcomes.

By providing a flexible, affordable, and accessible teacher preparation program, WGU may play a role in addressing the shortage of well-qualified teachers at the national and local level. The CBE GO study compares the self-reported career and financial outcomes of individuals who have graduated from WGU's teaching program with those reported by their counterparts who graduated from traditional teaching programs. The core research question of this study is the following:

> *Are graduates of online competency-based education (CBE) programs, such as the Western Governors University (WGU) teaching degree, as prepared for their careers as their counterparts who graduated from comparable traditional degree programs?*

METHODS

Participants

Participants included 821 teachers recruited during a six-week period. All participants had at minimum a bachelor's degree, and are licensed or certified to teach in public schools in at least one state in the U.S. The WGU participants (N=285), called the "WGU group," were eligible to participate if they graduated from WGU and consented to participate in the web-based survey. The "non-WGU group" was recruited through SSI, an external survey panel provider, and were eligible to participate if they did not attend WGU and consented to participate.

Procedure

All participants were randomly selected to take part in the survey and were recruited through email. SSI incentivized participants in the non-WGU group to take the survey by providing

participants "5 Opinion Points" upon completion of the survey. Participants in SSI's panel accumulate "Opinion Points" to purchase goods or services. WGU recruited participants in the WGU group through emails to graduates. Participant recruitment was conducted in multiple waves for both groups. WGU recruitment was completed in four waves, with three reminder emails sent per wave. Participation is outlined in the table below.

WGU contacted 2,905 WGU Teachers College graduates and 285 of them completed the survey, resulting in a 10 percent response rate. SSI contacted 722 non-WGU teachers and 525 participated, resulting in a 73 percent response rate. The study utilized waves to measure and respond to changes in response rates. WGU contacted graduates with both master's and bachelor's degrees for inclusion in the WGU group. The table below describes the number of graduates and undergraduates that were contacted. Only graduates with a bachelor's degree from WGU would have qualified for the survey. Respondents were asked, "Did you graduate with a bachelor's degree from the Teachers College at Western Governors University (WGU)?" Undergraduate and graduate students who did not receive a degree from the Teachers College at WGU would have answered "no" and were immediately disqualified from taking the survey; 43 percent of participants answered "no" to this question.

Table 16: Response Rates of WGU Teachers College Graduates

	CONTACTED	PARTICIPATED	RESPONSE RATE
Wave 1 (Pretest)	289	31	11%
Wave 2	2,616	254	10%
Total	**2,905**	**285**	**10%**

Table 17: Response Rates of Non-WGU Teachers

	CONTACTED	PARTICIPATED	RESPONSE RATE
Wave 1 (Pretest)	100	60	60%
Wave 2	622	465	75%
Total	**722**	**525**	**73%**

MEASURES

The web-based survey was hosted and built on the SurveyGizmo digital platform. Participants were emailed a link to the survey and answered 51 questions on the following areas: general demographics, work history, education history, personal financial history, work readiness, and grit. The average participation time was between 14 and 16 minutes. The WGU group had a 44 percent completion rate, while the non-WGU group's completion rate was 83 percent. A full version of the web-based survey can be found in the appendix.

Table 18: WGU Respondents Contacted by Degree Completed at WGU

	CONTACTED	PARTICIPATED	RESPONSE RATE
Wave 1 (Pretest)	166	123	289
Wave 2	1,627	989	2,616
Total	1,793	1,112	2,905

The work readiness and grit components of the survey were selected to measure career outcomes. Work readiness is defined as "the extent to which graduates possess the attributes that prepare them for success in the workplace." The work readiness scale (WRS) has been tested and validated by Dr. Arlene Walker of Deakin University. This scale includes 46 questions measuring four subscales: social intelligence, organizational acumen, personal management, and work competence. In the original model, each question was asked on a 10-point scale (1 = completely disagree, 10 = completely agree). A modified version of Walker's WRS was developed for the CBE GO study (mWRS). Eighteen questions, four or five questions per subscale, were selected from the original scale based on having the highest factor loadings for each of the different subscales and their applicability across different professional fields. Original factor loading information can be found in the appendix. Four questions were reverse coded to improve data response quality. Additionally, the original scale was narrowed from a 10-point scale to a 5-point Likert scale (1 = completely disagree, 3 = neither agree nor disagree, 5 = completely agree). To provide additional validity and reliability for the abbreviated mWRS scale, an exploratory factor analysis of the 18 items was performed on data from two separate studies of nursing and teaching professionals, N = 2,147. Prior to running the analysis, the data were screened by examining descriptive statistics on each item, inter-item correlations, and possible univariate and multivariate assumption violations. From the initial assessment, all items were found to be interval-like, responses were normally distributed, and all cases were independent. The Kaiser-Meyer-Olkin measure of sampling adequacy was .914 and indicated that the present data were suitable for principal component analysis. Similarly, Bartlett's test of sphericity was significant ($p<.001$), indicating sufficient correlation between variables to proceed with the analysis.

A total of four factors had eigenvalues greater than 1.00, cumulatively accounting for 59 percent of the total variance. The mWRS is said to have four subscales measuring social intelligence, organizational acumen, personal management, and work competence, so the factor extraction was as expected. The correlations between the factors supported an orthogonal

rotation strategy; thus, varimax rotation was used to determine factor component loadings. However, two of the 18 questions presented problems. One question ("I juggle too many things at once.") resulted in a communality extraction of .272, making it well below the threshold of acceptable variance. A second question ("I am always working on improving myself.") showed high factor loadings onto two components, organizational acumen and work competence. A review of the theoretical understanding of this question suggested that it could reasonably load onto either factor. Thus, both questions were removed from the subscales to explore how this might impact the factor analysis.

The data was then rescreened for possible concerns, and was again found to be appropriate for a factor analysis. With the 16 mWRS questions, the Kaiser-Meyer-Oklin measure of sampling adequacy was .879, still indicating the data were suitable for principal component analysis. Additionally, Bartlett's test of sphericity was still significant ($p<.001$), indicating sufficient correlations to proceed.

Again, four factors had eigenvalues greater than 1.00, cumulatively accounting for 61 percent of the total variance, an increase from the original 18 mWRS question scale. An orthogonal rotation strategy was deemed appropriate and a varimax rotation extraction was used. With the removal of the two questions, all remaining questions showed factor loadings above .50 in support of the identified subscales from the prior, un-abbreviated version of the measure. The internal consistency of each subscale, as assessed by coefficient alpha, seen in the table below, all exhibit acceptable internal consistency. Thus, for the purposes of the abbreviated mWRS measure, the two questions were removed from subscale analyses, leaving a validated, abbreviated 16 mWRS scale.

The survey also measured grit factors. Grit is defined as "a person's trait-level perseverance and passion for long-term goals." Grit also "entails the capacity to sustain both effort and interest in projects that take months or even longer to complete." Dr. Angela Lee Duckworth created and validated a scale to measure a person's grittiness. Originally, she validated a Grit Scale with 12 questions and later developed an abbreviated version with eight questions. The four questions with the highest factor loadings on the original grit measure were selected for an abbreviated measure. To provide additional validity for the abbreviated measure, correlations between all 4 questions were calculated. All the correlations were significant at the $p<.01$ level.

Two questions from each scale with the highest level of item correlation were taken and incorporated into the CBE GO study. In the new 4-question scale, the language on two of the questions were inverted to improve data quality and to prevent participants from straight lining their responses.

Table 19: Internal Consistency of Work Readiness Subscales

SUBSCALE	CRONBACH'S ALPHA
Social Intelligence	0.728
Organizational Acumen	0.801
Personal Management	0.787
Work Competence	0.785

Table 20: Demographic Makeup of the WGU and Non-WGU Groups

	NON-WGU; N = 525	WGU; N = 286
Gender	Female = 399 (76%) Male = 126 (24%)	Female = 244 (85.3%) Male = 42 (14.7%)
Age	Min = 21, Max = 66 Mean = 43.39 SD = 12.4	Min = 22, Max = 66 Mean = 39.95 SD = 10.03
Race/ethnicity		
White	N = 451 (89.5%)	N = 250 (87.4%)
Multiracial	N = 23 (4.4%)	N = 12 (4.2%)
Black	N = 19 (3.6%)	N = 7 (2.4%)
Latino	N = 16 (3.0%)	N = 9 (3.1%)
Asian	N = 13 (2.5%)	N = 1 (0.3%)
Other	N = 3 (.5%)	N = 7 (2.4%)
First generation	N = 123 (23.4%)	N = 75 (26.2%)
Not first generation	N = 204 (76.6%)	N = 211 (73.8%)

Table 21: Work Experience before and after Bachelor's Degree Attainment

	NON-WGU; N =525	WGU; N =286
Years in subject-related field prior to obtaining degree	M = 1.10 SD = 2.50	M = 3.90 SD = 5.09
Years post-graduation	M = 19.22 SD = 12.37	M = 2.86 SD = 2

Sample Characteristics

Table 20 shows the characteristics of the non-WGU and WGU samples in terms of gender, age, ethnicity, and first-generation college student (FGCS) status. Most participants in the WGU and non-WGU groups were female, with slightly more men in the non-WGU group (24 percent) than in the WGU group (15 percent). The average age of the groups was similar (non-WGU = 43; WGU = 40). Both samples were mostly white, with similar proportions of ethnic minorities. Finally, FGCSs composed over one-fourth of the WGU sample (26 percent) and slightly less of the non-WGU sample (23 percent).

Table 21 details participants' work experience prior to and after earning their bachelor's degree. On average, WGU students

Table 22: Highest Level of Education Obtained

	NON-WGU; N = 524	WGU; N = 283	MEAN % DIFFERENCE
Bachelor's degree	N = 229 (43.6%)	N = 218 (76.2%)	32.6***
Master's degree	N = 273 (52%)	N = 64 (22.4%)	29.6***
Doctorate degree	N = 22 (4.2%)	N = 1 (.3%)	3.9**

**Significant at p<.01
***Significant at p<.001

Table 23: Employment Status

	NON-WGU; N = 525	WGU; N = 286
I am not currently working	N = 11 (2.1%)	N = 19 (6.6%)
Part time (1-29 hours per week)	N = 87 (16.6%)	N = 21 (7.3%)
Full time (30 or more hours per week)	N = 427 (81.3%)	N = 246 (86%)
Current employment		
I am employed as a teacher	N = 495 (94.3%)	N = 219 (76.6%)
I am employed as something else	N = 30 (5.7%)	N = 67 (23.4%)

Table 24: Work Readiness

	NON-WGU; N = 525	WGU; N = 286	MEAN DIFFERENCES	COHEN'S D
Average WR	M = 3.79 SD = .41	M = 3.91 SD = .39	0.12*	.30
Social intelligence	M = 3.93 SD = .64	M = 4.00 SD = .64	0.07	.11
Work competency	M = 4.22 SD = .52	M = 4.21 SD = .53	-0.01	.02
Organizational acumen	M = 3.88 SD = .64	M = 4.13 SD = .57	0.25*	.41
Personal management	M = 3.25 SD = .89	M = 3.53 SD = .77	0.28*	.34
Grit	M = 3.53 SD = .60	M = 3.63 SD = .58	0.10*	.17

*differences are significant at p<.05

worked substantially longer in a field related to a taught subject (four years) than non-WGU students (one year). Substantial differences were also found in length of time since graduating from their bachelor's degree program. While the non-WGU participants had graduated an average of 19 years ago, WGU participants had graduated an average of 3 years ago.

Education

Table 22 shows the highest levels of education each group obtained. A significantly larger proportion of WGU graduates had obtained only their bachelor's degree (76 percent) than non-WGU graduates (44 percent). Additionally, while 56 percent of non-WGU participants had earned a graduate degree, only 23 percent of WGU participants had earned a master's degree or higher; as shown below, this difference is also statistically significant.

Table 23 shows the employment status for each group. WGU graduates were employed full time at a slightly higher rate than non-WGU graduates (86 percent and 81 percent, respectively). A substantially larger proportion of WGU graduates were not currently working (7 percent) compared to non-WGU graduates (2 percent). Fewer WGU graduates were employed as teachers (77 percent) than non-WGU graduates (94 percent), the profession for which they earned their degree.

Work Readiness

T-tests were performed to assess group differences on measures of work readiness and grit, as shown in **Table 24** below. WGU participants outperformed non-WGU participants on overall work readiness and on the organizational acumen and personal management subscales. WGU graduates also outperformed non-WGU graduates on measures of grit. All effect sizes were in the small to medium range, with WGU participants scoring higher than non-WGU participants by between .2 and .4 standard deviations.

Job Turnover

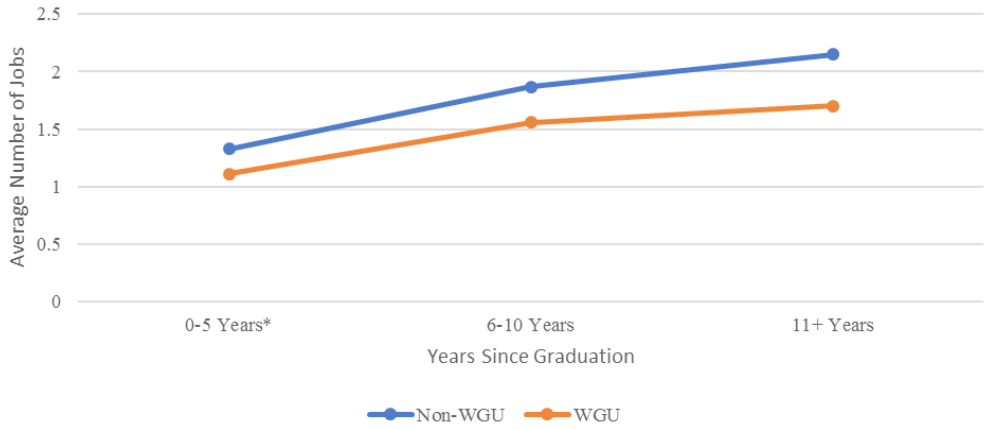
Because WGU graduates had been out of school for a significantly shorter time than non-WGU graduates, job turnover was analyzed by averaging the number of jobs held by individuals within specified segments since graduation. The graph below shows that among each graduating group, non-WGU graduates had held more jobs. While the non-WGU graduates had a higher average number of jobs in each time segment, only the difference in average number of jobs held between respondents within the last 5 years was statistically significant; t(115.64)=2.01, p<.05.

FINANCES

Financial Aid

The following bar chart shows the breakdown of the different forms of financial assistance received by the WGU and non-WGU graduates. Only a small proportion of both groups did

Figure 4: Average Number of Jobs by Number of Years Since Graduation



*Significant at p<.05

Figure 5: Forms of Financial Assistance Received by Graduates

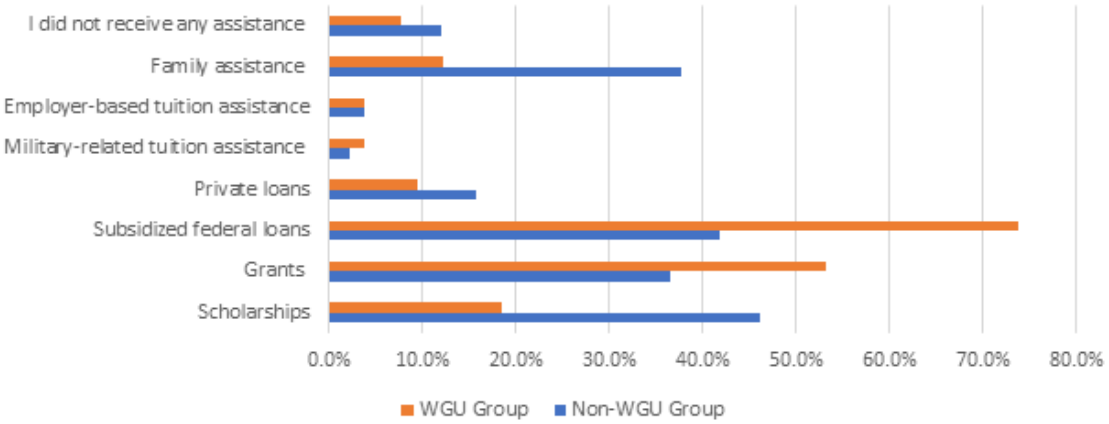


Table 25: Indebtedness of WGU and Non-WGU Graduates

	FULL NON-WGU GROUP; N = 521	FULL WGU GROUP; N = 284	MEAN DIFFERENCE
Debt at start	Mean = $6,332 Median = $0	Mean = $4,149 Median = $0	$2,183**
Debt at graduation	Mean = $23,643 Median = $16,000	Mean = $12,930 Median = $4,900	$10,713***
Current debt	Mean = $21,351 Median = $8,000	Mean = $11,190 Median = $0	$10,161***
Monthly loan payments	Mean = $157 Median = $23	Mean = $101 Median = $0	$56**

**Significant at p<.01
***Significant at p<.001

Table 26: Indebtedness of WGU and Non-WGU Graduates with Debt

	NON-WGU GROUP WITH >$0 DEBT	WGU GROUP WITH >$0 DEBT	MEAN DIFFERENCES
Debt at start	Mean = $20,387 Median = $17,000	Mean = $14,311 Median = $10,000	$6,076**
Debt at graduation	Mean = $32,906 Median = $27,000	Mean = $22,770 Median = $15,000	$10,136***
Current debt	Mean = $36,110 Median = $28,000	Mean = $33,689 Median = $22,500	$2,411
Monthly loan payments	Mean = $306 Median = $246.50	Mean = $311 Median = $280	-$5

**Significant at p<.01
***Significant at p<.001

Table 27: Salary of Teachers by Workplace

WORKPLACE	NON-WGU GROUP	WGU GROUP
Public school	Mean salary = $43,336 SD = 26,721.94 Median salary = $42,000	Mean salary = $53,372 SD = 30,650.94 Median salary = $50,000
Private school	Mean salary = $44,353 SD = 22,628.20 Median salary = $41,000	Mean salary = $54,285 SD = 23,830.16 Median salary = $52,000
Charter school	Mean salary = $36,387 SD = 20,740.31 Median salary = $43,000	Mean salary = $47,118 SD = 15,854.35 Median salary = $45,000
Private tutor	Mean salary = $41,485 SD = 19,964.63 Median salary = $40,000	Mean salary = $47,756 SD = 32,615.76 Median salary= $40,800
Other	Mean salary = $54,260 SD = 23,882.99 Median salary = $49,943	Mean salary = $54,000 SD = 15,556.35 Median salary = $54,000

not receive any form of financial assistance for their tuition: 12 percent of the non-WGU group and 8 percent of the WGU group paid fully out-of-pocket for their teaching degrees. Of those that did receive financial assistance, the chart illustrates that neither group received more financial assistance across all sources.

Student Debt

Given the significant burden of student loan debt and its impact on graduates as well as national economic outlook, the CBE GO survey included four questions about student loan debt:

1. When you started your ADN program, what was the total amount of student debt you had?
2. When you graduated from your ADN program, what was the total amount of student loan debt you had?
3. What is the total amount of student loan debt that you currently owe?
4. What is the total amount you spend monthly on student loan payments?

Many respondents in both the WGU and non-WGU group answered "$0" for every one of the four questions, leading to difficulty analyzing data from the entire sample to investigate the indebtedness of debt-bearing graduates. As such, debt variables were analyzed twice, once with the entire sample, and once considering only those who had debt. Those with no debt were eliminated from the analysis, to present the clearest interpretation of the data.

Sixty-eight percent of the non-WGU graduates and 71 percent of WGU graduates began their degrees with $0 of debt. Only 28 percent of non-WGU graduates completed their degrees debt-free, compared to 43 percent of WGU graduates. On average, non-WGU graduates reported having higher amounts of current student debt than WGU graduates. The difference of $10,161 in current debt between the two groups is statistically significant. Similarly, the difference of $56 between monthly loans payments of the two groups is also statistically significant.

As shown in **Table 26**, of the participants that took out loans while pursuing their teaching degree, those that did not attend WGU graduated with $10,136 more student debt on average. This difference between the two groups was found to be statistically significant. While WGU graduates accumulated on average $8,459 of student debt over the course of their degree, non-WGU graduates accumulated $12,519 of student debt. Neither the difference in current debt nor monthly loan payments between those who graduated with student debt in both groups is statistically significant.

Income

Income was analyzed for those respondents who identified as currently working in teaching. WGU graduates reported higher annual incomes than non-WGU graduates, with mean annual incomes of $52,629 and $43,454 respectively. The income difference of $9,175 between the two groups is statistically significant; t(354.12)=-3.92, p<.001. The incomes of WGU graduates, both mean and median, are higher in every workplace category, as shown in **Table 27**. The greatest difference in annual income is among those working in charter schools: WGU graduates are paid $10,731 more annually than non-WGU graduates in this population. The variation in incomes

reported by the graduates is substantial, illustrated by the high standard deviation (SD) values in this data.

To explain the differences between the non-WGU and WGU graduates, incomes were examined in relation to the number of years of experience prior to the degree program, the number of years since graduation, total number of years of work experience, highest education level, workplace, highest level of education, and participant age. None of these variables had a statistically significant correlation with income. These results support the finding that the large difference in income is more likely related to whether graduates received their degree from the WGU program, rather than a possible other covariate. More non-WGU graduates reported receiving promotions with increases in income after completing their teaching degrees. Sixty-seven percent of non-WGU graduates were promoted, compared to 56 percent of WGU graduates. The difference in the proportion of graduates that received a promotion between the two groups is statistically significant.

DISCUSSION

The purpose of this study was to compare outcomes between individuals who had earned their bachelor's degree in teaching from traditional and CBE programs. Online, competency-based programs are marketed as more flexible and affordable than degree programs at traditional colleges. Understanding whether this reputation for affordability is deserved, and whether CBE graduates perform as well, better, or worse than graduates of more traditional degree programs on employment outcomes such as work readiness, employment rates, and income is important for determining the relative value of the degree program. The findings show that WGU participants graduated with significantly lower debt and reported themselves as more work-ready and gritty than their non-WGU counterparts. They also reported earning more money, on average, despite having fewer graduate degrees. However, fewer WGU graduates had earned graduate degrees than their non-WGU counterparts, and fewer were working, both in general and in the field of teaching.

Sample Characteristics

Demographic and other characteristic differences between groups are important to keep in mind when comparing cross-sectional data. Importantly, the WGU and non-WGU groups were relatively similar in their gender, racial, and age characteristics. For example, the average age of the WGU group was 40 years; 85 percent were female; and 87 percent described themselves as white. These demographics represent similar average characteristics of teachers in the U.S. that were reported in 2011, of which 84 percent were female, 84 percent were white, and were, on average, 42 years old. However, the WGU and non-WGU samples had significantly different years of work experience, both prior to and after earning their teaching degree. WGU graduates had worked three years, on average, in a field related to the subject they taught, while non-WGU participants had worked one year prior to their training. In contrast, non-WGU participants had worked for a substantially longer period since receiving their degree, 19 years, compared to WGU graduates who had worked an average of three years since earning their degree. Differences in work experience between groups is likely due to several features of the WGU program. For instance, WGU is the only accredited online, competency-based teaching program in the country. The school's curriculum is designed for working adults, many of whom are changing careers.

Established in 2003, WGU's Teacher College is relatively new. That WGU students had more work experience prior to earning their degree, but less experience in the teaching field after earning their degree may be due to these institutional factors. Differences in the work experiences of each group are important to keep in mind when comparing them on financial, work readiness, grit, employment, and other career outcomes.

Cost of Degree

According to the NCES, 85 percent of first-time, full-time undergraduate students in four-year degree programs received some form of financial assistance. Only 12 percent of the non-WGU group and 8 percent of the WGU group paid fully out-of-pocket for their teaching degrees.

WGU graduates received significantly fewer scholarships, but more than half of them received tuition assistance through grants. The largest federal grant program available to undergraduate students is the Pell Grant program, which is based on financial need. The greater proportion of WGU graduates that received grants could suggest that they demonstrated greater financial need while pursuing their bachelor's degrees.

Eighty-three percent of WGU graduates and 58 percent of non-WGU graduates took out loans to pay for their bachelor's degree. Non-WGU graduates who borrowed money acquired 48 percent more debt than WGU graduates during their baccalaureate education. Of the WGU graduates who used loans to pay for tuition, 74 percent of the loans were federal, unsubsidized loans that are offered based on need. These results are higher than the national average of 61 percent of students at four-year private nonprofit institutions (such as WGU) that received federal student loans. Again, this data could suggest that graduates from WGU demonstrated greater need than their counterparts at traditional institutions. Although a greater proportion of WGU graduates took out loans to pay for their tuition, WGU graduates completed their degrees with less

student loan debt than non-WGU graduates, who on average graduated with over $10,000 more in student debt than WGU graduates. One explanation for this could be that the annual tuition at WGU is $6,280, significantly less than the national average at four-year public institutions ($12,750), private for-profit institutions ($21,000), and private nonprofit institutions ($24,690).[80] Although graduates from WGU accumulated less student debt than their counterparts while completing their teaching degree, participants from the two groups reported similar current debt and making similar monthly loan payments. However, non-WGU participants graduated on average 16 years earlier than WGU graduates and have had more time to repay their student loans. One explanation could be that a much larger proportion of non-WGU graduates continued to pursue a master's degree or higher and accumulated additional student debt.

Career Outcomes

Although non-WGU students had significantly more work experience since graduating with their teaching degree, WGU graduates outperformed them on measures of work readiness. The work readiness scale assessed participants on a variety of skills relevant to the teaching profession. These skills included work-related competence, such as having a theoretical understanding of their field; social intelligence, such as being able to build relationships and work well with others at work; organizational acumen, such as the ability to follow directions and utilize feedback; and personal management, such as managing multiple tasks and persevering through challenging situations. These traits have been previously theorized to represent the wide array of skills and personal management necessary for succeeding in highly demanding work environments. WGU graduates also scored higher on grit, measured in terms of the ability to maintain interest and effort while pursuing long-term goals. People with more grit may be better adept at working independently to achieve a goal, such as graduating from a largely self-guided program.

WGU participants scored higher on work readiness overall and on the specific subscales of organizational acumen and personal management. These results suggest that WGU participants feel they are better able to follow workplace protocols and manage multiple demands on their job than their non-WGU graduate counterparts. However, no differences were found between groups on the subscale measures of social intelligence and work competency. Although several of WGU's teacher training programs have been ranked highly by the NCTQ, it appears the graduates do not feel more competent at job-specific tasks than non-WGU graduates.

Importantly, differences on work readiness outcomes were small and ranged between 0.17 and 0.41 standard deviations, when significant. A 0.2 difference between groups indicates that 92 percent of the total sample's scores will overlap while a 0.4 difference indicates that 84 percent of the sample will overlap.[81] Therefore, differences in work readiness scores, while statistically significant, may not indicate a large practical difference between the work preparedness of non-WGU and WGU graduates. Still, these data indicate WGU graduates are no less prepared for the workplace than non-WGU graduates.

Table 28: Teacher Salary Comparison at Public and Private Schools

AVERAGE BASE SALARY	PUBLIC SCHOOL	PRIVATE SCHOOL
National	$53,070	$40,200
National with 2-4 years of experience	$41,480	$33,540
National with 15-19 years of experience	$58,880	$44,820
WGU Graduates	$53,372	$54,285
Non-WGU Graduates	$43,336	$44,353

Regarding education beyond a bachelor's degree, more non-WGU participants obtained graduate degrees than WGU graduates. While over half of the non-WGU group had earned a graduate degree, slightly less than a quarter of WGU graduates had earned more than a bachelor's degree. Again, because WGU is a relatively new school, the lower rates of graduate degrees among WGU students could be due to having less time to pursue a graduate degree since graduating with their bachelor's degree. WGU students could also be less prepared for or motivated to attend graduate school. Further research is necessary to determine why so few WGU students have earned a graduate degree compared to their non-WGU counterparts. While graduate degrees do impact teaching salaries, there is no evidence that they improve teacher effectiveness. For instance, in 2011, public school teachers with master's degrees reported earning over $10,000 more than teachers who had earned only their bachelor's degrees. However, an analysis of K-20 outcomes from the Florida Department of Education revealed that the only variable correlated with teacher effectiveness, measured by student achievement on tests, was years of classroom experience.

80 National Center for Education Statistics, 2017

81 Magnusson, 2014

Employment

While more WGU students were employed full time than non-WGU students, more non-WGU students were employed overall (including both part-time and full-time work). For instance, nearly 7 percent of WGU graduates were not currently working, while only 2 percent of non-WGU graduates were not working. Additionally, there was a stark difference regarding employment in the teaching field. While 94 percent of non-WGU graduates were employed as teachers, only 77 percent of WGU graduates were employed in the field for which they had been educated.

Income

On average, WGU graduates made 21 percent more income from teaching than non-WGU graduates. The difference in teaching salaries between the groups of graduates is statistically significant. WGU graduates also made more than the broad national average for all teachers, more than the Texas average ($48,819), and more than the national average when looking at public and private schools specifically.

The average annual income of WGU graduates working in public schools is almost equal to the national average for teachers working in public schools. However, WGU graduates working in public schools make significantly more than teachers with comparable experience (2-4 years). Non-WGU graduates teaching in public schools are paid almost $10,000 below the national average, and $15,000 below the national average for teachers with comparable experience (15-19 years).

Similarly, the average income of WGU graduates employed in private schools is significantly higher than the general national average for private school teachers as well as the national average for teachers with comparable teaching experience. The average salary of non-WGU graduates teaching in private schools is slightly above the national average for private school teachers, but below the average for teachers with comparable teaching experience.

WGU graduates also reported higher average salaries than non-WGU graduates in charter schools and working as private tutors, making $4,731 and $6,271 more than non-WGU graduates, respectively. The only workplace in which WGU graduates do not make more than their non-WGU counterparts is the "Other" category, in which non-WGU graduates make $260 more. However, the non-WGU graduates' median income for "Other" is lower than that of the WGU graduates, which could suggest that there are a small number of non-WGU graduates with higher income that lift the value of the mean. Regardless, the results indicate that teachers who graduated from the WGU Teachers College receive higher annual incomes after graduation, regardless of years of experience and highest education achieved.

The 11 percent difference in the proportion of graduates who received a promotion after graduation between the WGU and non-WGU groups was statistically significant. Despite receiving more promotions with pay increases, non-WGU graduates were still being paid less annually than WGU graduates. The United Federation of Teachers reports that the base salary for teachers "depends on three factors: your experience; your academic credits; and your length of service in the city's public schools." In the samples tested in the CBE GO study, the variance in income was not affected by prior years of experience, years since graduation, total years of experience, education level, workplace, or age. However, NCES data shows that teaching salaries are dependent on other exogenous factors that were not measured in this survey, such as geographic variance (city, suburban, town, and rural) and factors such as instructional level, supplemental contracts (compensating for additional activities such as coaching, student activity sponsorship, or teaching evening classes), and merit pay bonuses. Further research should be conducted to better understand differences in teaching salaries.

Limitations and Opportunities for Future Research

Due to the self-report nature of the study, the estimates provided by graduates from both the WGU group and non-WGU group on levels of debt accumulated, financial aid received, worker readiness, job turnover, and employment rates could have been influenced by social desirability bias or user error. The validity of self-reported data could be improved by obtaining proof of employment and debt, as well as by gathering observational reports, such as from supervisors, about employee competency and success in the workplace. However, many of these methods are intrusive to participants and would significantly reduce participation.

Further research on the financial aid access by CBE students could better inform policymakers about how to most efficiently allocate funds toward these nontraditional learners. For example, exploring the differences in gift aid received by WGU and non-WGU graduates to pay for their degree would provide valuable insight into how graduates use their financial assistance. Further research into financial aid patterns, particularly federal and need-based assistance, could improve the effectiveness of financial aid and financial aid advising, and ultimately help graduates use available funding most efficiently.

No data was gathered to determine why individuals were not currently employed in general or as teachers specifically. Further research is necessary to determine whether WGU graduates were not working at a higher rate because they had tried,

but could not find work, or if they were simply pursuing other goals. WGU graduates who were not employed as teachers may have worked in another field out of necessity or because they wanted to. Additional exploration in these areas could help better determine the perceived quality of a WGU degree among employers as well as the level to which WGU prepares their graduates to teach. Given the high demand for quality teachers nationally, understanding why some WGU graduates are not utilizing their degrees in the field for which they were educated could help policymakers and educators design more efficient pathways into long-term teaching careers.

Another area for further research is to explore the differences in annual income between the groups of WGU and non-WGU graduates, and CBE and non-CBE graduates more broadly. Investigating the exogenous factors that influence income for teachers from both traditional and nontraditional degree programs, such as geographic variance, professional experience, academic performance, scholastic level of instruction, and work readiness would be valuable. Exploring these factors in-depth could provide further insight into why the group of graduates who graduated from a CBE program receive higher annual salaries than the group that graduated from a traditional degree program. Finally, this research could lead to a greater understanding of the return on investment of different bachelor's degrees.

CONCLUSION

The Learning Policy Institute projects that the demand for well-trained teachers will rise to an additional 300,000 per year by 2020, and teacher shortages could reach 112,000 by 2018. By offering a flexible and accessible teacher preparation program, WGU may help increase the supply of educated teachers and provide some relief from forecasted teacher shortages. For students, employers, and policymakers interested in the relative costs and outcomes of a WGU degree, the CBE GO study makes several contributions to understanding the financial and career outcomes associated with earning a WGU degree.

First, significantly more WGU than non-WGU graduates took out student loans, but among those who borrowed to pay for their teaching degree, WGU participants graduated with over $10,000 less student debt than non-WGU graduates. This finding suggests that WGU's teaching degree is relatively affordable compared to traditional degree programs for students of lower socioeconomic status.

Second, WGU graduates reported higher work readiness than non-WGU graduates, measured as an overall work readiness score and on the subscales of organizational acumen, personal management, and grit. In the teaching profession, these attributes may translate into several positive employee qualities, such as the ability to follow workplace protocols, manage multiple demands, and persevere in challenging situations. Previous research has found new teachers self-reported grit to be related to teaching effectiveness, as measured by student achievement in underserved schools. While differences between groups of graduates on work readiness and grit measures is small, these data indicate that WGU graduates are no less prepared for the demands of the workplace than non-WGU graduates.

Third, despite being higher on several measures of work readiness, WGU graduates were less likely to be employed, in general, and as teachers, specifically, than non-WGU participants. While WGU graduates were as equally likely to be employed full time as non-WGU participants, they were more likely to not be currently working than their non-WGU counterparts. The selection criteria of the SSI panel, which included past or current employment as a teacher, may be one factor influencing group differences on employment. More research should assess the reason WGU graduates are not utilizing their degree in the teaching field, particularly given the national need for well-prepared teachers.

Finally, WGU graduates reported earning significantly higher annual salaries than non-WGU graduates teaching in public schools, private schools, charter schools, and teaching as private tutors. WGU graduate incomes were also higher than national averages for teachers in the same workplace with the same level of experience.

Integrated Analysis

The CBE GO study suggests that WGU offers a relatively affordable teacher training program, given that WGU graduates start their careers with less debt and have higher salaries than other graduates in similar teaching environments. Furthermore, WGU participants self-report that they are at least as work-ready, if not more so, than non-WGU graduates, a characteristic that may be related to the WGU training program or the type of person who persists in graduating from WGU's online, CBE teaching program.

In critical industries with chronic labor shortages like education and health care, bolstering the labor supply is necessary to ensuring that essential services are accessible and affordable. The large shortfall of qualified nurses and teachers in the U.S. is a symptom of an education system and labor market that fail to work in tandem to meet the growing needs of American society.

As more Americans gain access to reliable internet connections and labor demand continues to shift away from manufacturing into service industries, flexible, online learning opportunities can help increase access to a growing segment of people looking for a career change. Enrollment in online, competency-based programs has grown rapidly in the last decade, causing a large increase in CBE graduates in the workforce. While numerous research organizations, educational institutions, and state legislatures have speculated about the competence of CBE program alumni, relatively little research has been done to explore the outcomes of CBE graduates.

The CBE GO study conducted a survey-based, quantitative study of graduates from two prominent competency-based courses of study, the ADN from Institution X and the bachelor's degree from the Teachers College at Western Governors University (WGU). By comparing the responses of these samples with those of graduates from other comparable traditional nursing and teaching programs, outcomes of both groups can be evaluated with respect to comparable nurses and teachers.

Based on comparisons using a modified version of Walker's WRS, an abbreviated version of Duckworth's Short Grit Scale, and employment, income, and indebtedness information, no evidence suggested that CBE graduates in the programs studied had less favorable outcomes than the non-CBE graduates. In fact, incomes of both WGU and Institution X graduates were significantly higher than those of graduates of traditional programs. Institution X's ADN and WGU's bachelor degree are just two programs among the growing options available for people seeking a competency-based course of study.

One less-than-favorable difference between CBE and non-CBE graduates is the smaller percentage of CBE graduates working in the field of their degree, but this difference could be related to panel recruitment methods by SSI. Additionally, Institution X graduates may have had the opportunity to work in paying non-nursing jobs, as the difference in general employment rates between the Institution X and non-Institution X groups were statistically significant but the difference in employment was only 3 percentage points.

The qualitative portion of the study focusing on the BASOL program at South Texas College (STC) yielded a great deal of insight about the communities that CBE programs could serve and the challenges that new programs confront. Further investigation of low response rates and contact issues among STC respondents revealed that many did not have access to post-paid cellphone service or a personal email account. Many respondents cited that the BASOL was one of few education alternatives to the University of Texas-Rio Grande Valley and was much more affordable. The ability to reach communities of low socioeconomic status is extremely important in order to alleviate shortages in well-paying, critical fields and improving social mobility.

Interviewing STC graduates elucidated the significant obstacles new CBE programs face, including high technology start-up costs, training of faculty and staff in new software and processes, teaching students to navigate unclear financial aid systems, and the adapting competency-based model to fit funding pathways built on the credit-hour. The significant resources required to implement these changes are out of reach for many institutions and could explain the relative difficulty in establishing CBE programs in new subject areas and institutions.

Several states, such as California, have investigated competency-based programs' training for licensed professions (such as teaching and nursing) on the basis that these programs do not meet the educational requirements necessary to train professionals to state quality standards. From the CBE GO study a significant, detrimental difference in the career outcomes of CBE graduates was not found, and there was no evidence in income and employment information to claim that the labor market does not validate CBE degrees.

This evidence suggests that the outcomes of graduates from Institution X and WGU are not worse, but in many cases better than those of traditional programs. Two programs cannot provide a representative sample of CBE higher education broadly, so additional research is necessary to confirm the outcomes of CBE program alumni in nursing, teaching, and other fields.

Nevertheless, the claim that CBE program graduates are not prepared for the workforce or do not have at least comparable outcomes to traditional programs cannot be supported, and policymakers should review data and request additional studies to best understand CBE programs.

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Appendix and Reference Documents

Short Grit Scale

Directions for taking the Grit Scale: Please respond to the following 8 items. Be honest – there are no right or wrong answers!

1. New ideas and projects sometimes distract me from previous ones.*

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

2. Setbacks don't discourage me.

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

3. I have been obsessed with a certain idea or project for a short time but later lost interest.*

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

4. I am a hard worker.

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

5. I often set a goal but later choose to pursue a different one.*

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

6. I have difficulty maintaining my focus on projects that take more than a few months to complete.*

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

7. I finish whatever I begin.

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

8. I am diligent.

Very much like me Mostly like me Somewhat like me Not much like me Not like me at all

* Grit Scale citation:
Duckworth, A.L, & Quinn, P.D. (2009). "Development and validation of the Short Grit Scale" (Grit- S). *Journal of Personality Assessment*, 91, 166-174.

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Scoring:

1. For questions 2, 4, 7 and 8 assign the following points:

5 = Very much like me 4 = Mostly like me 3 = Somewhat like me 2 = Not much like me 1 = Not like me at all

2. For questions 1, 3, 5 and 6 assign the following points:

5 = Very much like me 4 = Mostly like me 3 = Somewhat like me 2 = Not much like me 1 = Not like me at all

Add up all the points and divide by 8. The maximum score on this scale is 5 (extremely gritty), and the lowest score on this scale is 1 (not at all gritty).

TABLE 1.—Item-level correlations with outcomes in Study 1.

Item	West Point Class of 2008 Retention	West Point Class of 2010 Retention	2005 National Spelling Bee Final Round[a]	Ivy League Undergraduate GPA
Consistency of Interest				
1. I often set a goal but later choose to pursue a different one.	***.10***	***.11***	***.12***	*.15*
5. I have been obsessed with a certain idea or project for a short time but later lost interest.	***.08***	***0.08***	*–.05*	**0.16**
6. I have difficulty maintaining my focus on projects that take more than a few months to complete.	*.04*	***.04***	*.07*	***.28***
2. New ideas and projects sometimes distract me from previous ones.	*.03*	*.03*	***.17***	*.13*
4. My interests change from year to year.	.06	***.09***	.08	.03
3. I become interested in new pursuits every few months.	.04	–.03	***.12***	.01
Perseverance of Effort				
9. I finish whatever I begin.	***.13***	***.06***	***.12***	***.32***
10. Setbacks don't discourage me.	***.07***	***.07***	***.11***	*.03*
12. I am diligent.	***.11***	*.00*	*.07*	***.31***
11. I am a hard worker.	***.09***	*.01*	*.09*	***.26***
7. I have achieved a goal that took years of work.	.02	.01	***.16***	***.17***
8. I have overcome setbacks to conquer an important challenge.	.04	–.03	–.03	–.09

Note: Italicized items were retained in the Short Grit Scale. Boldface correlation coefficients are above the median.

[a] Spearman's rho correlation coefficient.

The table above from Duckworth and Quinn (2009) shows the item-level correlations for the 12-question Grit Scale from four studies (the eight-item Short Grit Scale includes italicized items). The grit questions used in the CBE GO study are as follows and were selected based on highest overall item-level correlations.

1. I often set a goal but later choose to pursue a different one. (Labelled 1 in the table above.)
2. I have been obsessed with a certain idea or project for a short time but later lost interest. (Labelled 5 in the table above.)
3. I finish whatever I begin. (Labelled 9 in the table above.)
4. Setbacks don't discourage me. (Labelled 10 in the table above.)

Table 2 e Factor Loadings and Uniqueness for the Work Readiness Scale for Graduate Nurses (N [450)

Item	Factor 1 WC	Factor 2 SI	Factor 3 OA	Factor 4 PWC	Uniqueness
1. I have a solid theoretical understanding of my field of work	**0.73**	−0.13	0.04	0.07	0.56
2. I am confident about my learnt knowledge and could readily answer clinical questions about my field	**0.72**	−0.13	0.07	0.04	0.55
3. Analyzing and solving complex problems is a strength for me	**0.68**	−0.05	0.03	−0.07	0.51
4. I know how to cope with multiple demands	**0.65**	−0.05	−0.04	−0.29	0.40
5. Now that I have completed my studies I consider myself clinically competent to apply myself to the field	**0.59**	0.00	0.02	0.00	0.65
6. I feel confident that I will be able to apply my learnt knowledge to the workplace	**0.55**	0.01	0.19	0.03	0.58
7. People approach me for original ideas	**0.54**	0.07	−0.14	0.02	0.72
8. One of my strengths is that I have an eye for detail	**0.48**	0.00	0.15	0.02	0.70
9. I remain calm under pressure	**0.47**	0.08	−0.11	−0.31	0.55
10. I know my strengths and weaknesses	**0.43**	0.08	0.14	0.00	0.70
11. When a crisis situation that needs my attention arises I can easily change my focus	**0.41**	0.08	0.02	−0.26	0.63
12. I am always prepared for the unexpected to occur	**0.40**	0.02	0.10	−0.22	0.66
13. Being among the best in my field is very important to me	**0.40**	0.00	0.16	0.07	0.79
14. I consider myself to have a mature view of life	**0.37**	0.15	0.08	0.07	0.76
15. Developing relationships with people is one of my strengths	−0.18	**0.94**	0.05	0.04	0.25
16. Others would say I have an open and friendly approach	−0.12	**0.83**	0.04	0.06	0.39
17. Adapting to different social situations is one of my strengths	−0.02	**0.79**	0.00	−0.02	0.38
18. I can express myself easily	0.03	**0.71**	0.01	−0.04	0.45
19. I communicate effectively with different patients	0.08	**0.52**	0.08	−0.03	0.61
20. I find I am good at reading other people's body language	0.21	**0.51**	−0.12	0.07	0.66
21. I adapt easily to new situations	0.21	**0.48**	−0.09	−0.20	0.53
22. I am good at making impromptu speeches	0.20	0.46	**−0.16**	0.01	0.70
23. I look forward to the opportunity to learn and grow at work	−0.08	−0.01	**0.74**	−0.04	0.49
24. I am always working on improving myself	0.04	0.01	**0.67**	0.00	0.52
25. I am eager to throw myself into my work	0.10	−0.06	**0.63**	−0.18	0.50
26. I see all feedback as an opportunity for learning	−0.04	0.05	**0.61**	0.02	0.62
27. I can't wait to start work and throw myself into a project	0.20	−0.12	**0.60**	−0.15	0.51
28. I thrive on completing tasks and achieving results	0.14	0.05	**0.57**	0.02	0.57
29. An organisation's values and beliefs forms part of its culture	0.04	0.04	**0.55**	0.01	0.67
30. As an employee it's important to have a sound understanding of organisational processes and protocols	0.00	0.06	**0.55**	0.12	0.68
31. It is important to respect authority figures	−0.07	0.06	**0.52**	0.09	0.73
32. At work it is important to always take responsibility for your decisions and actions	−0.02	0.04	**0.43**	−0.04	0.80
33. It's important to respect your colleague	−0.04	0.07	**0.42**	0.11	0.81
34. It is important to learn as much as you can about the organisation	0.11	0.14	**0.42**	0.12	0.71
35. There is a lot to learn from employees who have worked at an organisation for years	−0.06	−0.02	**0.39**	0.15	0.86
36. You can learn a lot from your colleagues	0.03	−0.01	**0.35**	0.04	0.87
37. I recognise when I need to ask for help	0.06	−0.03	**0.33**	−0.18	0.82
38. You can learn a lot from long serving employees, even if they do not have a university degree	−0.11	0.09	**0.31**	0.10	0.89
39. I become overwhelmed by challenging circumstances	−0.06	0.02	−0.04	**0.80**	0.32
40. Juggling too many things at once is one of my weaknesses	−0.14	0.07	0.02	**0.77**	0.35
41. I feel that I am unable to deal with things when I have competing demands	0.00	0.01	−0.03	**0.76**	0.42
42. I get stressed when there are too many things going on	−0.09	0.00	0.14	**0.65**	0.55
43. I sometimes experience difficulty starting task	0.06	−0.06	−0.17	**0.55**	0.64
44. I am sometimes embarrassed to ask questions when I am not sure about something	0.12	0.00	−0.15	**0.52**	0.73
45. I don't like the idea of change	0.11	0.03	−0.13	**0.48**	0.78
46. Approaching senior people at work is a weakness for me	0.17	−0.17	−0.09	**0.47**	0.75
Variance explained by each factor	57.11%	18.42%	14.11%	10.36%	
Cronbach alpha of each factor	0.88	0.87	0.85	0.84	

OA, organisational acumen; PWC, personal work characteristics; SI, social intelligence; WC, work competence.
Bold numbers relate to the items and respective loadings of each factor.

The table above shows the Work Readiness Scale - Graduate Nurses (WRS-GN) from Walker et al. (2015), including the factor loadings, variance, and other statistics.

NOTE: The Personal Work Characteristics (PWC) subscale was renamed to Personal Management (PM) in the CBE GO study to better reflect the nature of the questions. The questions used in the CBE GO study are based on the questions listed above with high factor loadings and adjusted for applicability across fields.

CBE Graduate Interview (for South Texas College)

Pre-Interview Reminders for Participant:

There is no right or wrong answer, we're interested to learn about their experiences and stories

Emphasize confidentiality

Remind participant of their right to refuse to answer

Initial Interview Script:
"This is interviewer (state ID#) with Participant (state ID#). Today's date is (state Month, Day, and year) at (time) (am/pm)."

Qualitative Topics and Guiding Questions

Starting from high school, tell me more about your education.

(Probe) *What courses interested you most in high school?*

(Probe) *What factors were most important in deciding what to do after high school?*

(Probe) *What did you do after graduating from high school?*

(Probe) *Did you think about attending college? If so, why?*

**Transition script: "Now we're going to switch topics….*

Tell me about the education you received at UNIVERSITY.

(Probe) *Did the coursework you received improve your performance at work? How?*

(Probe) *How has having a Bachelor's degree impacted your career?*

(Probe) *Tell me about the value of your degree from UNIVERSITY.*

Additions:

What were your experiences with teachers & administrations (request stories)

What was your experience with financial aid (request story)

Most favorite and least favorite aspect of STC

**Transition script: "Changing gears a bit….*

Thinking about your career, tell me about your work experience.

(Probe) *Career changes*

(Probe) *Promotions*

**Transition script: "Switching to a new topic….*

Have your career goals changed since graduating from UNIVERSITY?

How does having an education impact people in your line of work?

(Probe) *Job-specific*

(Probe) *How has having a Bachelor's degree impacted your career?*

Ask for specific story

(Probe) *How has your education impacted your relationships at work?*

Ask for specific story

SUBSCALE	MWRS ITEM
Social Intelligence (SI)	mWRS1: Developing relationships with people is one of my strengths.
	mWRS2: Others would say I have an open and friendly approach.
	mWRS15: I can express myself easily.
	mWRS17: Adapting to different social situations is one of my strengths.
Work Competence (WC)	mWRS3: I could readily answer clinical questions about my field.
	mWRS4: I am confident about my learned knowledge.
	mWRS6: I know how to cope with multiple demands.
	mWRS8: I have a solid theoretical understanding of my field of work.
	mWRS9: Analyzing and solving complex problems is a strength for me.
Personal Management (PM)	mWRS7: I become overwhelmed by challenging circumstances.
	mWRS10: I get stressed when there are too many things going on.
	mWRS18: I feel that I am unable to deal with things when I have competing demands.
Organizational Acumen (OA)	mWRS11: I am eager to throw myself into my work.
	mWRS12: I see all feedback as an opportunity for learning.
	mWRS14: I look forward to the opportunity to learn and grow at work.
	mWRS16: I can't wait to start work and throw myself into a project.

How would you compare your performance to colleagues that do not have a bachelor's degree?

Ask for specific story

How would you compare your performance to colleagues with bachelor's degrees from traditional institutions?

(Probe) *How many other people in your company or group have bachelor degrees? How many of those are from traditional institutions?*

(Probe) *How has having a Bachelor's degree impacted your career?*

(Probe) *How has your education impacted your relationships at work?*

Is there anything else you would like to tell me about your experience with UNIVERSITY?

If you could pass on one piece of wisdom to someone who is about to enter STC, what would you tell them?

Transition Script:

"Thank you so much for sharing your stories and experiences, we really appreciate it! We're going to shift to questions that are a bit more personal. Please remember that your answers are completely confidential and you may refuse to answer if you'd like to."

Tip: Write "Refused to answer" if participant chooses not to answer a question.

1) Do you own or rent your primary residence?

( ) Own ( ) Rent ( ) Unsure ( ) Other - Write In: _____

2) What is your monthly rent or mortgage payment?*

( ) Monthly Payment: _____

( ) My house or apartment is fully paid off.

( ) I live with friends and/or family.

( ) Other - Write In: _____

3) What is your annual income from (state job title)?

_____ (hourly or yearly)

4) What was the TOTAL amount you paid towards student loans last month?

_____

(Write deferred or paid out of pocket if they have no loans.)

5) How much student loan debt did you graduate with? Please type the amount in dollars.

_____

Probe: Differentiate between Associates and Bachelors and Masters (if they have multiple degrees)

6) Do you still make student loan payments?

( ) Yes ( ) No ( ) Prefer not to answer

Probe: If attending Master's degree program, ask how much student loans they've taken on.

FINAL STATEMENT SCRIPT:

"This concludes our interview, thank you for sharing all that you did! We sincerely appreciate it. We're about to wrap up the interview, are there any last thoughts or experiences in general that you'd like to share with us?"

Turn off recording by pressing "ENTER" button.

Finish notes on Data Collection Guide

Institution X Nursing Survey (IRB-approved)

Consent -

This survey is part of a research project being conducted by Goldman Insights, and you are invited to participate based on your professional and academic achievements.

Your participation in this research study is voluntary and involves an online survey that will take approximately 10 minutes. Your responses will be confidential.

Your time will be compensated with a $5 Amazon gift card sent to the email address provided at the end of the survey. All data is stored in a password protected electronic format. If you have any questions about the research study, please contact the research team at research@goldmaninsights.com.

Clicking on the "Agree" button below indicates that:

- ***You have read the above information.***
- ***You voluntarily agree to participate.***
- ***You are at least 18 years of age.***

If you do not wish to participate in the research study, you may decline to participate by clicking on the "Disagree" button. [82]

( ) Agree ( ) Disagree

Did you graduate from the Associate Degree in Nursing (ADN) program from Institution X?*

( ) Yes ( ) No ( ) Unsure

What state do you live in? (scroll down and select state)

From what state(s) do you hold an active nursing license?* (scroll down and select state)

What is your current employment status?*

( ) Full time (30 or more hours per week)

( ) Part time (1 - 29 hours per week)

( ) I am not currently working.

Are you actively seeking employment?*

( ) Yes ( ) No

Which statement best describes your employment status?*

( ) I am employed as a nurse or nurse supervisor.

( ) I am employed as something else: _____*

Which of the following best describes where you work?*

Select ALL that apply.

[ ] Hospital

[ ] Doctor's Office or Clinic

[ ] School/University

[ ] Nursing Home

[ ] Home Health Care

[ ] Other: _____

Did you earn credit from a college or university before starting your nursing program at Institution X?*

( ) Yes ( ) No

82 The asterisk (*) denotes a required survey question.

What college or university did you attend BEFORE you started your nursing program at Institution X?*

If you went to more than one college or university before Institution X, choose the one where you earned the most credits.

_____

How long did you study at _____?*

( ) Less than 6 months

( ) 6 months to less than 1 year

( ) 1 year to less than 2 years

( ) 2 years to less than 3 years

( ) 3 years to less than 4 years

( ) 4 years to less than 5 years

( ) 5 or more years

What reason(s) caused you to end your studies at _____?*

Select ALL that apply.

[ ] Graduated

[ ] Lack of funding

[ ] Unsure of career choice

[ ] Not a good fit for me

[ ] Chose a different career

[ ] Personal/Health reasons

[ ] Family responsibilites

[ ] Unprepared for the work load

[ ] Other - Write In: _____

What year did you complete your Associate Degree in Nursing at Institution X?*

_____

Did you receive assistance from any of the following sources in paying for your nursing program at Institution X?*

Select ALL that apply.

[ ] Scholarships

[ ] Grants (including Pell Grants)

[ ] Subsidized federal loans

[ ] Private loans

[ ] Military-related tuition assistance (such as the GI Bill)

[ ] Employer-based tution assistance

[ ] Family assistance (including spouses)

[ ] I did not receive any assistance in paying for my degree

_____

Prior to completing your nursing degree at Institution X, how much work experience did you have in the health care field?*

( ) None

( ) Less than 2 years

( ) 2 years to 5 years

( ) 6 years to 10 years

( ) 11 years to 15 years

( ) 16 years or more

_____

Before becoming a registered nurse (RN), where did you work?*

Select ALL that apply.

[ ] I didn't work until I became an RN.

[ ] I worked in a hospital.

[ ] I worked in a doctor's office/clinic.

[ ] I worked as a member of the military.

[ ] I worked in a school.

[ ] I worked in a nursing home or long term care facility.

[ ] I worked in a different place: _____

What was the last job title you had BEFORE becoming a registered nurse (RN)?*

( ) I didn't work until I became an RN.

( ) Certified Nursing Assistant (CNA)

( ) Licensed Practical Nurses (LPN)/Licensed Vocation Nurses (LVN)

( ) Nurse Tech

( ) Other - Write In: _____

How many times have you taken NCLEX-RN?*

( ) 0 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5+

How many different, full-time nursing jobs have you had since graduating from Institution X?*

( ) 0 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 or more _____

How long have you worked for your current employer?*

( ) Less than 1 year ( ) 1 - 2 years ( ) 3 - 5 years ( ) 6 - 10 years ( ) More than 10 years

Since completing your nursing program at Institution X, have you received a promotion with a pay increase?*

( ) Yes ( ) No ( ) Unsure _____

Are you currently looking for another job?*

( ) Yes, I am looking for another role in nursing.

( ) Yes, I am looking for a role in a different role in the health care field.

( ) Yes, I am looking for a role in field other than health care.

( ) No

( ) Unsure

mWRS1

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Developing relationships with people is one of my strengths.	( )	( )	( )	( )	( )

mWRS2

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Others would say I have an open and friendly approach.	( )	( )	( )	( )	( )

mWRS3

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I could readily answer clinical questions about my field.	( )	( )	( )	( )	( )

mWRS4

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I am confident about my learned knowledge.	( )	( )	( )	( )	( )

mWRS5

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I am always working on improving myself.	( )	( )	( )	( )	( )

mWRS6

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I know how to cope with multiple demands.	( )	( )	( )	( )	( )

mWRS7

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I become overwhelmed by challenging circumstances.	( )	( )	( )	( )	( )

mWRS8

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I have a solid theoretical understanding of my field of work.	( )	( )	( )	( )	( )

mWRS9

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Analyzing and solving complex problems is a strength for me.	( )	( )	( )	( )	( )

mWRS10

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I get stressed when there are too many things going on.	( )	( )	( )	( )	( )

mWRS11

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I am eager to throw myself into my work.	( )	( )	( )	( )	( )

mWRS12

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I see all feedback as an opportunity for learning.	( )	( )	( )	( )	( )

mWRS13

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I juggle too many things at once.	( )	( )	( )	( )	( )

mWRS14

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I look forward to the opportunity to learn and grow at work.	( )	( )	( )	( )	( )

mWRS15

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I can express myself easily.	( )	( )	( )	( )	( )

mWRS16

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I can't wait to start work and throw myself into a project.	( )	( )	( )	( )	( )

mWRS17

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Adapting to different social situations is one of my strengths	( )	( )	( )	( )	( )

mWRS18

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I feel that I am unable to deal with things when I have competing demands.	( )	( )	( )	( )	( )

mWRS19

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I often set a goal but later choose to pursue a different one.	( )	( )	( )	( )	( )

mWRS20

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I have been obsessed with a certain idea or project for a short time but later lost interest.	( )	( )	( )	( )	( )

mWRS21

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I finish whatever I begin.	( )	( )	( )	( )	( )

mWRS22

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Setbacks don't discourage me.	( )	( )	( )	( )	( )

What is your annual income from nursing, before taxes?*

_____

When you started your Associate Degree in Nursing (ADN) program at Institution X, what was the TOTAL amount of student debt you had?*

_____

When you graduated from Institution X, what was the TOTAL amount of student loan debt you had?*

_____

What is the TOTAL amount of student loan debt that you currently owe?*

_____

What is the TOTAL amount you spend monthly on student loan payments?*

_____

What is your gender?*

( ) Female ( ) Male ( ) Other: _____

What is your age?*

_____

What is your ZIP code?*

_____

With which racial or ethnic group(s) do you identify?*

Select ALL that apply.

[ ] Black or African-American

[ ] Asian or Pacific Islander

[ ] White or Caucasian

[ ] Latino or Hispanic

[ ] Native American or Aleut

[ ] Other - Write In: _____

What is your current marital status?*

( ) Married

( ) Divorced

( ) Widowed

( ) Single, never married

( ) Other - Write In: _____

Do you identify as LGBTQ+?*

( ) Yes ( ) No

Do you identify as any of the following?*

Select ALL that apply.

[ ] Bisexual

[ ] Gay

[ ] Lesbian

[ ] Transgender

[ ] Straight or Heterosexual

[ ] Queer

[ ] Other: _____

What is your highest level of education completed?*

( ) Up to 8th grade

( ) Some high school, no diploma

( ) High school diploma or equivalent (such as GED)

( ) Some college credit

( ) Trade/technical/vocational training

( ) Associate degree

( ) Bachelor's degree

( ) Master's degree or higher

( ) Unsure

What is your FATHER's highest level of education completed?*

( ) Up to 8th grade

( ) Some high school, no diploma

( ) High school diploma or equivalent (such as GED)

( ) Some college credit

( ) Trade/technical/vocational training

( ) Associate degree

( ) Bachelor's degree

( ) Master's degree or higher

( ) Unsure

What is your MOTHER's highest level of education completed?*

( ) Up to 8th grade

( ) Some high school, no diploma

( ) High school diploma or equivalent (such as GED)

( ) Some college credit

( ) Trade/technical/vocational training

( ) Associate degree

( ) Bachelor's degree

( ) Master's degree or higher

( ) Unsure

Thank you for completing this survey. Please enter your email address below in order to receive your $5 Amazon gift card.*

_____

May we send you additional information about future study participation via email?*

( ) Yes ( ) No _____

Thank You!

WGU Teacher Survey (IRB-approved)

Consent - Updated

This survey is part of a research project being conducted by Goldman Insights, and you are invited to participate based on your professional and academic achievements.

Your participation in this research study is voluntary and involves an online survey that will take approximately 15 minutes. Your responses will be confidential.

Your time will be compensated with a $5 Amazon gift card sent to the email address provided at the end of the survey. All data is stored in a password protected electronic format. If you have any questions about the research study, please contact the research team at research@goldmaninsights.com

Clicking on the "Agree" button below indicates that:

- *You have read the above information.*
- *You voluntarily agree to participate.*
- *You are at least 18 years of age.*

If you do not wish to participate in the research study, you may decline to participate by clicking on the "Disagree" button. *[83]

( ) Agree ( ) Disagree

Did you graduate with a Bachelor's degree from the Teachers College at Western Governors University (WGU)?*

( ) Yes ( ) No ( ) Unsure

83 The asterisk (*) denotes a required survey question.

What state do you live in? (scrolls down and selects state)

From what state(s) do you hold an active teaching license or certification?* (scrolls down and selects state)

What is your current employment status?*

( ) Full time (30 or more hours per week)

( ) Part time (1 - 29 hours per week)

( ) I am not currently working.

Are you actively seeking employment?* ( ) Yes ( ) No

Which statement best describes your employment status?*

( ) I am employed as a teacher.

( ) I am employed as something else: _____*

Which of the following best describes where you work?*

Select ALL that apply.

[ ] Public School

[ ] Private School

[ ] Charter School

[ ] Private Tutor

[ ] Other: _____

Did you earn credit from a college or university before starting your teaching program at Western Governors University?*

( ) Yes ( ) No

What college or university did you attend BEFORE you started your teaching program at Western Governors University?*

If you went to more than one college or university before Western Governors University, choose the one where you earned the most credits.

_____

How long did you study at _____?*

( ) Less than 6 months

( ) 6 months to less than 1 year

( ) 1 year to less than 2 years

( ) 2 years to less than 3 years

( ) 3 years to less than 4 years

( ) 4 years to less than 5 years

( ) 5 or more years

What reason(s) caused you to end your studies at _____?*

Select ALL that apply.

[ ] Graduated

[ ] Lack of funding

[ ] Unsure of career choice

[ ] Not a good fit for me

[ ] Chose a different career

[ ] Personal/Health reasons

[ ] Family responsibilites

[ ] Unprepared for the work load

[ ] Other - Write In: _____

What year did you complete your bachelor's degree from Western Governors University?*

_____

Did you receive assistance from any of the following sources in paying for your bachelor's degree at Western Governors University?*

Select ALL that apply.

[ ] Scholarships

[ ] Grants (including Pell Grants)

[ ] Subsidized federal loans

[ ] Private loans

[ ] Military-related tuition assistance (such as the GI Bill)

[ ] Employer-based tution assistance

[ ] Family assistance (including spouses)

[ ] I did not receive any assistance in paying for my degree.

Prior to completing your bachelor's degree at Western Governors University, how much TOTAL work experience did you have that relates to a subject you teach?*

( ) None

( ) Less than 2 years

( ) 2 years to 5 years

( ) 6 years to 10 years

( ) 11 years to 15 years

( ) 16 years or more

Before becoming a teacher, what was your job?*

_____

How many different, full-time teaching jobs have you had since graduating from Western Governors University?*

( ) 0 ( ) 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( ) 6 or more

How long have you worked for your current employer?*

( ) Less than 1 year ( ) 1 - 2 years ( ) 3 - 5 years ( ) 6 - 10 years ( ) More than 10 years

Since completing your teaching program at Western Governors University, have you received a promotion with a pay increase?*

( ) Yes ( ) No ( ) Unsure

Are you currently looking for another job?*

( ) Yes, I am looking for another role in teaching.

( ) Yes, I am looking for a role in a different role in the field of education.

( ) Yes, I am looking for a role in field other than education.

( ) No

( ) Unsure

mWRS1

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Developing relationships with people is one of my strengths.	( )	( )	( )	( )	( )

mWRS2

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Others would say I have an open and friendly approach.	( )	( )	( )	( )	( )

mWRS4

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I am confident about my learned knowledge.	( )	( )	( )	( )	( )

mWRS5

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I am always working on improving myself.	( )	( )	( )	( )	( )

mWRS6

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I know how to cope with multiple demands.	( )	( )	( )	( )	( )

mWRS7

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I become overwhelmed by challenging circumstances.	( )	( )	( )	( )	( )

mWRS8

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I have a solid theoretical understanding of my field of work.	( )	( )	( )	( )	( )

mWRS9

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Analyzing and solving complex problems is a strength for me.	( )	( )	( )	( )	( )

mWRS10

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I get stressed when there are too many things going on.	( )	( )	( )	( )	( )

mWRS11

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I am eager to throw myself into my work.	( )	( )	( )	( )	( )

mWRS12

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I see all feedback as an opportunity for learning.	( )	( )	( )	( )	( )

mWRS13

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I juggle too many things at once.	( )	( )	( )	( )	( )

mWRS14

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I look forward to the opportunity to learn and grow at work.	( )	( )	( )	( )	( )

mWRS15

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I can express myself easily	( )	( )	( )	( )	( )

mWRS16

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I can' t wait to start work and throw myself into a project.	( )	( )	( )	( )	( )

mWRS17

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Adapting to different social situations is one of my strengths.	( )	( )	( )	( )	( )

mWRS18

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I feel that I am unable to deal with things when I have competing demands.	( )	( )	( )	( )	( )

mWRS19

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I often set a goal but later choose to pursue a different one.	( )	( )	( )	( )	( )

mWRS20

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I have been obsessed with a certain idea or project for a short time but later lost interest.	( )	( )	( )	( )	( )

mWRS21

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
I finish whatever I begin.	( )	( )	( )	( )	( )

mWRS22

How strongly do you agree or disagree with the following statements?*

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Setbacks don't discourage me	( )	( )	( )	( )	( )

What is your annual income from teaching, before taxes?*

_____

When you started your bachelor's degree at Western Governors University, what was the TOTAL amount of student debt you had?*

_____

When you graduated from Western Governors University, what was the TOTAL amount of student loan debt you had?*

_____

What is the TOTAL amount of student loan debt that you currently owe?*

_____

What is the TOTAL amount you spend monthly on student loan payments?*

_____

What is your gender?*

( ) Female ( ) Male ( ) Other: _____

What is your age?* _____

What is your ZIP code?* _____

With which racial or ethnic group(s) do you identify?*

Select ALL that apply.

[ ] Black or African-American

[ ] Asian or Pacific Islander

[ ] White or Caucasian

[ ] Latino or Hispanic

[ ] Native American or Aleut

[ ] Other - Write In: _____

What is your current marital status?*

( ) Married ( ) Divorced ( ) Widowed ( ) Single, never married ( ) Other - Write In: _____

Do you identify as LGBTQ+?*

( ) Yes ( ) No

Do you identify as any of the following?*

Select ALL that apply.

[ ] Bisexual [ ] Gay [ ] Lesbian [ ] Transgender [ ] Straight or Heterosexual [ ] Queer [ ] Other: _____

What is the highest degree or level of school you have completed? If currently enrolled, select the previous grade or highest degree received.*

( ) Associate degree (for example: AA, AS)

( ) Completed some college credit

( ) Bachelor's degree (for example: BA, BS, BSN)

( ) Completed some graduate credit

( ) Master's degree (for example: MA, MS, MBA, MSN)

( ) Professional degree (for example: MD, DDS, JD, NP)

( ) Doctorate degree (for example: Ph.D., EdD, DCN)

What is your FATHER's highest level of education completed?*

( ) Up to 8th grade

( ) Some high school, no diploma

( ) High school diploma or equivalent (such as GED)

( ) Some college credit

( ) Trade/technical/vocational training

( ) Associate degree

( ) Bachelor's degree

( ) Master's degree or higher

( ) Unsure

What is your MOTHER's highest level of education completed?*

( ) Up to 8th grade

( ) Some high school, no diploma

( ) High school diploma or equivalent (such as GED)

( ) Some college credit

( ) Trade/technical/vocational training

( ) Associate degree

( ) Bachelor's degree

( ) Master's degree or higher

( ) Unsure

Email Ask:

Thank you for completing this survey. Please enter your email address below in order to receive your $5 Amazon gift card.*

_____

May we send you additional information about future study participation via email?*

( ) Yes ( ) No

Thank You!

mWRS Factor Analysis

	Component				
	WORK COMPETENCE	ORGANIZATIONAL ACUMEN	SOCIAL INTELLIGENCE	PERSONAL MANAGEMENT	COMMUNALITIES
mWRS1: Developing relationships with people is one of my strengths.	.172	.077	**.799**	.013	.674
mWRS2: Others would say I have an open and friendly approach.	.316	.117	**.696**	-.011	.597
mWRS15: I can express myself easily.	.285	.300	**.532**	.008	.455
mWRS17: Adapting to different social situations is one of my strengths.	.086	.326	**.670**	.092	.571
mWRS3: I could readily answer clinical questions about my field.	**.718**	.036	.190	.076	.559
mWRS4: I am confident about my learned knowledge.	**.772**	.157	.214	.012	.666
mWRS6: I know how to cope with multiple demands.	**.652**	.240	.234	.036	.538
mWRS8: I have a solid theoretical understanding of my field of work.	**.756**	.193	.113	.035	.623
mWRS9: Analyzing and solving complex problems is a strength for me.	**.621**	.312	.107	.018	.495
mWRS7: I become overwhelmed by challenging circumstances.	.060	.015	.035	**.888**	.794
mWRS10: I get stressed when there are too many things going on.	.033	-.005	-.029	**.815**	.666
mWRS18: I feel that I am unable to deal with things when I have competing demands.	.031	.033	.069	**.805**	.655
mWRS11: I am eager to throw myself into my work.	.179	**.786**	.145	.005	.670
mWRS12: I see all feedback as an opportunity for learning.	.205	**.642**	.195	.058	.496
mWRS14: I look forward to the opportunity to learn and grow at work.	.358	**.651**	.173	.060	.584
mWRS16: I can't wait to start work and throw myself into a project.	.102	**.802**	.153	-.056	.680

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

About the Authors

Thomas K. Lindsay, Ph.D.

Thomas K. Lindsay, Ph.D., is director of the Texas Public Policy Foundation's Center for Higher Education. He has more than two decades' experience in education management and instruction, including service as a dean, provost, and college president.

In 2006, Lindsay joined the National Endowment for the Humanities (NEH) staff as director of the agency's signature initiative, We the People, which supports teaching and scholarship in American history and culture. He was named deputy chairman and chief operating officer of the NEH in 2007.

Lindsay received his B.A., *summa cum laude*, in political science, and went on to earn his M.A. and Ph.D. in political science from the University of Chicago. Oxford University Press published Lindsay's American government college textbook *Investigating American Democracy* (with Gary Glenn). He has published numerous articles on the subject of democratic education, many of which have appeared in the world's most prestigious academic journals, including *American Political Science Review, Journal of Politics,* and *American Journal of Political Science*.

Lindsay has published articles on higher-education reform in Real Clear Policy, *Los Angeles Times, National Review, Inside Higher Ed, Washington Examiner*, Knight-Ridder Syndicate, *Dallas Morning News, Houston Chronicle, American Spectator,* and *Austin American-Statesman*, among others. He is also a regular contributor to Forbes.com.

In recognition of his scholarship on democratic education, Lindsay was made the 1992-93 Bradley Resident Scholar at the Heritage Foundation in Washington, D.C.

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Joe Goldman is a qualitative and quantitative researcher with a passion for developing impactful research to challenging questions. Previously with Gallup and the Harvard University Center for International Development, Joe started Goldman Insights to apply survey research and data analytics to uncover hidden gems that transform perspectives. Joe's work focuses on economics, nontraditional education, survey methods, and the effective communication of research findings to diverse stakeholders.

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Phoebe Long, MA, is an Educational Psychology Ph.D. Candidate at the University of Texas at Austin. Her individual research centers on the role emotions and self-beliefs play in student communication and help-seeking behavior. She teaches undergraduate courses and community workshops in Austin, Texas.

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