COMMUNITY COLLEGE CULTURE AND STUDENT ENGAGEMENT: A MIXED METHODS STUDY SEEKING RELATIONSHIPS AMONG EMPLOYEE DIMENSIONS OF CULTURE AND STUDENT ENGAGEMENT BENCHMARKS

by

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ABSTRACT

A common practice in community colleges is to conduct nationally recognized, benchmarked surveys to guide improvements in college culture and student engagement. How community colleges use these results varies from simple documentation to a detailed, collaborative college-wide analysis, culminating in collegewide improvement plans. This study provides insight for community college leaders on how college culture and student engagement correlate to improve student learning.

This mixed-methods, explanatory sequential study identified relationships among the Great Colleges-Higher Education Insight Survey (Great Colleges-HEIS) employee dimensions and the Community College Survey of Student Engagement (CCSSE) benchmarks in Phase 1. Great Colleges-HEIS is an employee survey to measure college climate/culture, and the CCSSE is a student survey measuring student engagement. Phase 2 consisted of nine college leader interviews, three leaders from each of three community colleges showing the greatest improvements in survey scores (from the foundational surveys to the subsequent surveys four or more years later) between 2008 through 2017. The leaders shared their perceptions of why their college's survey scores improved. The Phase 1 Pearson *r* correlations of employee dimensions (scores from Great Colleges-HEIS surveys) with student engagement benchmarks (scores from CCSSE surveys) were integrated with college events, initiatives, and changes gathered from the Phase 2 interviews. These outcomes may guide community college leaders in transforming culture to increase student engagement for improved student learning.

Phase 1 of the study found 31 significant relationships of employee dimensions of culture with student engagement benchmarks among 75 possible pairs. The nine college leader interviews of Phase 2 generated three broad recurring themes: Authentic Relational Leadership, Distinctively Strong Student Focus, and Collegewide Initiatives and Events. The leaders interviewed came from three of the 14 participating community colleges showing the greatest improvements in survey scores. Integrating the correlations with the themes provides strategies to transform a community college's culture to increase student engagement based on a college's Great College-HEIS and CCSSE survey results. Recommendations for further research are included.

KEY TERMS: college climate, community college transformation, organizational culture, student engagement, student learning

DEDICATION AND ACKNOWLEDGEMENTS

This dissertation journey consisted of an earlier-than-planned voluntary retirement from a 38-year community college career. However, the Lord blessed this transition into retirement in unbelievable and unexpected ways: continued steady growth in my faith walk; the successful learning and completion of the final two years of doctoral classes; the blessings of a new granddaughter and grandson through adoptions at birth; dissertating and data collection during the Covid-19 pandemic; chairing a feasibility study and planning committee seeking God's Will to start a new Lutheran High School at our established church and preschool through eighth grades; facilitating a Tuesday Morning Ladies Bible study unexpectedly after a treasured friend and Biblical teacher lost her battle to cancer, but gained heaven instead; the bond of studying together with fellow sisters in Christ; and this academic year teaching leadership at Bethel Lutheran High School, now in its second year. Personal Bible study, prayer, and reflection guided my doctoral journey with the help of two daily devotional books, *Jesus Calling* (2004) and *Jesus Listens* (2021), authored by Sarah Young, both constant guides in living a Christ-filled life and listening for my next steps. Proverbs 16:9 became my leading dissertation verse, "In their hearts, humans plan their course, but the Lord establishes their steps" (Holy Bible, New International Version, 2011). While Michael W. Smith and Hillsong Live's faith-building, stress-relieving music accompanied me on weekly drives to Davenport, Iowa to grandbabysit Ruthie and Kelvin. Moreover, Hamilton's confidence-boosting hip-hop music (including attending five musical Chicago performances during this dissertation journey) kept me "writing as if I were running out of time."

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LIST OF ABBREVIATIONS

FIGURE AND TABLE TERMS	ABBREVIATIONS
14 Participating Community Colleges	CC1, CC2 through CC14
Great Colleges to Work for Higher Education Insight Survey	Great Colleges-HEIS
Survey Year of Administration and Survey # (1 or 2)	GC2009-1, GC2015-2
Community College Survey of Student Engagement	CCSSE
Center for Community College Student Engagement	CCCSE
Survey Year of Administration and Survey # (1 or 2)	CCSSE2008-1, CCSSE 2016-2
Great Colleges-HEIS Employee Dimensions	
Job Satisfaction/Support	JobSS
Teaching Environment	TeachEn
Professional Development	ProfDev
Compensation, Benefits & Work-Life Balance	CompB
Facilities	Facilities
Policies, Resources & Efficiency	Policy
Shared Governance	Gov
Pride	Pride
Supervisors/Department Chairs	Suprv
Senior Leadership	SrLead
Faculty, Administration & Staff Relations	FacAdSt
Communication	Comm
Collaboration	Collab
Fairness	Fair
Respect & Appreciation	Respect
CCSSE Benchmarks	
Active and Collaborative Learning	ActiveLearn
Student Effort	StuEffort
Academic Challenge	AcChallenge
Student-Faculty Interaction	Stu-Fac
Support for Learners	Support

CHAPTER ONE: INTRODUCTION

INTRODUCTION

Unique beliefs, values, social patterns, methods of conducting work, and traditions created and practiced by organizations help to define their organizational cultures (Kotter & Heskett, 2011; Schein, 2017; Shugart, 2013). Community college leaders who understand the traditions, symbols, values, ways of work, and social patterns that make up the organizational culture of their institutions are more likely to lead purposefully toward cultural transformation (Bolman & Deal, 2013, p. 264). Tierney says, "Our lack of understanding about the role of organizational culture in improving management and institutional performance inhibits our ability to address the challenges that face higher education" (1988, p. 4). Tierney's quote still applies and suggests that a college's organizational culture plays a crucial role in tackling community college challenges in student enrollment, student persistence, student engagement, student learning, and student success.

Could community college leaders' improved understanding of college culture, measured by the Great Colleges to Work for Higher Education Insight Survey (Great Colleges-HEIS), help improve student engagement, as measured by the Community College Survey of Student Engagement (CCSSE)? The Center for Community College Student Engagement (2015) shows that student engagement improves student learning, which moves colleges forward in student success (McClenney & Arnsparger, 2012). An improved understanding of college culture and how it relates to and supports student engagement should help colleges transform their cultures to a stronger focus on student learning.

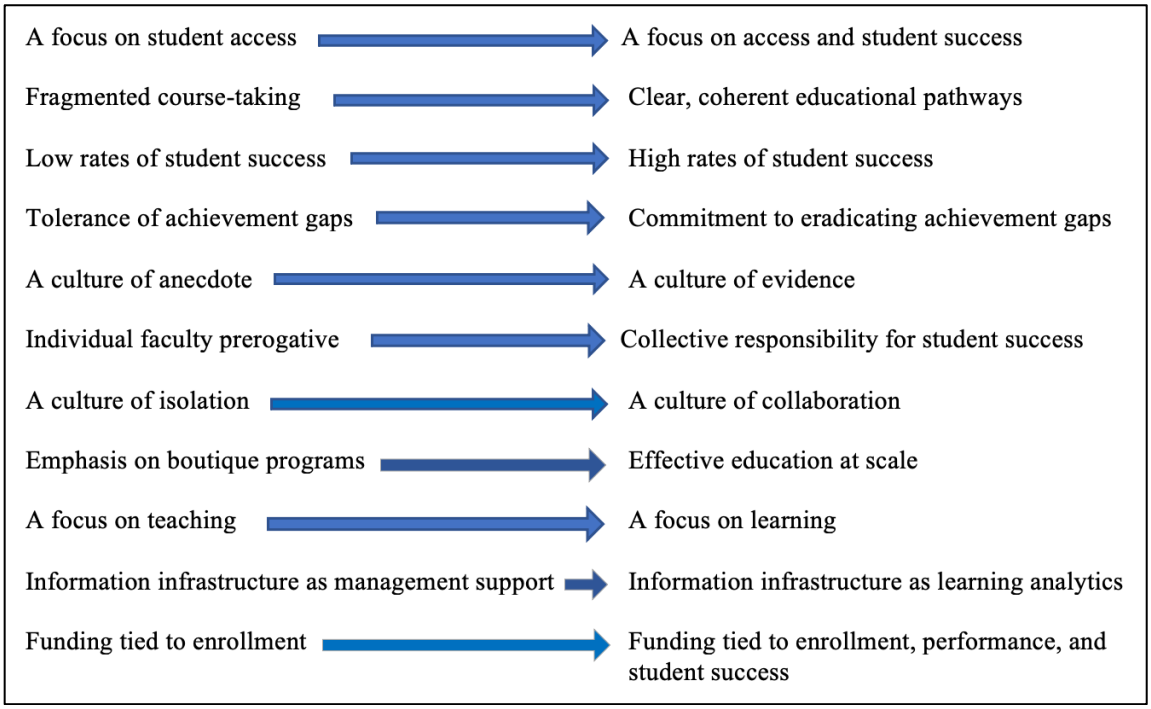
As the 21st-Century Commission on the Future of Community Colleges, sponsored by the American Association of Community Colleges (AACC), stated in *Reclaiming the American Dream*: “Colleges need to find ways to make student success central to the work of everyone on campus, particularly the faculty and including the governing board — equipping all with the knowledge and skills required for their most effective work” (2012, p. 19). Community college administrators, faculty, and staff need to develop innovative ways to conduct the work of teaching and learning by intentionally engaging students, which subsequently improves student learning. Community colleges work in a world of high expectations and accountability from their communities, students, accreditors, and state/federal funding agencies, as proclaimed by AACC and Bailey et al. (2015).

Community college employees must realize that everyone, not just faculty, must be involved in helping students learn and succeed (AACC, 2012; Bailey et al., 2015). It takes the entire community of college employees working together to engage students in their learning, both within and outside the classroom. Colleges desiring to increase student engagement must realign their mission with an acute focus on student learning. This student-learning focus disrupts and almost contradicts most community college cultures' traditional teaching and student access mission (AACC, 2012; AACC, 2013). For example, the traditional “cafeteria model” of community colleges, offering a wide range of curricular and specific course choices to attract students, is now being replaced in most institutions with a simplified “guided pathways” approach (Bailey et al., 2015). According to Bailey et al., the “guided pathways” approach provides fewer curricular choices for students with more guidance to programs, increased student services, and generous academic support.

TRANSFORMING A COMMUNITY COLLEGE'S CULTURE

Transforming a community college's culture challenges institutions steeped in traditions of administrative hierarchies and faculty-centered teaching practices. Community colleges have long focused on student access, for example, rather than assessing student learning outcomes for accountability. Student persistence, retention, certificate and degree completions, and other outcomes demonstrating student success are needed for community colleges to prove themselves reputable partners in higher education (AACC, 2012; Bailey et al., 2015). Faculty need to focus more on assessing student learning outcomes and student success and completion in conjunction with their teaching preferences and practices. As illustrated in Figure 1, AACC provided an overview of institutional responses needed for community colleges to strengthen their focus on student learning (2012, p. 14). A faculty-centered practice appears in scheduling classes to fit the faculty's desired teaching times instead of offering times more suited to student needs. Another faculty-centered practice allows faculty to teach a favorite class every semester, even if the institution's programs may not require the class. These faculty-centered practices become the norm or the "way we do things" at the college, with little evidence that the practice improves student learning. Faculty-centered practices, along with other beliefs, values, social patterns, ways of work, and traditions, make up a community college's organizational culture and have, over time, proved difficult to change (Kotter & Heskett, 2011; Cameron & Quinn, 2011). As Bailey et al. (2015) explain, shifting away from preferential treatment of faculty and their needs to focus on student learning disrupts the current culture of community colleges. Administrators, faculty, and staff need to reflect, rethink, and sharpen their focus on student learning, not on "how it has always been done." This transforming of a college's culture to improve student learning was proposed by Kempner in 1990 and outlined by AACC in the Institutional Responses in Figure 1.

Figure 1. AACC Framework of Institutional Responses to Move Community Colleges Ahead



An organization's culture either inhibits or supports the effectiveness of the organization. Nikpour's 2017 study of Azad University employees found that organizational culture and employee commitment significantly impact organizational performance. Suppose Nikpour's findings apply to community colleges; this may indicate that community college employees committed to the mission of student learning will more likely share their passion and commitment to students through their work.

A typical instrument used to assess an institution's culture often called a climate survey, evaluates the present atmosphere or climate of the institution at the time of survey administration. According to Peterson & Spencer (1990), an organization's *climate* is temporary, reflecting the current pattern and atmosphere of work, and it changes more readily than an organization's *culture*, which is deeply rooted in the organization's values, history, social patterns, ways of work, and traditions. Climate is analogous to an organization's attitude or

mood at a particular time, based on current circumstances. In contrast, culture is comparable to an organization's personality, established over time, ingrained, deep-seated, and more complex and challenging to change.

Employees who feel valued in their college roles understand and live the mission of their institutions, working collaboratively with their colleagues. These valued employees are more likely to grow a dynamic, positive organizational culture undertaking challenges necessary to increase student engagement, ultimately transforming a college's culture (Bailey et al., 2015; McClenney & Arnsparger, 2012).

UNDERSTANDING ORGANIZATIONAL CULTURE

Organizational culture is abstract yet powerful and includes what a group has learned over time (Schein, 2017). According to Connors and Smith, "Organizational culture is the way people think and act" (2011, p. 7). Schein explains that culture can be considered the foundation of our social order and the rules we follow (2017). Organizational culture combines past and current institutional leaders and the rules and policies they impose, explains Schein. Practices and policies transferred, consciously and indirectly, from past to present leaders form a college's culture, informally defined as "the way we do things around here" (McClenney & Arnsparger, 2012, p. 135). The culture personifies how work gets accomplished at the college. Bolman and Deal explain culture as both a product and a process (2013). As a product, it embodies wisdom accumulated from experience; as a process, it is renewed and re-created as newcomers learn the old ways and eventually become teachers *(of the culture)* themselves" (2013, p. 263). A culture can be passed from one employee to another, transferring culture's positive and negative aspects. This culture transfer from one employee to another makes changing a community college's culture challenging. Schein summarizes cultures as "learned patterns of beliefs, values,

assumptions, and behavioral norms that manifest themselves at different levels of observability" (2017, p. 2).

Faculty lead students in the classroom by their words, actions, and expressed values; faculty are vital in shaping a community college's culture, according to McPhail (2004) and Stout (2018). Additionally, faculty pass on the organizational culture to new faculty coming into the college, perpetuating both positive and negative aspects of the college's culture. For example, the "administration versus faculty divide" may persist if it passes from veteran faculty to new faculty.

Fullan (2001) states that changing the culture of teaching and learning may be the most challenging work in improving student success. The beliefs, values, social patterns, and traditions created by institutions over time and from one generation of faculty to the next make transformative changes challenging. For example, the traditional pedagogical approach of lectures in higher education culture requires an infusion of innovative approaches to engage the adult student population in community colleges (Murray, 2002). Confident faculty leaders and academic administrators, well-versed in organizational culture, are more likely to challenge the traditional teaching culture of the lecture by encouraging new teaching strategies that support engaging students in their learning (Bolman & Deal, 2013; Fullan, 2001; McClenney & Arnsparger, 2012; Tierney, 1988). How evident is this in our community colleges today? Addressing student learning in and outside the classroom disrupts traditional teaching, which calls for courageous conversations among faculty, staff, academic administrators, and students.

Historically, higher education has shown a typical pattern of "fixing" student support areas before attempting to disrupt faculty and teaching practices (Bailey et al., 2015). Recently, Achieving the Dream (ATD) leaders added "Teaching and Learning" as a separate entity in the

ATD Institutional Capacity Framework (2022). In 2015, under the new leadership of President and Chief Executive Officer (CEO) Karen Stout, a revised ATD Institutional Framework was implemented, which included individual, different capacities for "Teaching and Learning" and "Data and Technology" (2022). Adding these two distinct capacities to the ATD Institutional Framework signals the emphasis needed in "Teaching and Learning" and "Data and Technology" to accomplish further advances in student success (D. Troyer, personal communication, January 31, 2018; Achieving the Dream, 2022). The revised ATD Framework depicted in Figure 2 shows the added "Teaching and Learning" and "Data and Technology" institutional capacities. ATD recognized these two vital areas in addressing transformational changes in a college's culture to improve student engagement to increase student learning.

Figure 2. Achieving the Dream's Institutional Capacity Framework

- **Leadership & Vision:** keen commitment to student success and clarity of the vision for desired change
- **Data & Technology:** collect, access, analyze and use data to inform decisions & use technology to support student success
- **Equity:** equitably serve low-income students, students of color, & other at-risk student populations
- **Teaching & Learning:** engage full-time & adjunct faculty in examinations of pedagogy & as change agents for student success
- **Engagement & Communication:** form strategic partnerships for student success & improvement of student outcomes
- **Strategy & Planning:** collegewide alignment of student success & the roadmap to achieve
- **Policies & Practices** – revise policies and practices that impact student success

Retrieved from: http://achievingthedream.org/our-approach

CULTURE AND CLIMATE

While a community college's culture depicts the college's overall long-term personality, the climate describes the college's current short-term mood or atmosphere (Peterson & Spencer, 1990; Cameron & Quinn, 2011). As described earlier, social patterns, ways of work (written and

unspoken rules), values, beliefs, symbols, and long-held traditions constitute a college's organizational culture (Bolman & Deal, 2013; Cameron & Quinn, 2011). In contrast, an organization's more temporary climate or "mood" changes based on circumstances or events. For example, the announcement of a sizable grant award may brighten the mood for several weeks, or the immediate departure of a well-respected leader may cast a climate of shock and abandonment for several months. In both climate examples, the college's overall culture may not change. Changing a college's culture most often takes constant, long-term, and intentionally-focused intervention to be transformative and lasting, involving all leaders in the organization (Connors & Smith, 2011). Fullan refers to this intentional transformation as a "reculturing" or "changing the way we do things around here" (2001, p. 44).

In order to capture "snapshot" images, employee climate surveys measure the current mood (climate) and engagement of employees at the time of the survey administration, which captures a sense of the overall culture of an organization. To gather these climate indicators, community colleges may administer self-authored surveys or surveys developed by national organizations: the Personal Assessment of the College Environment (PACE), the Organizational Culture Assessment Instrument (OCAI), or the Great Colleges-Higher Education Insight Survey, developed by the Chronicle of Higher Education through ModernThink (Cameron & Quinn, 2011; Chronicle of Higher Education, 2017; ModernThink, 2020).

In order to make sustainable, transformative changes toward increasing student engagement, colleges must modify their deep-rooted cultures, not just their surface, transitory climates (American Association of Community Colleges, 2012, p. 14; Cameron & Quinn, 2011, p.13). Conducting a climate survey every few years and observing the trends can help college leaders intentionally guide the transformation of their college's culture.

STUDENT ENGAGEMENT AND STUDENT LEARNING

Kuh (2009) describes student engagement as the amount of time and active effort students apply to their academic learning and educational activities, which benefit their development as learners and future working professionals. Engagement also refers to intentional institutional efforts of faculty and staff to create and promote active learning experiences, both inside and outside the classroom (Chickering & Gamson, 1987; Kuh, 2009; McClenney & Arnsparger, 2012). For this study, student engagement is defined broadly as behaviors and strategies that promote student persistence and learning, both within and outside the classroom. Student engagement is measured by the five CCSSE benchmarks of active and collaborative learning, student effort, academic challenge, student-faculty interaction, and support for learners (Center for Community College Student Engagement, 2015; McClenney & Arnsparger, 2012). In student engagement research, outcomes show that as student engagement increases, student learning, student success, and student completions also increase (Center for Community College Student Engagement, 2010; McClenney & Marti, 2006; Price & Tovar, 2014).

STUDENT SUCCESS

Student success is a challenge to define and can be controversial to measure. Student success at a community college can be defined as completing a course with a minimum of a "C"; completing a degree or certificate program with a grade point average (GPA) of 2.0 or above; transferring 30 to 60 credit hours with a minimum of a "C" to a university, or completing a sequence of courses and securing a full-time job in the area of study. This study addresses student engagement as measured by the CCSSE, which relates to student success. However, the study does not measure student success since colleges define and measure success differently. Instead, this study uses the five CCSSE benchmarks to measure student engagement, promoting

student learning (McClenney, Marti, & Adkins, 2012). Positive improvements in CCSSE benchmark scores from the first administration of the survey to a subsequent administration of four or more years imply improvements in student engagement.

FRAMEWORK FOR THE STUDY

Transforming a community college from one primarily concerned with teaching and student access to a community college focused on student engagement and learning can be challenging (Bailey et al., 2015). The American Association of Community Colleges (AACC) developed a framework of eleven institutional attributes of culture and the actions needed to improve student engagement and, ultimately, student success (AACC, 2012, pg. 14). The AACC framework in Figure 1 prompted this study. This study investigates how the 15 Great Colleges-HEIS employee dimensions of culture and the five (CCSSE) student engagement benchmarks are related. These employee/student engagement relationships could inform and guide community college leaders working towards college cultural transformations. The AACC Framework illustrated in Figure 1 depicts the areas of cultural transformation community colleges must make to sharpen their focus on student learning. This study attempted to narrow the study's focus by concentrating on areas related to faculty and their roles in student learning.

The Achieving the Dream's Institutional Capacity Framework illustrated in Figure 2 depicts the capacities leaders should address to effect transformational changes in a college's culture to improve student engagement and learning. This study focused specifically on one aspect of the student-focused culture of the community college: teaching and student learning.

Overview of the Study's Structure

This study encompasses two distinct research phases. Phase 1 of the study identified relationships among the 15 Great Colleges-HEIS employee dimensions and the five CCSSE benchmarks, which support transformation towards an advanced culture focused on student learning. Relationships among the 15 employee dimensions of culture and the five student engagement benchmarks were identified using Pearson *r* correlation and Excel data analytics. Two sets of each survey were analyzed (foundational survey and subsequent survey) with a minimum span of four years between surveys providing time for cultural change.

During Phase 2, the researcher interviewed key personnel from three community colleges identified during Phase 1 that made the greatest positive improvements in survey scores from the first administration to the subsequent administration four or more years later. Phase 2 interview questions focused on college events, initiatives, and changes that most likely affected improvements in the colleges' survey results. Interview discussions revealed events, instructional strategies, business practices, leadership changes, and college-wide initiatives that helped to improve student engagement and employee culture survey results.

Research Approach

This study used a mixed-methods, explanatory sequential study completed in two phases: Phase 1 is the quantitative study followed by Phase 2 qualitative interviews, which help explain the quantitative results of Pearson *r* correlations found in Phase 1 (Creswell, 2015, p. 38). The quantitative research of Phase 1 reviews secondary data gathered from the Great Colleges-HEIS and CCSSE surveys, looking for improvements in scores over four or more years. This study phase attempts to share pertinent descriptive survey data. It identifies significant relationships among the 15 Great Colleges-HEIS employee dimensions and the five CCSSE benchmarks using

Pearson *r* correlation and Excel's data analytics. The qualitative research of Phase 2 consisted of semi-formal interviews with three college leaders from each of the three community colleges demonstrating the most substantive improvements in survey results derived from Phase 1 secondary data analysis.

Significance of the Study

Discovering relationships among the 15 Great Colleges-HEIS employee dimensions and the five CCSSE benchmarks in Phase 1 may encourage college leaders to review their most recent survey results together (both CCSSE and Great Colleges-HEIS) for planning more targeted strategic direction in transforming their college's culture for increased student engagement. The paired relationships found in Phase 1 may help college leaders prioritize the areas of culture and student engagement to address. The findings from the Phase 2 interviews of college leaders from community colleges showing substantial improvements in their survey scores should prove helpful to college leaders looking to transform their culture to improve student engagement.

Discovering relationships between Great Colleges-HEIS employee dimensions and the CCSSE benchmarks may bring new knowledge to community college leaders seeking to further their understanding of organizational cultural dynamics and student engagement (AACC, 2012; McClenney & Arnsparger, 2012). Previous research found no studies that sought relationships among the 15 Great Colleges-HEIS employee dimensions and the five CCSSE benchmarks. Identifying specific relationships among the Great Colleges-HEIS employee dimensions and the CCSSE benchmarks may assist community college leaders in improving student learning by targeting the related pairs of culture and student engagement. Understanding a community college's culture and removing organizational barriers should further the success and

sustainability of student success initiatives (Bailey et al., 2015; Cameron, 1997; McClenney & Arnsparger, 2012).

Valuing and supporting employees, an employee culture attribute measured in the Great Colleges-HEIS within the dimensions of Job Satisfaction and Support and Respect and Appreciation may impact student engagement in several benchmarks, as measured by the CCSSE. For example, faculty who feel valued and supported, measured by the Great Colleges-HEIS, may create more engaging learning opportunities, in class and outside of class, as measured by the CCSSE benchmarks (Center for Community College Survey of Student Engagement, 2015; Chronicle of Higher Education, 2017). This example of valuing faculty, which promotes student engagement, demonstrates a relationship between community college culture with student engagement that may be found in Phase 1 of the study, using Pearson *r* correlation (Trochim et al., 2016). Identifying these directional relationships among the 15 Great Colleges-HEIS employee composite dimensions and the five CCSSE composite benchmarks will guide community college leaders seeking to intentionally and strategically transform organizational cultures to increase student engagement.

RESEARCH QUESTIONS

The primary research questions for this study are:

1. How are the employee dimensions of community college culture measured by the Great Colleges-HEIS related to the student engagement benchmarks measured by the Community College Survey of Student Engagement (CCSSE)?
2. What types of college events, initiatives, or changes helped improve college climate and student engagement as measured by the Great Colleges-HEIS and the CCSSE, respectively?

Community college leaders may identify opportunities in employee dimensions closely related to student engagement to improve culture and student engagement at the college. The

first research question was addressed in this study's quantitative phase, Phase 1. The study uses Pearson *r* correlation using Excel data analytics to identify relationships among the 15 Great Colleges-HEIS employee dimensions and the five CCSSE benchmarks.

This study hypothesizes that as Great Colleges-HEIS employee dimension results improve, related CCSSE benchmark scores may also improve. The reverse could also be true since relationships were identified, not cause and effect. Thus, as CCSSE benchmark scores improve, the related Great Colleges-HEIS employee dimension scores may also improve. Identifying specific Great Colleges-HEIS employee dimensions related to specific CCSSE student engagement benchmarks will assist community colleges in their cultural transformation to increase student engagement for improved student learning.

The second research question was examined during the study's qualitative phase, Phase 2. Interviews with three leaders from each of the three community colleges demonstrating the greatest improvements in survey scores shared their perspectives on answers to the second research question. The interview findings should reveal college events, initiatives, and changes that helped to impact community college culture and student engagement.

CHAPTER SUMMARY

This first chapter introduced the necessity for understanding community college culture, how it relates to student engagement and student learning, the need for college cultural transformation, and the impact of faculty on student engagement. As community colleges transform their focus from student access and teaching to student engagement and learning, a culture change may need to occur. Climate and student engagement survey results could guide college leaders in transforming community colleges to improve and strengthen their focus on student learning. This mixed methods research hopes to discover relationships among the 15

employee dimensions of the Great Colleges-HEIS climate survey and the five CCSSE student engagement benchmarks in Phase 1. In Phase 2, community college leader interviews from colleges showing substantial improvements in survey scores will gather perceptions of possible college initiatives, events, and practices that may have impacted their improved survey scores. The study's findings should assist community college leaders in their cultural transformations towards a sharper student learning focus.

Chapter Two reviews the literature concerning community college culture, student engagement, the role and functions of faculty, and college transformation to increase student engagement to improve student learning. Chapter Three describes the research design, methodology, and data collection processes, including the study's limitations, delimitations, validity, and reliability. Chapter Four reports the findings from both phases of the research and analyzes the results. Chapter Five concludes the study by integrating the findings relative to the AACC Institutional Responses, found in Figure 1, to assist college leaders along their cultural transformation journeys. Recommendations for further research conclude Chapter Five.

CHAPTER TWO: REVIEW OF THE LITERATURE

INTRODUCTION

This literature review investigates the body of knowledge relevant to the two research questions of this study. The review consists of a review of the literature surrounding community college culture, student engagement, the need for cultural transformation to increase student learning, and the role of faculty. The review begins with a brief history of the cultural aspects of community colleges to assist readers in understanding the need for cultural transformation. Research of relationships among organizational culture, student engagement, and faculty; transformation in community college culture; and teaching and student learning are presented, noting gaps found in the research.

COMMUNITY COLLEGE CULTURE

Higher education is steeped in culture and tradition, stemming from monastic origins in western Europe nearly one thousand years ago, still evident today through architecture, traditions, and rituals, such as the ceremonial dress evident at graduations. The first universities in Bologna, Paris, and Oxford formed their purposes and cultures from the cathedral schools and monasteries of the late Middle Ages, which eventually birthed our nation's community colleges, known for open access, according to the American Association of Community Colleges (2012), Chickering and Reisser (1993), and Shugart (2013). This rich history of higher education challenges our community colleges to transform cultures so steeped in tradition. Valencia College President Sandy Shugart warned community college leaders not to ignore the influence

of history on community colleges and their cultures, which almost guarantees failure in any transformational efforts (2013, p. 9). For this reason, a summary of community college history continues to explain the cultural aspects.

Polytechnic Era

The American Association of Community Colleges highlights the unique connection among the economy, the workforce, and education in the United States as they explain the need for community college transformation from a focus on student access to a focus on student learning (2012). President Lincoln established land-grant public universities by signing the Morrill Act in 1862, creating a land-grant university for each state to teach agriculture and teacher education, according to Chickering and Reisser (1993). Shugart highlighted how faculty began to specialize within disciplines across a broader curriculum, adding electives patterned after Harvard, giving students more freedom in their selection of courses, and the faculty's role defined as the scholarship of teaching and conducting research (2013). Chickering and Reisser, along with Shugart, described the hallmarks of the Polytechnic era: curricula specialization, structuring of distinct academic departments, development of career and technical majors, lessening of theological and humanistic studies, and lecture as the preferred pedagogy. According to Chickering, Reisser, and Shugart, the garnering of industry support for university research and the implementation of student development and campus life departments also began in the polytechnic era.

Industrial Era

The post-World War II era brought 15 million veterans returning home to an economy transitioning from wartime to peacetime production, according to AACC (2012) and Shugart (2013). The GI Bill or Servicemen's Readjustment Act of 1944 provided veterans' healthcare

benefits, financial support, tuition, and living expenses for college, which overwhelmed the capacities of many colleges and universities, prompting the 1947 Truman Commission, according to Bailey et al., 2015, Cohen et al., 2014, and Shugart, 2013. The Truman Commission recommended a new higher education system using open access for students, providing local institutions for commuters, and offering more economical costs, the prelude to establishing community colleges, according to Bailey et al., Cohen et al., and Shugart. According to Cohen et al., this open-door policy created easy access for returning World War II veterans and workers training to grow the nation's economy. The AACC (2012) highlighted that President Eisenhower's 1958 National Defense Education Act supported higher education by emphasizing science and technology to aid the nation's race to outer space. According to the AACC, the Higher Education Facilities Act of 1963 sought to establish 500 new community colleges to educate the Baby Boomer generation. Shugart inferred that this "massification of education" ushered in the industrial model of higher education by enrolling large populations of students at low cost. President Johnson expanded access to higher education by providing additional student financial assistance through the Higher Education Act of 1965 (AACC). In 1972, President Nixon signed the amendments to the Higher Education Act, which established student financial support through Pell grants and the first Title IX legislation, preventing discrimination based on gender, according to AACC.

This industrial model of culture (or massification of education) stimulated the formation of faculty unions, mass student enrollment processes, monitoring of teaching loads using a part-time to full-time faculty ratio, and the business model of funding based on full-time equivalent (FTE) students, according to Shugart (2013), and Cohen et al. (2014). Distinct academic departments, specialized curricula, new career and technical education programs, an entire

smorgasbord of course selections, and large lecture formats continued in the industrial era. Using part-time faculty and staff to reduce costs while emphasizing student enrollment numbers and class size were also hallmarks of the industrial era, as Cohen et al. and Shugart reported.

Retail Era

While higher education institutions were responding to the demands of overwhelming student enrollments, high school student graduate numbers began to decline, the veteran population leveled, and competition for college students became the new focus, reported Bailey et al. (2015) and Shugart (2013). Competition for students required higher education to enter the realm of marketing, student recruitment plans, enrollment management, and establishing a college's brand, bringing in the retail era, according to Shugart. The Student Right-to-Know and Campus Security Act of 1990 prompted a shift from student access to college performance, with reporting of student outcomes in the form of graduation rates and safety measures, reported by Bailey et al. In order for students to receive financial aid, colleges and universities were required to publish safety measures, student outcome measures, and other critical performance results, described by Bailey et al. In 1995, Dolence and Norris published a visionary report, *Transforming Higher Education*, as the nation moved into the information age of technology offering online learning and systemized programs. In 2004, Newman and colleagues identified four significant forces driving the change in higher education (all of which have occurred): information technology, new education providers, and globalization of higher education due to technology, resulting in all types of new students. Because of the technology, information systems, and competition, publishing outcome measures and results on college websites became the norm in the early 2000s, according to Lipka in 2019.

President Obama's completion agenda in 2009 called for 20 million additional college graduates by 2020, and the Lumina Foundation announced a goal for 60% of the nation's population to obtain a postsecondary certificate or degree by 2025, according to Bailey et al. (2015). This student success movement proved to be humbling for many; public scrutiny and state and federal governments demanded that institutions of higher education, especially community colleges, focus on improving student outcomes, according to Lipka, 2019. President Obama and the Lumina Foundation recognized the critical role community colleges play in producing graduates, therefore offering additional financial support, according to Bailey et al. Additionally, Obama's first-ever White House Summit for Community Colleges brought a heightened national awareness of community college's role in developing America's workforce (White House Summit on Community Colleges, 2011). Bailey et al. reported that many states set goals for increasing college completion. However, as federal funding dwindled, large industries and private funders supported community colleges in improving student outcomes; the Ford, Bill and Melinda Gates, Lumina, and Kresge Foundations were significant players, according to Bailey et al.

In 2004, the Lumina Foundation launched Achieving the Dream (ATD), an independent organization focused on community college reform for increasing student success, according to Bailey et al. (2015). Thus, as AACC (2012, 2014) and Bailey et al. stated, this retail era calls for community college redesign, shifting from focusing on student access to emphasizing success for all community college students. Increasing student outcomes of persistence, student retention, credential completions, graduations, and transfers required community colleges to transform by redefining the culture and beliefs of the organizations in order to focus more on student learning and student success, as researched and demonstrated by Nutt and Hardman (2019). Developing

systems for ongoing, accurate data collection, analysis, and practical improvements in community college processes is crucial to improving student success and increasing student completion rates, as reported by The Education Trust (2016) and Lipka (2019). Owning the data is a critical step in the process of community college transformation, according to The Education Trust and Lipka. Transforming business processes of student enrollment, financial aid, the student advising process, and simplifying curricular pathways and selections are challenges community colleges are tackling, according to the AACC (2014) and Bailey et al. (2015). However, most community colleges have not challenged teaching practices in the classroom, according to the research of Bailey et al. Innovation in student learning must be a focus if leaders desire lasting cultural transformation, acclaimed Stout, CEO of ATD in 2018 and Nutt and Hardman of Lone Star–Tomball in 2019.

DEFINING ORGANIZATIONAL CULTURE FOR UNDERSTANDING COMMUNITY COLLEGE TRANSFORMATION

Chapter 1 described community college culture as a way of thinking, behaving, and working in a community college; culture affects the way faculty, staff, and administration do their jobs, according to Schein (2017). McClenney and Arnsparger (2012) found that understanding an organization's culture helps leaders sharpen their focus on student learning by increasing student engagement, both inside and outside the classroom, which takes faculty, staff, and administration working collaboratively. As McClenney readily shared, "students don't do optional" to guide faculty and staff to create unavoidable interactive assignments and require students to seek out college academic resources (Reed, 2014). The literature relevant to organizational business cultures utilizes several frameworks; frameworks most applicable to community colleges follow since research specific to community college culture is minimal.

Transforming a Community College's Culture

Deal and Kennedy reprinted their 1982 classic, *Corporate Cultures: The Rites and Rituals of Corporate Life,* because their findings stood the test of time in business literature and relevance to community colleges outlining when an organization's culture should transform (1982/2000). According to Deal and Kennedy's guidelines, community college transformation should occur when: the environment and industry are changing, there is a significant growth spurt in enrollment, education becomes highly competitive, and the college is mediocre or failing in student outcomes. Kempner studied the effects of faculty culture on student learning in a suburban community college in 1990, finding that cultures varied at colleges by geography and the local community, but even by academic departments within an institution. Kempner found two common themes: controversy with unions mediating disputes between faculty and administration, and excellence in the classroom was controversial to define, causing barriers to good teaching. Additional hindrances Kempner found were a lack of faculty accountability, a perceived lack of administrative awareness and support, poor leadership, and an organization's culture. In 2009, Myran published *Reinventing the Open Door: Transformational Strategies for Community Colleges* to motivate and prepare college leaders to make changes to address the needs of an increasingly diverse student body with many lacking college-entry skills. Myran outlined evidence of transformation and described how college leaders should question and realign curricular programs, student services, and business processes to support the diverse needs of students. In 2011, Connors and Smith published *Change the Culture, Change the Game*, explaining their research and methodologies using a results pyramid for accelerating culture change in organizations to energize employees and generate greater accountability for results. In 2013, Hersh and Keeling addressed the inadequacy of higher education student learning, noting

that most institutions' cultures do not prioritize student learning or student outcomes assessment. Hersh and Keeling pleaded for institutional culture change that puts learning first.

In 2014, Kadlec and Rowlett published their research on increasing employee engagement in change processes gleaned from hundreds of community college focus groups of faculty, staff, students, and administrators. Kadlec and Rowlett learned that collegewide transformation is only possible when the human side of change is addressed through the inclusive engagement of employees in the change processes. Kadlec and Rowlett reinforced that the human side of change needs clear, consistent, accurate, and ongoing communication allowing input and feedback from faculty, staff, and administration. In 2019, Nutt and Hardman published their research at Lone Star College-Tomball, transforming their student access agenda to a student completion agenda and ultimately to a Beliefs Agenda, using the Connors and Smith (2011) methodology. Nutt and Hardman found that students need to believe they belong at a community college and can learn the skills and knowledge to persevere in their learning, termed the Beliefs Agenda. According to Nutt and Hardman, faculty, staff, and administrators must also transform their thinking and beliefs regarding student learning to accomplish the Beliefs Agenda fully. Community college transformation addresses student success by living the community college mission, values, and vision, as well as challenging the ways faculty, staff, and administration think, act, and complete the work of the college, according to Nutt and Hardman. From these studies, transforming a college's culture takes persistence, diligence, time, shared and sustained faculty, staff, and administration collaboration, and practical, communicative, and caring change leaders.

Trust Needed in Transformation

Kotter's research found that the power of relational trust and working toward a common goal, such as cultural transformation, can focus a team on conquering unbelievable challenges (1996, p. 65). Covey and Merrill, in 2006, built on Kotter's research formulating a business plan promoting trust has a bottom-line impact on results: when trust goes up, speed increases and costs go down. Covey and Merrill found that high trust within an organization creates an effective working environment with a competitive edge since trust inspires freedom allowing creativity and innovation to thrive. Kouzes and Posner's leadership research described how exemplary leaders foster collaboration by creating a climate of trust and facilitating relationship-building (2012). In *Trust Matters: Leadership for Successful Schools*, Tschannen-Moran recognizes the critical importance of trustworthy leadership for successful schools; building and maintaining trust among students, teachers, schools, families, and communities is vital (2014). Bailey et al. stress the importance of building and encouraging relational trust among administration, faculty, and staff through evidence of professional competence, personal integrity, authenticity, and collegial respect (2015). Fostering the growth of trust appears crucial in community college cultural transformation.

Considerations of Organizational Cultural Dynamics

Schein (2017) recommends that leaders consider the maturity level of an organization as they prepare for change initiatives: the early formative stage, the diversified midlife stage, and the maturity and decline stage. Since many community colleges have celebrated fifty years of teaching and learning, this places many colleges in the maturity and decline stage, primed for a redesign or transformation according to Schein's institutional maturity definitions. Schein's research found two types of leaders evolved from most problem-solving or change initiative

groups, necessary for effective long-range performance: a task leader (project manager) and a social-emotional leader (concern for people).

ORGANIZATIONAL CULTURE MODELS RELEVANT TO COMMUNITY COLLEGES

Community colleges are complex organizations of various departments, distinct employee groups, and numerous work units, each working on varying goals and agendas. The different work units and departments compete for power and resources, which Schein refers to as subcultures within the multifaceted organizational culture (2017). The literature on frameworks and culture models, mainly from business, and most relevant to community colleges follow.

Organizational Culture Findings

Deal and Kennedy described elements that make a strong organizational culture: the business environment; values and beliefs of the organization; heroes that personify the organization and its values; rites, rituals, and work behaviors; the cultural network; and an informal means of communication (1982/2000). According to Deal and Kennedy, a strong culture with its informal set of rules describes how employees behave and work but also may serve as a solid barrier to change (2000, p. 159). Deal and Kennedy found that change threatens a culture and the organization's rituals, traditions, heroes, and ways of conducting business, leaving employees confused, insecure, bitter, or possibly angry. Changing a strong culture is the most challenging aspect of any change initiative, according to Deal and Kennedy. The situations when leaders should consider reshaping or transforming culture are relevant for community colleges, as stated previously. Their research did not specifically address students, student engagement, or higher education, but it is relevant to community colleges' business culture and change challenges.

Six Characteristics of Culture

In 1988, Tierney described critical characteristics of an organization's culture, similar to the organizational frameworks of Bolman and Deal, but using six aspects instead of four frames: environment, mission, socialization, information, strategy, and leadership (p. 15). Tierney provides two to four questions for each of the six aspects that leaders should reflect on. Tierney's business-like approach provides practical questions to aid in understanding the business aspects of a community college. However, it does not explicitly address community colleges, students, student engagement, or student learning; further additions would be necessary to include teaching and student learning.

Study of Two-Year Colleges

Smart and Hamm (1992) surveyed 1,332 faculty and administrators at 30 two-year colleges to investigate the four dominant organizational cultures described by Cameron and Quinn (2011), initially identified in 1983 by Quinn and Rohrbaugh. Smart and Hamm used the Institutional Performance Survey for higher education institutions and the Competing Values Framework for organizational analysis. From 662 valid responses, Smart and Hamm found: ten "Clan" cultures emphasizing shared values, goals, and the development of employees; seven "Adhocracy" cultures emphasizing growth, adaptability, and an entrepreneurial spirit; ten "Hierarchy" cultures emphasizing a bureaucratic structure, defined processes, and control; and three "Market" cultures emphasizing competitiveness, environmental interaction, outreach, and customer satisfaction. Smart and Hamm found vast differences in the effectiveness of cultures, with colleges displaying the "Adhocracy" culture to be the most effective, the "Clan" and "Market" cultures displaying mid-range effectiveness, and "Hierarchy" cultures showing the least favorable culture for effectiveness. Smart and Hamm's research is relevant in applying the

four organizational culture types to community colleges and in identifying the most effective cultures. Their work considered students' effectiveness as educational satisfaction in academic, career, and personal development.

Case Study Using OCAI and Competing Values Framework

Adkinson's 2005 case study of a small, private midwestern university using the Organizational Culture Assessment Instrument (OCAI) and the Competing Values Framework (CVF) concluded that the OCAI culture results helped leaders support the management of the university. Adkinson also realized that the OCAI results could help formulate plans for institutional change. Adkinson's findings support using an employee culture assessment to guide leaders of higher education institutions in implementing institutional change initiatives.

The Denison Model

Denison developed a model from over twenty years of business research (2009). He found linkages between organizational culture and business performance measures of bottom-line profits, return on investment (ROI), sales growth, quality of products and services, and employee satisfaction. The Denison model covers four major traits of organizations (mission, adaptability, involvement, and consistency), with each trait focused on a critical question and answered in three index areas. The Denison assessment invites employees to answer 60 questions within the index areas that impact each of the four traits: mission, adaptability, involvement, and consistency. Denison described dynamic tensions found during his research. These tensions develop in responding to external business environmental issues while continuing the internal business functions and maintaining consistency in processes and policies yet remaining flexible and adaptive to innovation. Tensions of business also occur while balancing top-down and bottom-up alignment of mission and employee involvement, all while responding to customers

with quality products and services, according to Denison. Denison's research did not address higher education; however, the model assesses and provides insight into natural organizational tensions that seem relevant to community colleges. Denison's research provides proof of relationships among organizational culture traits and business performance metrics but does not address higher education specifically or student engagement.

Four Frameworks

Bolman and Deal (2013) describe cultural variables in four frameworks or perspectives to help leaders and managers improve their understanding of an organization and its culture. Bolman and Deal's four frameworks of perspective guard leaders and managers from self-deception and cluelessness: becoming so ingrained in one's view that they lose sight of the actual circumstances and challenges. Bolman and Deal's four structural, human resource, political, and symbolic frames refer to any organization viewed through these four perspectives, which are relevant to community colleges. How culture relates to student engagement or student learning was not addressed by Bolman and Deal, yet the four frames appear applicable to students and their learning.

Competing Values Framework

From extensive research on culture and the Competing Values Framework, Cameron found that organizational change initiatives fail almost 75% of the time because institutions neglect or ignore their organizational cultures (1997, p. 39-64). This finding should remind community college leaders to address their college's culture before attempting any student learning initiatives or embedding the organization's culture change within the initiative to increase the success of the improvement. Building on this research, in 2011, Cameron and Quinn offered a proven methodology for managing organizational culture change using the Competing

Values Framework (CVF) and the Organizational Culture Assessment Instrument (OCAI). The OCAI identifies four dominant culture types: Clan (or Collaborate), Hierarchy (or Control), Adhocracy (or Create), and Market (or Compete). These four culture types are similar to those described by Deal and Kennedy (1982/2000). Most organizations demonstrate a dominant culture within one of these four culture types, with variations dependent on the culture attributes surveyed, according to Cameron and Quinn. Likewise, community colleges may display aspects of the four types in varying degrees but will most likely display a dominance towards one culture. According to Cameron and Quinn, the strength and consistency of the dominant culture types should be considered in planning change initiatives. The OCAI does not address higher education institutions or student engagement; it addresses organizational culture for all institutions with the four CVF culture types applicable to community colleges.

THE CALL FOR COMMUNITY COLLEGE TRANSFORMATION IN TEACHING AND LEARNING

Community colleges play a pivotal role in the nation's educational system and workforce training. Nevertheless, the need for higher education transformation in teaching and learning looms large in the public's eye based on Arum and Roksa's published research, *Academically Adrift: Limited Learning on College Campuses* (2011) and Stout's challenge as the CEO of ATD (2018). Low student graduation rates, decreased retention, and declining enrollments continue to plague the nation's community colleges outlined by Bailey et al. (2015). The need for transformation in teaching and learning is not new; more than 30 years ago, higher education leaders exclaimed the need to change. A review of key calls for a transformation of teaching and learning in community colleges, specifically addressing the role of faculty, follows.

Seven Principles for Good Practice in Undergraduate Education

In 1987, Chickering and Gamson's *Seven Principles for Good Practice in Undergraduate Education* called for a transformation in undergraduate education, affecting both faculty and students. Chickering and Gamson's seven principles surfaced from 50 years of research, with the intent to guide faculty, students, and administrators to improve teaching and student learning. Chickering and Gamson's principles of good practice included encouraging contact between students and faculty, developing reciprocity and cooperation among students, using active learning techniques, giving prompt feedback, communicating high expectations, and respecting diverse talents and ways of learning. Chickering and Gamson determined that faculty and students are jointly responsible but need support from college administrators, governing bodies, and accrediting agencies. They outlined college cultural environments conducive to good practice in undergraduate education in 1987. However, findings from a Higher Ed Insights 2016 Spring Survey highlighted that insufficient state funding of public higher education was the most significant obstacle to improving student success (Alamuddin et al., 2016). The most significant institutional factors uncovered from the Higher Ed Insights 2016 Survey were practices of faculty incentives that inhibited student success and innovative teaching, administrative silos resulting in a lack of collaboration across the college, and faculty resistance to change. These 2016 Higher Ed Insights findings correspond to Chickering and Gamson's environmental and cultural needs, calling for: a shared sense of purpose for administrators and employees, adequate funding for good practices, teaching policies aligned with good teaching practices, high expectations and accountability for faculty, and adequate financial support for innovative programs, professional development, and resources. The need for change in teaching and learning was identified in 1987 by Chickering and Gamson and affirmed in 2016 with the Higher

Ed Insights Survey, signifying little progress in teaching and learning at community colleges. Wyner further verified these findings in 2014, Bailey et al. in 2015, and Stout in 2018.

Learning Paradigm

In 1995, Barr and Tagg introduced a new paradigm, a cultural transformation for undergraduate education: colleges should not only provide instruction but also produce student learning. Barr and Tagg emphasized that "changing paradigms is hard" … "it is a shift that changes everything" (pp. 15-16). Undergraduate institutions are no longer responsible for focusing on quality instruction, but instead for producing student learning and documenting the learning outcomes, according to Barr and Tagg. In this new Learning Paradigm, Barr and Tagg reposition faculty from center stage as knowledgeable lecturers to serving as designers of instruction and facilitators of student learning. According to Barr and Tagg, this change from the instructional paradigm to a learning paradigm is a gradual modification process, eventually affecting all areas of the institution. Barr and Tagg identified an institution-wide assessment information system, a data analytics system in today's terms, as the vital structure necessary for shifting the institution to a learning paradigm. The new careers of data science and data analytics are helping higher education to make this shift; however, it appears community colleges are still lagging in transforming the focus from teaching to student learning, as documented by Bailey et al., 2015; Rutschow, 2011; Stout, 2018; and Wyner, 2014.

Learning College

Terry O'Banion, former President and CEO of the League for Innovation in the Community College, originated the "Learning College" movement, which focused on the transformation from teaching to student learning, using Chickering and Gamson's seven principles (1987), Barr and Tagg's research (1995), and O'Banion's research (1997). O'Banion's

six key principles state that the Learning College: creates change in learners, engages learners as full partners in the learning process, creates and offers options for learning, assists learners to learn collaboratively, defines the roles of learning facilitators by the needs of the learners, and success happens only when improved and expanded learning is documented. Similar to Barr and Tagg's 1995 recommendation for an institution-wide assessment data system, O'Banion reiterated that information technology and assessment are crucial for transforming into a learning college since the improvement in student learning must be measured and documented. O'Banion highlighted the importance of faculty involvement and encouraged faculty to assume leadership roles in teaching and learning (p. 121). O'Banion reminded leaders "that transforming a culture and managing the people, processes, and technology associated with change is time-intensive and a long-range effort" (1997, p. 121).

The Community College Survey of Student Engagement (CCSSE)

The Community College Survey of Student Engagement (CCSSE), first administered to students in 2001, is an established tool used to aid community college leaders in assessing and establishing effective educational practices for identifying areas for improvement (CCSSE, 2019). McClenney and Marti (2006) completed validation research on student engagement, funded by the Lumina Foundation, using CCSSE data from 2002, 2003, and 2004. These CCSSE data were linked to external student outcome data sources from the Florida Department of Education, the ATD project, and student record databases from CCSSE-participating Hispanic-Service community colleges, according to McClenney and Marti. The Florida study confirmed positive relationships among student engagement, measured by CCSSE, and community college outcomes of GPA, degree completion, and attainment of academic milestones (completion of developmental coursework, first college credits, first term, first year, and certificate), as reported

by McClenney and Marti. The overall CCSSE validation study results confirmed linkages between student engagement and positive academic outcomes that specifically address community college students. The five CCSSE benchmarks include active and collaborative learning, student effort, academic challenge, student-faculty interaction, and support for learners (McClenney & Arnsparger, 2012; Center for Community College Student Engagement, 2015).

In McClenney and Marti's 2006 work, the CCSSE benchmark of Support for Learners consistently correlated with student persistence measures. The Florida study demonstrated that the CCSSE benchmarks of Academic Challenge, Active and Collaborative Learning, and Student-Faculty Interaction correlated strongest with student learning outcomes of GPA, persistence, and various completion measures. Active and Collaborative Learning was the most powerful predictor of student success for ATD colleges, using several student outcomes, according to McClenney and Marti. Academic Challenge and Support for Learners were the most consistent predictors of student learning in the Hispanic student study.

Students Speak Study

McClenney and Arnsparger shared student engagement findings in *Students Speak: Are We Listening? Starting Right in the Community College* after a decade of touring and listening to community college students (2012). McClenney and Arnsparger concluded that community colleges should demonstrate five dimensions of organizational culture to show students matter and belong: a Culture of Connection, a Culture of High Expectations, a Culture of Potential, a Culture of Collaboration, and a Culture of Evidence and Inquiry. Organizational culture is multifaceted and spreads collegewide like a virus; "positive or negative, culture pervades," stated McClenney and Arnsparger (2012, pp. 135-136). They warned that community college culture could change only with intentionality, persistence, and collective effort.

American Association of Community College's Call to Action

Reclaiming the American Dream, developed by AACC's 21st-Century Commission on the Future of Community Colleges, called for colleges to step up to the challenge of remaking themselves to reclaim the American Dream of educating the population, rebuilding the nation's economy, and becoming the world leader in higher education degrees attained (AACC, 2012). AACC's redesign is an expanded and updated institution-wide version of Barr and Tagg's Learning Paradigm from 1995. The redesign depicts 11 areas of cultural transformation community colleges must make to focus on student learning. AACC's Commission offered seven recommendations to ***redesign*** students' educational experiences, ***reinvent*** institutional roles, and ***reset*** the system to create incentives for student and institutional success, accompanied by brief explanations for community college redesign. AACC's 21st-Century Commission continued its work and, in 2014, distributed *Empowering Community Colleges to Build the Nation's Future: An Implementation Guide* to bring the seven recommendations into action plans. The AACC guide indicates community colleges should not be content in providing students access to instruction alone but should follow AACC's seven recommendations to transform for greater student learning. Each recommendation needs faculty leadership and involvement to succeed; faculty engagement in transforming their roles is crucial in Recommendations 1, 3, 4, 5, and 7 (AACC, 2014). AACC's Recommendation 1 calls for collegewide efforts to increase graduation rates by simplifying student career and transfer pathways, recommending faculty involvement in redesigning curriculum, advising, and academic support for students. AACC's Recommendations 3 and 4 call to close skills gaps, redefine faculty roles, create conditions for part-time faculty to contribute to student success, incorporate innovative uses of technology, and empower students as partners in achieving their learning goals. AACC's Recommendation 5 suggests creating consortia to optimize capacities of

institutional collaboration, as in faculty and staff professional development, and for using learning analytic tools. AACC's Recommendation 7 calls for rigor and accountability in the classroom and business practices, using the Voluntary Framework of Accountability (VFA) to improve the measurement of student learning and employment-related outcomes (2014).

Achieving the Dream: Transforming America's Community Colleges

Achieving the Dream (ATD) is an independent non-profit national organization launched in 2004 by the Lumina Foundation to guide community colleges working to close student achievement gaps and accelerate student success (Achieving the Dream, 2022). ATD organizes its work around seven capacities institutions must strengthen or transform to improve student success: leadership and vision, data and technology, equity, teaching and learning, engagement and communication, strategy and planning, and policies and practices. Rutschow and colleagues found from their preliminary research of the 26 Round 1 ATD community colleges after the first five years that most improvement strategies implemented involved tutoring, advising, student success courses, and developing learning communities (2011). Rutschow and colleagues identified four common features of ATD colleges making the most significant progress: collegewide involvement of college administrators, faculty, and staff; strong and responsive institutional research departments; regular program evaluations; and scaling up of successful strategies. The final report of Round 1 ATD colleges, authored by Mayer and colleagues in 2014, showed similar findings to the initial report with the following recommendations: broaden and improve the leadership model to focus on teaching and learning, strengthen data analysis, broaden engagement to include adjunct faculty, include all college personnel in professional development, enhance policies, and include a systemwide approach for evaluating new initiatives. ATD and the Round 1 ATD college leaders learned from this final report that

collegewide improvement of student learning takes more time and is much more challenging than initially anticipated (Mayer et al., 2014).

In 2018, Stout reinforced ATD's seven fundamental institutional capacities that colleges must strengthen to accelerate student success and emphasized greater urgency for teaching and learning reform. Stout shared that teaching and learning reform must be supported by ongoing collaborative professional development and incentives to enable faculty to teach and learn using new strategies. According to Stout, these pedagogical changes translate into changing community college policy to support, incent, and provide time for faculty to learn to teach in ways that increase student engagement. Building on Stout's call for an urgency of community colleges to move towards teaching and learning excellence, Eynon and Iuzzini of ATD (2020) compiled a research-based faculty toolkit for community college leaders and faculty to use.

According to a synthesis of 20 years of MDRC's randomized controlled research trials regarding community college student success interventions, Weiss and Bloom documented that the impacts of the 39 diverse interventions studied increased consistently with the comprehensiveness of the programs offered (measured by the number of components) and with initiatives promoting students to enroll full-time and in summer (2022). As reported by Weiss and Bloom, additional promising evidence of the impacts of interventions increases with advising and tutoring use by students and the availability of financial support for students.

Redesigning America's Community Colleges

Bailey and coauthors compiled extensive research and data gathered from the Community College Research Center (CCRC) describing the limitations of the nation's community colleges, which affirmed and strengthened ATD's work (2015). The authors provided challenges to the status quo in *Redesigning America's Community Colleges* to motivate

and challenge leaders to heal their community colleges by rethinking the siloed institutional structures, applying methods to simplify curricular offerings, and strategically guiding students in their educational journeys. Bailey and colleagues emphasized the importance of engaging faculty and staff to rethink student services, academic support, and student instruction in this comprehensive guide, which compiles, affirms, and supports recommendations from Chickering and Gamson (1987), Barr and Tagg (1995), O'Banion (1997), AACC's 21st-Century Commission (2012 & 2014), Wyner (2014), and Stout (2018).

Bailey and coauthors addressed the challenge of rethinking instruction by noting that faculty "have been largely uninvolved in and unaffected by reform efforts" thus far, except regarding developmental education reform (2015, p. 11). Most academic reforms have been focused on student support services and tutoring while strengthening existing community college models, according to Bailey et al. Leaders have not yet tackled the "transformed models" focusing on improving student learning while preserving student access. Bailey et al. described the original community college model as designed for student access, providing a cafeteria model of self-service, allowing students to self-select college coursework along the way. The authors revealed how the CCRC research guides community colleges to establish guided pathways with anticipated outcomes of supporting students throughout their educational journeys and improving student engagement. Bailey et al. addressed the transformation of faculty roles and disrupting teaching practices and policies to focus on student engagement to improve student learning. Wyner of the Aspen Prize for Community College Excellence (2014), Bailey, Jaggars, and Jenkins of CCRC (2015), and the institutions of Achieving the Dream, the American Association of Community Colleges, and MDRC, are all working simultaneously towards community college transformation, benefiting from and building on one another's research.

Bailey et al. challenged the strained relationships among faculty, staff, and administrators, occurring when college leaders disrupt governance seeking a more collegial culture among faculty, staff, and administrators (2015). Cultural change initiatives require building relational trust to encourage risk-taking, allowing for and supporting the transformation of teaching and learning. Building trust encourages redesigning college structures, policies, and personnel roles to focus more on student learning, not faculty and staff politics, according to Bailey and coauthors. This transformation of faculty roles needs a renewed sense of urgency for cultural change in teaching and learning to occur, proclaimed by Stout in 2018.

Lone Star College–Tomball Answers the Call for Transformation

Nutt and Hardman challenged community college faculty and staff to change their beliefs and teach students to practice, value, and reinforce grit, a combination of passion, perseverance, and a growth mindset (2019). Nutt and Hardman shared Lone Star College-Tomball's (LSC-T) cultural transformation using Connors and Smith's (2011) process: moving from student access to a "Student Completion Agenda" to a "Student Beliefs Agenda," which prescribed changing employees' and students' beliefs regarding overcoming adversity, coping with challenges, and persisting to finish what they start (2019, pp 31-54). The "Student Beliefs Agenda" changes faculty and staff roles from lecturers and directors to coaches, facilitators of learning, and encouragers. Nutt and Hardman's research integrates community college culture, student engagement, and student learning. The relationship of community college culture to student engagement was not addressed using surveys as measurements or defined by specific relationships. Instead, Nutt and Hardman outline the process and demonstrate the outcomes realized when a college truly focuses on students and their learning.

ASSESSING COMMUNITY COLLEGE CULTURE

The value of assessing organizational culture continues to be controversial due to defining culture and its challenges, controversies in measuring culture, and deciding on crucial issues characterizing culture, as addressed in the research of Cameron and Quinn (2011) and Schein (2017). Relevant culture assessments for community colleges are reviewed.

Great Colleges to Work for ModernThink Higher Education Insight Survey©

Organizational culture assessment tools are as varied as the theories and frameworks that represent organizational culture. A prominent culture assessment currently used by community colleges, ModernThink's Great Colleges to Work for Higher Education Insight Survey, is composed of 60 survey statements using a five-point agreement scale, 18 employee benefit satisfaction questions using a five-point satisfaction scale, two open-ended questions, and 15 optional demographic questions (ModernThink, 2020). According to Great Colleges to Work For, the survey was developed specifically for higher education after thoroughly analyzing workplace and employee engagement practices, research of higher education organizational cultures, and validation. The *Great Colleges to Work for Modern Think Higher Education Insight Survey*© (Great Colleges-HEIS) measures the organizational dynamics and competencies unique to institutions of higher education (ModernThink, 2020). The Great College-HEIS instrument provides insight into 15 employee dimensions of higher education culture. National benchmark data is compiled across Carnegie classification, region, student enrollment size, and public/private status factors (ModernThink, n.d.).

The Great Colleges-HEIS survey uses concepts from the Denison model of 1990 and other culture models (Denison, 2003; Schein, 2017). It adds higher education issues to the questions and statements to assess the employee dimensions, recently revised to assess ten

employee dimensions instead of 15 (Great Colleges to Work For, 2020). A panel of experts and higher education professionals provided input for customizing the survey uniquely designed for higher education in 2008 (ModerThink, n.d.). A second panel convened in 2012 to review the survey, with a third party validating the survey (ModernThink).

Personal Assessment of the College Environment

Another employee assessment for colleges is the ***Personal Assessment of the College Environment*** **(PACE)** offered by the National Initiative for Leadership and Institutional Effectiveness (NILIE, 2019). The PACE survey documents personnel's perceptions concerning college climate and provides data to assist in assessing the organizational characteristics addressed in the survey. The NILIE PACE survey includes 46 standard questions covering four domains of institutional structure, supervisory relationships, teamwork, and student focus. Customized questions can be added to the PACE survey, along with eight demographic items and two open-ended questions, according to the NILIE website. Scores on the PACE survey are nationally benchmarked with other similar institutions, as reported by NILIE.

Organizational Culture Assessment Instrument

The *Organizational Culture Assessment Instrument* (OCAI) is a general institutional survey, not explicitly geared toward higher education. The OCAI was developed using Cameron and Quinn's Competing Values Framework (Cameron & Quinn, 2011). According to Cameron and Quinn (p. 173), the OCAI focuses on six content dimensions to assess organizational culture, covering: dominant characteristics of the organization, leadership style and approach, management and treatment of employees, organizational glue or bonding mechanisms, the strategic emphasis for college focus, and criteria of success for recognition and rewards.

ATD's Institutional Capacity Assessment Tool

ATD's Institutional Capacity Assessment Tool **(**ICAT) is a self-assessment and diagnostic tool to help colleges identify strengths and improvement areas in the seven capacities of ATD's Framework to guide college leaders in building a student-focused culture (ATD, 2022). The ICAT helps colleges prioritize their transformational work and allocate resources accordingly. The ICAT may not be considered a culture or climate assessment but works toward similar student-focused outcomes.

ASSESSING STUDENT ENGAGEMENT

Using Kuh's definition (2009), student engagement is the amount of time and active effort students apply to their academic learning and educational activities. Engagement may also refer to intentional institutional efforts by faculty and staff to create, promote, and facilitate active learning experiences, both inside and outside the classroom, according to Chickering and Gamson, 1987; Kuh, 2009; McClenney and Arnsparger, 2012; and Nutt and Hardman, 2019. Both definitions are pertinent to this literature review and research.

Community College Study of CCSSE Data

Balog and Search described how Tallahassee Community College (TCC) used its CCSSE data as a critical measure of its student-retention program (2006). TCC developed a student retention program as their Quality Enhancement Plan (QEP), a required part of the TCC reaffirmation of accreditation through the Southern Association of Colleges and Schools (SACS). As faculty and administrators reviewed collegewide student learning data, TCC appeared as a high-performing community college in many areas. However, as reported by Balog and Search, TCC's CCSSE scores and other student retention statistics revealed gaps that needed addressing. TCC's faculty and administrators studied their 2003 CCSSE scores finding six areas

that needed improvement: students' class participation, students' class preparation, student collaboration, assessment and feedback from faculty, emphasis on higher-order thinking skills, and quality of relationships among students and between faculty and students, according to Balog and Search. Several student retention statistics showed that TCC students were not persisting or achieving their educational goals. TCC faculty and staff workgroups: analyzed their CCSSE scores and student retention data, read scholarly publications, researched best practices, and discussed questions adapted from the League for Innovation in the Community College's Vanguard Learning College Project. According to Balog and Search, TCC's workgroups and administrators developed two foundational principles: student engagement was the primary method to improve students' learning, and successful education was a shared responsibility between the teacher and the learner. Besides the CCSSE benchmarks, TCC used O'Banion's Learning College (1997) and Chickering and Gamson's Seven Principles (1987) to guide their development of student engagement strategies and their QEP. Balog and Search reported that better integration of the students into the TCC community, both academically and socially, was added to TCC's QEP, as formulated by Tinto (2002). From Tinto, TCC learned of the commitment required of faculty and staff to integrate students into active involvement in their learning: in the classroom, within the college, and in "outside-the-classroom" learning experiences (1993, 2002). Tinto found that institutional change was necessary to rethink traditional retention methods, recommending integrating students into learning communities that engages them to persist (1993).

TCC's use of CCSSE benchmark scores in guiding student engagement, improving student retention, and increasing student learning affirms their use as a viable approach to continuous improvement of student engagement. TCC's culture was not addressed directly in

their CCSSE work, but the changes made were transformational to TCC's culture. Workgroups answering questions regarding structures, policies, and processes have proven critical in promoting the success of underprepared TCC students, according to Balog and Search. TCC successfully used CCSSE data to assess and improve TCC cultural attributes, beliefs, behaviors, and processes of academic support: all aspects of the college's organizational culture. Therefore, TCC's student retention program outcomes did impact the college's culture.

CCSSE Findings

Price and Tovar studied correlations between the 2007 CCSSE scores and institutional graduation rates for 261 community colleges (2014). They found that student engagement is an important predictor of college program and degree completions (2014). According to Price and Tovar's research, active and collaborative learning and supportive institution-wide policies and practices were the student engagement benchmarks with the highest correlation to graduation rates. Organizational culture was not identified, measured, or researched in the study.

The Center's Research of CCSSE

After analyzing 11 years of CCSSE benchmark data from 853 public two-year colleges, the Center for Community College Student Engagement (CCCSE) found consistent, continuous improvement in student engagement in all five benchmark areas (CCCSE, 2015). Additionally, CCCSE states that the gap between part-time and full-time students is closing (improving) in most areas of engagement. One of the greatest increases found in the student-faculty interaction benchmark was students' use of email to communicate with faculty. Palo Alto College in Texas reported using CCSSE scores to increase active and collaborative learning across all disciplines, with faculty implementing problem-based learning, learning communities, and other active learning strategies in place of passive lectures (CCCSE). Century College in Minnesota used

CCSSE benchmark scores to develop the college's student life plan named GPS (Goals + Plans = Success) and uses CCSSE data to track the effectiveness of their GPS Program, as reported by CCCSE.

COMMUNITY COLLEGE CULTURE, STUDENT ENGAGEMENT, AND FACULTY

Lack of funding, faculty hiring practices, faculty training, incentives for improvements in teaching, administrative and department silos, and faculty resistance to change are the top obstacles identified in the 2016 Higher Ed Insights Survey (Alamuddin et al., 2016). So how do faculty impact college culture and student engagement? Several studies provide insight into integrating these three areas of community college culture, student engagement, and faculty. Included are several historical studies since the research explicitly covers higher education and community colleges.

Faculty Culture and Student Learning

Kempner (1990) completed an intensive-interview case study on the effect of faculty culture on student learning in a suburban, non-inner-city community college. Since most faculty were considered isolated and ambivalent about improving teaching, this became Kempner's focus. From his case study, Kempner found four major themes: veteran faculty need a sense of purpose, faculty versus administrative conflict is real, defining excellence in the classroom appears challenging, and faculty hinder student learning initiatives when trust is low.

Kempner reinforced that understanding the community college's role in the communities it serves helps faculty understand the college's purpose and mission (1990). Community college culture both hinders and supports student learning, Kempner found. Understanding the dynamics and strengths of the college culture should help faculty and administration work together to transform specific cultural areas to improve student learning. This study links college culture to

faculty facilitating learning and working with the administration, but the study did not address student engagement.

Faculty Perceptions of Culture in Seven Community Colleges

The culture of a college exerts a powerful influence on socializing faculty into the college, especially in strong college cultures, according to Schein's definitions and descriptions (2017). Using Cameron and Quinn's organizational culture typology of Clan, Adhocracy, Hierarchy, and Market, Sokugawa studied factors influencing faculty's perception of culture in seven community colleges within a single state system (1996). Sokugawa found that institutional factors of college culture affected the faculty more than individual factors of gender, age, years of teaching, academic rank, degree, experience, and background. Sokugawa also found that diverse missions of community colleges confused and frustrated faculty: significant differences arose among faculty perceptions regarding college transfer education, vocational/technical education, and community and continuing education. However, Sokugawa found no discernible differences regarding remedial education. A significant theme of Sokugawa's study was the importance of understanding a community college's culture in realizing institutional goals. This study emphasized and reinforced college leaders' need to give time and attention to understanding the college culture in planning and communicating institutional goals to faculty.

Excellent Teachers

Ken Bain's work with 63 of the best college and university faculty reveals that "excellent teachers develop their abilities through constant self-evaluation, reflection, and a willingness to change" (2004, p. 172). The actions of ongoing self-evaluation, thinking about teaching, and changing teaching methods to improve student engagement indicate that faculty are not accepting the status quo but working continually to improve engaging students, which could

require a transformation in college culture. Bain's research included interviews of faculty and their students; presentations or discussions about their philosophy of teaching; reviewing teaching artifacts such as syllabi, lecture notes, and grading policies; teaching observations and video recordings; student focus groups and faculty ratings; student academic work; and teaching colleague comments.

The Center for Community College Student Engagement (CCCSE) in 2010 stated that teaching quality is essential in improving student learning. What goes on in the classroom among students and faculty matter; quality teaching and meaningful documented learning are at the heart of student success, according to CCCSE's findings. The CCCSE reported four key strategies for deeper classroom learning: strengthen classroom engagement in learning, integrate student support into learning experiences and assignments, expand faculty professional development offerings to focus on engaging students, and revise institutional policies to create improved conditions for learning.

Faculty Behaviors Impact Student Engagement

In 2005, Umbach and Wawrzynski studied two national data sets from the National Survey of Student Engagement (NSSE, the university student engagement survey) to explore the relationships between faculty practices and student engagement and learning. Umbach and Wawrzynski analyzed NSSE data from 2003 of senior and first-year students from 137 universities. The authors also surveyed the university faculty regarding instructional practices and out-of-class work. Umbach and Wawrzynski's results indicate that faculty behaviors and practices impact student engagement and learning. Higher levels of student engagement and increased learning occur when faculty members use: active and collaborative learning techniques, engage students in experiential learning, emphasize higher-order thinking strategies,

challenge students by keeping expectations high, interact with students inside and outside the classroom, and offer enriching educational experiences. Umbach and Wawrzynski's findings affirm the NSSE by demonstrating that engaging teaching strategies improve student learning. They further recommend that colleges and universities find better methods to incent, support, and reward good teaching. The importance placed on enriching educational experiences may be an indirect measure of college culture that values a diverse range of educational activities: service learning, practicums, internships, clinical rotations, tours, and international study abroad, as suggested by Umbach and Wawrzynski. Culture was not studied directly but supporting, and rewarding faculty for quality teaching was recommended, which aligns with transforming a college culture.

Faculty Use of Data for Change: Placing Learning First

In 2013, Kerrigan and Jenkins reported that Achieving the Dream colleges found getting faculty and staff involved in student success initiatives challenging. Michigan's Macomb Community College (MCC) leaders reported the isolation of faculty as a major obstacle to innovation in teaching and learning (2017). MCC leaders reported that faculty are creative, but processes for sharing innovations for use in other disciplines, encouraging collegewide innovation, and assessing the impact on student learning are challenging to institutionalize. Moreover, Kerrigan and Jenkins found that faculty from ATD colleges in Washington state found little use with their institutional data reports. However, Kerrigan and Jenkins realized that faculty were more likely to use data if their department chairs and deans shared how they used it in making departmental decisions.

Pierce College in Washington, a 2017 Leah Meyer Austin Award College, uses course-level dashboards to get data into the hands of individual faculty by request (2017). Faculty then

have opportunities to make changes in teaching based on student learning outcomes data, as reported by Broxson (2016) and Pierce College (2017). Broxson shared that before faculty data dashboards were available at Pierce College, faculty redesigning their pre-college math sequence learned from student focus groups that the instructor was the significant factor in course success.

According to Broxson (2016), further discussions revealed faculty variances in the interpretation of course outcomes, differences in grading, and instructional time spent on topics were the most significant variations among faculty teaching the same course. Pierce College faculty and staff placed student learning first, listened to their students, utilized student data to verify their students' voices, and made instructional changes to improve student learning.

Placing student learning first, supported by systemic assessment, is what Hersh and Keeling promoted in their paper from the National Institute for Learning Outcomes Assessment (NILOA) in 2013. Hersh and Keeling prescribe an intentional, collegewide instructional approach assessed across all courses and programs, as in the examples of writing critically, thinking critically, and problem-solving (2013). According to Hersh and Keeling, meaningful assessment connects and reinforces teaching and learning through transparency, frequent formal and informal assessments, regular and timely feedback, and integrating learning across courses. This study helps to emphasize the integration of instructional strategies and assessment across disciplines to make lasting changes in student learning.

Culture Preparedness for Implementing a Learning Initiative

Kadlec and Rowlett found, after interviewing several hundred colleges and university faculty, staff, and administrator focus groups, that "attending to the human side of change entails taking the time to develop and refine processes to bring a wider range of perspectives and insights to the table" (2014, p. 90). Attending to the human side of change takes time and

intentional, ongoing efforts to gather feedback from stakeholders, along with continued follow-up and communication on progress, to build the relational trust needed to promote lasting cultural transformation. Student learning requires the creation of diverse work teams, including student services staff, faculty, data analytics professionals, information technology specialists, and other related stakeholders. Kadlec and Rowlett indicated that teams need professional development and support in team facilitation and conflict resolution during the challenging work of change. The authors provided two extensive checklists of exploratory questions to help college leaders assess their institutional culture of engagement and culture preparedness before beginning any collegewide innovative learning initiative. Kadlec and Rowlett discovered that any learning initiative work must first recognize the college's culture of preparedness for change. Change challenges leaders to focus on cultural conditions and situations, not people and personalities. Kadlec and Rowlett emphasized that colleges need change leaders who drive the change with their vision and empower the college community to use their talents and skills to solve the challenges. This study addressed several aspects of the triad of culture, student engagement, and faculty in transforming a community college's focus on student learning.

Faculty Resistance to Change

Simon Sinek, TED Talk speaker, consultant, and author, shares that employees need to feel a deep sense of trust and cooperation to be effective (2014). Sinek states that if employees feel safe, remarkable things happen inside an organization because they feel included in the circle of trust, which provides the freedom to be creative. Sinek's organizational conditions refer to an organization's internal environment and culture. Applying Sinek's feelings of trust and cooperation to community college faculty implies that when faculty feel safe and secure in their teaching position, they may more likely stretch outside their comfort zones and experiment with

innovative teaching methods. This security to try new methods would also help faculty connect with students to increase student engagement and improve student learning. Low faculty trust in administration begs for colleges to focus on transforming the college culture to be more collaborative, resulting in growing trust before expecting significant progress on student learning initiatives, especially in teaching and learning. Disconnects between the administration and faculty goals are intensified by faculty mistrust; relational trust is built and reinforced through professional competence, personal integrity, and respect, as Bailey et al. reported (2015, p.147). Alamuddin and colleagues found in the 2016 Higher Ed Insights survey that faculty resistance to change halts numerous student success initiatives, thus slowing community college culture transformation (2016).

Big Ideas and Educator Competencies

According to President Shugart, Valencia College transformed its organizational culture by formulating and living *Valencia's Big Ideas***,** developed during crucial conversations with Valencia's faculty and staff, documented by Brown & Kurzweil (2015). *Valencia's Big Ideas* include: anyone can learn under the right conditions, students need to start right, students need connection and direction, the college is how students experience it, the purpose of assessment is to improve student learning, and collaboration is how work happens. According to Brown and Kurzweil, Valencia's Big Ideas are the foundation for a shared culture, language, and principles that engage all campus stakeholders. Changes in organizational culture and the faculty's role at Valencia resulted in the Valencia Faculty Educator Competencies shared by Brown and Kurzweil. Valencia's *Seven Essential Competencies* demonstrate how the role of faculty is sharply focused on student learning (Valencia College Teaching Learning Academy, 2016). Valencia's Teaching Learning Academy (TLA) provides performance indicators, short

informational videos, and a cadre of faculty resources for Valencia faculty use; faculty seeking tenure must show evidence of all seven competencies, according to the TLA.

Building Faculty and College Leadership

Collaborative relationships are key to change initiatives in community colleges. Leaders should focus on building relationships through listening, especially to resisters, and learning from the resistance, which will help move the initiatives forward to implementation, explained Fullan (2001). Fullan, recognized as an international authority on educational reform, stated that transforming culture or "reculturing" is the main point in any change initiative. Fullan shares five leadership components that influential leaders apply: a moral purpose for making a difference, understanding of and respect for the change process, seeking out interactions and problem-solving with employees, collaboratively creating and sharing knowledge, and striving for balance and sense-making amidst the chaos of change.

The educational and organizational divide between faculty and administration is real and reactive in community colleges; however, many faculty can keep politics from affecting their classroom teaching and behaviors, according to Bailey et al. (2015). Unfortunately, "political faculty" may speak against most change initiatives with a loud and constant voice. Due to faculty resistance, progress can be slow for community college change initiatives. Much time and energy are consumed in controversial discussions, sometimes delaying the next steps or entirely suffocating a change initiative, according to Bailey et al. Faculty resistance comes from little trust in the administration, resulting in low morale for faculty and staff when tend to withdraw into their offices and classrooms instead of taking active roles in college governance and change initiatives, reported Bailey et al. (2015, p. 144). In 2014, Wyner found from his research administering the Aspen Prize for Community College Excellence that transforming teaching for

better student engagement is nearly impossible if trust is compromised. Is the administrative leadership earning the faculty's trust by leading and communicating effectively? This question should be uppermost in the minds and actions of leadership throughout any change initiative.

Tennessee Community Colleges Link College Culture and Student Engagement

In studying the implementation of guided pathways in Tennessee community colleges, Jenkins and colleagues found that institutional reforms required colleges to change their culture (2018). The researchers found that the Tennessee colleges needed "to make fundamental changes not only in practice but also in college culture" (p. 44). Jenkins et al. shared that several colleges are making cultural changes by "rethinking their approaches to hiring and professional development, college finance, and other functions critical to supporting innovation in practice over time" (p. 44). These changes require a college culture open to continuous improvement and innovation, modeled by faculty. In this culture of improvement, Tennessee community college faculty led learning outcomes assessment to improve teaching and learning through program review, professional development, and other intentional efforts, as reported by Jenkins and colleagues. The work in the Tennessee community colleges links community college culture to improving student engagement strategies through implementing guided pathways with faculty leading the charge.

FACULTY'S ROLE IN STUDENT ENGAGEMENT

Faculty are essential in the cultural change process since they hold the keys to transforming a culture for increased student engagement, emphasized Chancellor McPhail of The Community College of Baltimore County in his article, *Transformation of a College: From Teaching to Learning* (2004, p. 30). Faculty and academic support services staff should work

together to support one another; both are essential points of contact for community college students, according to McGuire in 2015 and Wyner in 2014.

Faculty as Facilitators of Student Engagement for Learning

Barkley's *Student Engagement Techniques: A Handbook for College Faculty* is a comprehensive resource of teaching tips, strategies, student engagement techniques (SETS), and active learning practices (2010). Barkley explains that student engagement, in the context of a college classroom, "is a process and a product that is experienced on a continuum and results from the synergistic interaction between motivation and active learning" (2010, p. 8). Barkley states that faculty should explain the value of course content in meaningful ways, design student discovery of resources or provide the essential resources, and offer support during the learning process. Barkley describes theories of student engagement that affect student learning, from understanding student engagement to the latest in neuroscience and learning. The author provides practical tips and strategies, pulled from various resources, for fostering motivation, promoting active learning, building community in the college classroom, ensuring students are challenged, and promoting holistic learning. According to Barkley, holistic learning occurs when students engage in all learning domains: the cognitive domain of thinking, the affective domain of enjoying and bringing focus to learning, and the psychomotor domain by completing a physical or hands-on activity. The author offers 50 student engagement techniques for faculty to use.

Barkley, Major, and Cross authored *Collaborative Learning Techniques: A Handbook for College Faculty* in 2014 to highlight the benefits of intentionally designed, interactive group learning. The authors describe 35 creative, collaborative learning techniques providing examples for each technique. Instead of lecturing, Barkley, Major, and Cross encourage faculty to flip their

classrooms by assigning pre-class reading and videos to prepare students for an interactive class designed for group work and problem-solving using Fink's course design principles (2013). In a flipped classroom, students work together using knowledge from reading and viewing assigned texts, journals, and videos outside of class. Strategies for the flipped classroom include Think-Pair-Share, Jigsaw, Fishbowl, and Test-Taking Teams (Barkley, Major, & Cross, 2014; Barkley & Major, 2018).

In 2018, Barkley and Major published *Interactive Lecturing: A Handbook for College Faculty* to assist faculty in integrating active learning strategies during their lectures to keep students actively engaged. The authors include 53 teaching strategies for making lectures more engaging and 32 active learning techniques to keep students engaged during lectures; this may also re-energize faculty. Barkley and Major address the debate between lecture and active learning by showing how a combination of lectures and active learning strategies makes the classroom more engaging, with students as active participants, not passive learners. The title of *Interactive Lecturing* may even attract resistant faculty to try integrating active learning techniques into their traditional lectures.

Faculty as Designers of Student Learning

Fink shares that current higher education teaching practices are not generating student learning (2013). According to Fink, faculty want students to achieve greater learning, but they continue to use passive teaching practices that are not achieving learning nor contributing to program and degree completions. Barkley and Major found that Fink's Taxonomy of Significant Learning supports teaching for improved student learning (2016). Barkley and Major organized and incorporated learning assessment techniques (LATs) using Fink's Taxonomy of Significant

Learning. Fink's Taxonomy covers the cognitive and affective domains of learning, interpersonal skills, and human dimension needs.

Each domain of Fink's Taxonomy is relational and interactive, stimulating the other domains; this synergistic interactivity helps create significant learning for students, where all domains of learning are activated as "when the light bulb comes on." In contrast, Bloom's Taxonomy and the Revised Bloom's cover only the cognitive domain, according to Barkley and Major. Answering five questions of Fink's Integrated Course Design to attain significant learning follows the Wiggins and McTighe Backward Design method (Wiggins & McTighe, 2005). According to Wiggins and McTighe, using Backward Design helps faculty focus first on student learning outcomes for the course before focusing on teaching. Finally, Fink recommends that faculty check and verify that learning goals, feedback and assessments, and learning activities support one another and are integrated throughout the course.

Most faculty have little background, education, or experience in course design; thus, community colleges should support faculty by offering professional development and assistance through teaching and learning centers staffed with knowledgeable instructional designers, according to Fink (2013). Fink's course design suggestions emphasize active learning methods, focusing on student learning and student engagement, and faculty serving as designers of student learning, not just lecturers of content.

Faculty as Promoters of Metacognition, Motivation, and Mindset

Focusing on student learning strengthens teaching; student learning should improve if faculty address metacognitive skills (thinking about thinking and students reflecting on their learning) with their students along with teaching course content, according to McGuire (2015) and Taylor and Parsons (2011). Taylor and Parsons found that student engagement includes

enhancing students' skills to learn how to learn. McGuire states that teaching metacognition, motivation, and mindset is new for most faculty and students, yet integrating these skills while teaching boosts student learning. McGuire explains that faculty must help students assume responsibility for their learning by teaching and reinforcing cognitive strategies to increase student understanding. McGuire emphasizes that faculty are in the best position to motivate students to make changes by assisting students with using metacognitive strategies, practicing strategies in class, and encouraging students to make use of academic support services.

Building on McGuire's research, Barkley and Major describe four different reflective and metacognition strategies in their handbook on *Interactive Lecturing* (2018): the punctuated lecture when a faculty stops to ask students what they are doing at the given moment; the post-lecture survey reviewing questions and students' rate their confidence in answering; the lecture wrapper, sharing three main ideas; and the use of lecture engagement logs for students to note their preparation, participation, and reflection in the lecture process. In her *Student Engagement Techniques Handbook,* Barkley explains several other metacognitive strategies, such as completing a post-test analysis or having students generate learning goals before a course section or assignment (2010).

Faculty as Participants in Governance

Community colleges struggle to adapt to the changes needed to advance higher education success. The challenges include declining enrollments, decreasing high school graduate populations causing competition for students, limited funding from state and federal governments, variances in community and skilled workforce needs, and diminishing public trust (Mahoney, 2019). Awan (2014) emphasized that leadership needs to consult collegially with faculty and staff on decisions that impact their teaching and learning. Nonetheless, according to

Awan, everyone should realize that administrators are responsible for making the final decisions and handling any consequences of those decisions. Thus, participatory governance may be a more accurate term for the governance style than shared governance, which could imply shared responsibility, according to Awan.

Barrett, Gaskins, and Haug (2019) found that investing in leadership development of faculty encourages innovation in student learning. Involving faculty as leaders in transforming college cultures to focus on student learning encourages collaboration with the administration, which builds trust and moves student learning initiatives forward. They emphasized that faculty need to be more concerned with student learning than with their teaching; this is a huge culture change, which challenges faculty to think as facilitators of learning. Encouraging faculty leaders who strongly focus on student learning to participate in college governance is crucial in helping transformation occur in a college's culture.

Faculty as Key Participants in Transformation

Building a culture focused on student learning may involve faculty and staff consistently inventing new ways to increase student engagement to improve student learning, according to The Aspen Institute (2014). A community college culture that continuously and systemically inspires positive improvements in student learning should reach higher goals in improving student outcomes and overall student success. The Aspen Institute highlighted how Valencia and other colleges developed a faculty-specific culture of continuous improvement of student learning.

Faculty need to be involved in strategic planning and visioning for their community colleges and share in the governance responsibilities in academic standards, curriculum and instruction, and student learning policies, according to Bailey et al. (2015). Faculty involvement

is especially crucial during transformative times of moving from teaching to a greater focus on student learning, reported Bailey et al. Smyre and Richardson spoke of the concept of adaptive planning, in place of or in conjunction with strategic planning, which allows for a more fluid process of transformation using DICE: design, identify, connect, and emerge (2016, p. 127). By the time a five-year community-based strategic plan is completed, two years may have passed as college leaders work to involve faculty and business community leaders. Smyre and Richardson's adaptive planning for communities may seem more realistic because of the constant state of chaos and change in community colleges. According to Smyre and Richardson, a more fluid adaptive planning process may attract more faculty to participate in the planning necessary for community college transformation.

The Chronicle of Higher Education's release of *The Future of Learning: How colleges can transform the educational experience* (McMurtrie, 2018) provides several recommendations to transform community college teaching. Transforming teaching by increasing student engagement takes motivation, time, effort, confidence, creativity, and instructional design skills; most faculty lack some of these skills, causing a lag in changes toward improvement. Add in the lack of trust in administration during times of change, and the challenge becomes real and formidable, according to Bailey et al. (2015) and Kouzes and Posner (2012).

SUMMARY

The call for the cultures of our nation's community colleges to transform to a sharper focus on student learning rather than teaching has been issued repeatedly. Most transformative changes have been in the student enrollment, curricular, and academic support areas. However, faculty have yet to be challenged to make student engagement changes in their teaching, according to the findings of AACC (2012 & 2014), Bailey et al. (2015); Lipka (2019); Stout

(2018), and Wyner (2014). This literature review covers organizational culture, student engagement, teaching and the need for change, student learning, and seeking intersections among college culture, student engagement, and the faculty role. The necessity and urgency for community colleges to transform their cultures to encourage, support, and facilitate student engagement to improve student learning are apparent in this review.

This study aims to identify specific relationships among community college employee cultural dimensions and student engagement benchmarks, as well as the college events and initiatives which may propel colleges forward in student engagement initiatives. The review found no studies identifying relationships among employee dimensions of culture and student engagement using nationally benchmarked surveys. Correlating culture surveys with student engagement surveys were limited to studies that call for leaders to take the culture of their institutions seriously before implementing learning initiatives, as in the research of Broxson, 2016; Kadlec and Rowlett, 2014; Kempner, 1990; Nutt and Hardman, 2019; and Sokugawa, 1996.

CHAPTER THREE: METHODOLOGY

INTRODUCTION

As Chapter Two literature review reveals, there is an abundance of research published regarding organizational culture of businesses, far less on the field of higher education culture, and limited research regarding community college culture. No substantive research addresses the relationships between community college culture and student engagement. Thus, this mixed-methods explanatory sequential study examining relationships among 15 employee dimensions of community college climate assessed by the Great Colleges-Higher Education Insight Survey (Great Colleges-HEIS) and five student engagement benchmarks assessed by the Community College Survey of Student Engagement (CCSSE) may fill a research gap. Studying climate survey results alongside student engagement results may reveal findings and relationships not evident when college leaders review the surveys separately. Investigating directional relationships among 15 employee dimensions and five student engagement benchmarks may provide added practical insights for college leaders transforming their college's cultures to focus on student learning by increasing student engagement. Interviews with college personnel from colleges that substantially improved survey results may reveal strategies and college events other community colleges can leverage to increase student engagement on their campuses.

PURPOSE OF THE STUDY

This mixed-methods explanatory sequential study attempts to identify relationships among 15 Great College-HEIS employee dimensions and five CCSSE benchmarks to improve the practical use of both surveys' results. Three college leaders from each of three colleges that

made the greatest improvements in the Great Colleges-HEIS dimensions and the CCSSE benchmarks were interviewed to uncover college events or initiatives that may have contributed to their improved survey results.

Research Questions

The primary research questions in this study are:

1. How are the employee dimensions of community college culture measured by the Great Colleges-HEIS related to the student engagement benchmarks measured by the Community College Survey of Student Engagement (CCSSE)? (Quantitative Phase 1).

2. What types of college events, initiatives, or changes helped improve college climate and student engagement as measured by the Great Colleges-HEIS and the CCSSE, respectively? (Qualitative Phase 2)

By identifying relationships among the 15 Great Colleges-HEIS employee dimensions and the five CCSSE benchmarks, community colleges may be better able to identify and improve employee culture dimensions that support and increase student engagement. This study hypothesizes that as Great Colleges-HEIS employee dimensions improve over time, related CCSSE benchmarks may show improvements in student engagement, with the reverse also being true. The assumption is also that survey results would reflect any improvement in culture and student engagement over time. This study looks for correlational relationships, not cause-and-effect (causal) relationships (Trochim et al., 2016). Correlation is a descriptive statistic describing the relationship's strength and direction between two variables, according to Trochim. For example, two related variables, an employee dimension of culture, Pride, could be related to a student engagement benchmark, Student Effort, as a related pair. However, it is undetermined which variable causes the other. A positive directional relationship exists when a score on an employee dimension (Pride, for example) goes up, and its paired variable of the student engagement benchmark (Student Effort, for example) also increases. In other words, as one

variable increases, the related variable generally also increases (Trochim et al.). A negative directional relationship exists when the inverse occurs: as one variable score increases, the score for the related variable decreases (Trochim et al.). For example, suppose a dimension of culture, such as Pride, is negatively related to the student engagement benchmark of Active and Collaborative Learning; this suggests that as Pride increases, Active and Collaborative Learning may decrease, and similar for the reverse. Therefore, college leaders need to understand and address their cultures first in order to support and increase any student engagement initiatives by applying what the literature review informed regarding the possibilities of organizational culture devouring initiatives within an institution (Baer & Norris, 2016; McClenney & Arnsparger, 2012; Pope, 2004; Wyner, 2014).

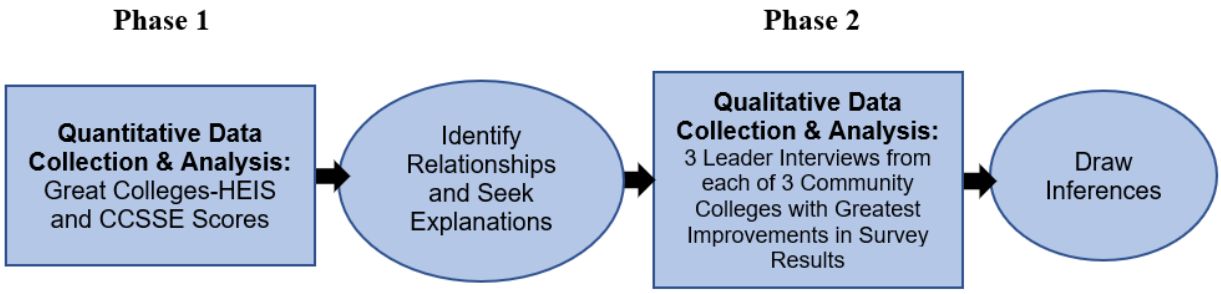
Research question 1 (Phase 1) used secondary data from institutions that had taken both surveys at least twice between 2008 and 2016, with a minimum four-year gap between surveys. Pearson *r* correlation was used to identify relationships among the 15 employee dimensions of the Great Colleges-HEIS and the five CCSSE student engagement benchmarks. To address the second research question (Phase 2), four colleges that showed the greatest improvements in their survey results were selected and asked to participate in interviews. Leaders from three of the four colleges (nine interviewees) agreed to participate in discussing their perceptions of possible college events or initiatives that may have contributed to their improved survey results.

RESEARCH DESIGN

This study uses a mixed-methods approach conducted in two phases to address the complexities of community college culture and its relationships to student engagement. The quantitative data are collected first, followed by qualitative data collection, to explain results in practical and realistic detail, as illustrated for this study in Figure 3 (Creswell, 2015; Merriam &

Tisdell, 2016). The methodology follows the Grounded Theory approach introduced by Glaser and Strauss, which focuses on finding meaning from the data collected from processes that change over time for practical use (1967). Creswell's explanatory sequential design aligns with this mixed-methods study.

Figure 3. Explanatory Sequential Design



Phase 1 of this study involved collecting and reviewing secondary national survey results regarding community college culture from the Great Colleges to Work for Higher Education Insight Survey (Great Colleges-HEIS) and student engagement results from the Community College Survey of Student Engagement (CCSSE). Using Pearson *r* correlation and Excel's data analytics, analysis of these results identified relationships among employee dimensions and student engagement benchmarks. Variables used to find Pearson *r* correlations were the aggregate (or composite) results for employee dimensions and student engagement benchmarks, not individual survey statements. A review of the first or baseline survey results compared to the subsequent results for both Great Colleges-HEIS and CCSSE identified colleges that made the greatest improvements over the set minimum of four or more years. The variances of both survey results were analyzed for each college; four colleges with the greatest improvements and located in different regions of the nation were invited for Phase 2 interviews.

Phase 2 of the study involved virtual (Zoom) interviews of three college leaders from each community college, showing the greatest improvements in survey results. College leaders who served in roles responsible for the areas showing the greatest improvements in survey results and present during the survey administrations were selected for interviews. Four colleges were invited to participate in Phase 2. However, personnel from three colleges accepted the invitation to participate in the interviews for a total of nine college leaders interviewed, representing three colleges with the greatest survey increases.

The cultural employee dimensions and the student engagement benchmarks showing the greatest improvements helped to identify which college leaders and positions to interview. For example, if several of the employee cultural dimensions of the organization improved comparing the two administrations of the Great Colleges-HEIS survey scores, the college president and human resources director were interviewed. Additionally, to meet the criteria to be invited to interview, college leaders needed to be employed during their college's survey administrations (2008 – 2017) to speak to the culture and events during the timeframe. For the three participating colleges, whenever possible, interviews included a faculty member and vice president of academics to gather perspectives regarding the institution's teaching and student learning initiatives and strategies.

THE RESEARCH PLAN

Phase 1: Data Collection

After signing ModernThink's non-disclosure agreement and submitting a one-page research plan, ModernThink, the Great Colleges-HEIS vendor, provided the community colleges that had conducted the Great Colleges-HEIS survey and the years completed (R. Boyer, personal communications, August 8, 2017, January 19, 2018). The ModernThink list included 127

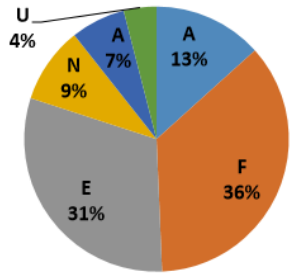
community colleges. However, colleges that had not conducted two survey administrations between 2008 and 2017 were eliminated since they did not meet the study's criteria. The refined list of Great Colleges-HEIS colleges was cross-referenced with the CCSSE list of member colleges conducting the CCSSE survey twice during the study's timeframe (CCSSE, 2020/2022). The cross-referencing of the Great-Colleges-HEIS colleges with the CCSSE website list of annual member colleges resulted in 44 community colleges meeting the study criteria.

Leaders (President, Vice President of Academics, and an Institutional Research Director or Human Resources Director) from these 44 community colleges were identified from their colleges' websites to receive the initial invitation to volunteer their colleges to participate in the study. Thus, at least three college leaders (from the four colleges) invited received the email invitation requesting permission to volunteer for the study and to provide their college's survey data. The emailed invitation included a summary of the study, the appropriate criteria for a college to participate, and the Informed Consent statement. Attempts to contact the community college leaders occurred a minimum of three times over at least six weeks from the initial contact. The researcher answered questions from potential subjects and completed specific college IRB protocols or similar documents for colleges interested in participating.

Data retrieved from the colleges appeared similar to the Great Colleges-HEIS data sample of Figure 4 and the CCSSE data sample shown in Table 1. These data are for examples only, not from any participant college. Only the aggregate data or overall data for employee dimensions and student benchmarks (as in these data samples) were used in the study. Aggregate data is more familiar to college leaders and provides composite culture and student engagement results leaders may more likely use. The raw data for each survey statement was not used for this study.

Figure 4. Sample of HEIS-Great Colleges Employee Results

Extracted Data Set



Response Distribution	
Administration	30
Faculty	81
Exempt Prof'l Staff	69
Non-exempt Staff	21
Adjunct Faculty	15
Unspecified	9

Poor	Warrants Attention	Fair to Mediocre	Good	Very Good to Excellent
0% - 44%	45% - 54%	55% - 64%	65% - 74%	75% - 100%

HEIS Dimensions	2014	2015	2016	2016 Honor Roll 10,000+	2016 Carnegie Associate
Job Satisfaction/Support	80%	78%	82%	83%	76%
Teaching Environment	64%	72%	67%	79%	66%
Professional Development	76%	70%	72%	82%	73%
Compensation, Benefits & Work-Life Balance	76%	76%	75%	81%	73%
Facilities	77%	80%	81%	79%	75%
Policies, Resources & Efficiency	66%	68%	68%	75%	64%
Shared Governance	60%	63%	70%	77%	63%
Pride	79%	80%	84%	87%	79%
Supervisors/Department Chairs	76%	75%	74%	81%	75%
Senior Leadership	61%	65%	69%	73%	62%
Faculty, Administration & Staff Relations	56%	59%	65%	75%	62%
Communication	57%	58%	60%	71%	59%
Collaboration	58%	60%	64%	74%	64%
Fairness	63%	64%	64%	72%	63%
Respect & Appreciation	61%	63%	61%	76%	66%
Survey Average	67%	69%	70%	77%	68%

Note: Data not from this study; for example, only

Table 1. Sample of CCSSE Results

CCSSE Benchmarks	2008 Results	2010 Results	2012 Results	2016 Results
Active and Collaborative Learning	50.8	44.1	48.1	48.2
Student Effort	48.0	45.8	46.3	45.2
Academic Challenge	48.6	46.9	45.4	47.1
Student-Faculty Interaction	49.8	46.7	49.0	47.5
Support for Learners	48.2	47.7	50.6	47.3

Note: Data not from this study; for example, only

The minimum of four years between follow-up surveys provided adequate time to show possible improvements in the Great Colleges-HEIS results, CCSSE results, or both. The Great

Colleges-HEIS administered the climate survey for the first time in 2008. The CCSSE survey, extensively researched and validated from 2005–16, was revised slightly in 2017; analyzing survey results from 2008 through 2016 seemed best for controlling survey variables (Center for Community College Student Engagement, 2017; Chronicle of Higher Education, 2017). Since colleges provided data for their 2017 Great Colleges-HEIS survey results, the 2017 data were used if the 2017 Great Colleges-HEIS results maintained a minimum of four years between survey scores. Thus, CCSSE data ranged from 2008 through 2016, and the Great Colleges-HEIS data ranged from 2008 through 2017. Both surveys are nationally recognized, researched, validated, and benchmarked; thus accepted as appropriate surveys for this study.

Phase 1: Study Variables

The study variables for Phase 1 are 15 employee dimensions assessed in the Great Colleges-HEIS climate survey. Each employee dimension contains two to seven statements rated by employees and aggregated to provide a composite score for each employee dimension, as listed in Appendix A (Chronicle of Higher Education, 2017). The scores used for this study included the composite (overall) employee dimension scores, not each statement result. Great Colleges-HEIS dimension composite scores are reported as the percentage of positive responses with an estimated range from 30% to 95% for each employee dimension. Also included in Phase 1 are the study variables for the five CCSSE student engagement benchmarks. Each student engagement benchmark contains six to ten questions or statements answered by students, as indicated in Appendix B (Center for Community College Student Engagement, 2017). The CCSSE question stems reference the student's experience "at this college during this current school year"; thus, students should answer the questions based on all experiences at their college for the year. The CCSSE scores used for this study include the composite student engagement

benchmark scores, not individual statement results. CCSSE composite scores range from an estimate of 35 to 65, with 50 as the adjusted norm.

Phase 2: Data Collection and Participant Selection

The changes in survey scores from the first administration to the later administration for the Great Colleges-HEIS and the CCSSE determined the four colleges with the greatest improvements. Moreover, the geographical region also influenced the subjects to invite for Phase 2 interviews, hoping to use colleges representing regions of the nation. Thus, the Phase 2 data collection process used purposive sampling (Trochim et al., 2016). Interviews investigated college leaders' perspectives on possible reasons for improved survey results. The improved areas of employee dimensions and student engagement benchmarks guided the researcher to the college leaders (their role of service) to interview. Additionally, follow-up questions to use during interviews, based on the areas of improved results, were prepared as found in Appendices C and D. This selection process helped provide a broader representation of colleges for greater generalizability of study results.

The email invitation to the initial college contact shared the general introductory open-ended question to be asked during the college leader interviews:

> Your college showed significant improvements in _____ and _____, employee dimensions of the Great Colleges-HEIS (employee climate) Survey, as well as significant improvements in the _____ benchmark of the CCSSE student engagement survey. In your opinion, what has transpired at your college during this timeframe of _____ (state survey years) that may have contributed to these changes?

The college contact also received a summary of their college's Great Colleges-HEIS and CCSSE data for the first and subsequent surveys to inform or remind them of their survey results. The email invitation also included the required IRB Informed Consent. The researcher discussed the best college leaders to interview with the college contact since personnel needed to

be present during the years of the surveys. The email invitations were sent to each college leader interviewee, along with the initial question, a survey summary of their college's data, and a copy of the Informed Consent, as received by the initial college contact. The researcher scheduled the interviews using email and phone calls and checked for any concerns regarding the Informed Consent. At the beginning of each recorded interview, the college leader interviewee gave verbal consent after the researcher addressed any questions or concerns.

Phase 2: Interview structure

Interviews were conducted virtually using Zoom and lasted 45-60 minutes, with one interview lasting 90 minutes. All interviews were video recorded and transcribed using Zoom's licensed transcription service. Field notes supplemented the transcripts. All interviews began with the general introductory open-ended question.

Appendices C and D contain interview follow-up questions prepared from the statements that make up the 15 employee dimensions of the Great Colleges-HEIS and the five student engagement benchmarks of the CCSSE. During the interviews, college leaders were reminded of the years of the survey administrations at their college. Any interview follow-up questions were specific to survey results showing significant improvements. Follow-up questions were combined depending on the improved scores and the role of the college leader interviewed.

DATA ANALYSIS PROCEDURES

Phase 1: Survey Data Analysis

All secondary data from the 14 participating colleges (Great Colleges-HEIS 1 and 2 and CCSSE 1 and 2) were run using Excel data analytics and Pearson *r* correlation. Pearson *r* correlation scores fall between -1.0 and 1.0, with a score closer to 1.0 signifying a stronger positive correlation (Statistics Solutions, 2021; Trochim et al., 2016). A negative score signifies

an inverse correlation; thus, as one variable increases, the related variable decreases. The closer the Pearson *r* results are to -1.0 or 1.0, the stronger the relationship. Figure 5 displays the formula for Pearson *r* Correlation, with *r* being the correlation between variables x and y.

Figure 5. Pearson *r* Correlation Formula Used

$$r_{xy} = \frac{\sum_{i=1}^{n}(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^{n}(x_i - \bar{x})^2}\sqrt{\sum_{i=1}^{n}(y_i - \bar{y})^2}}$$

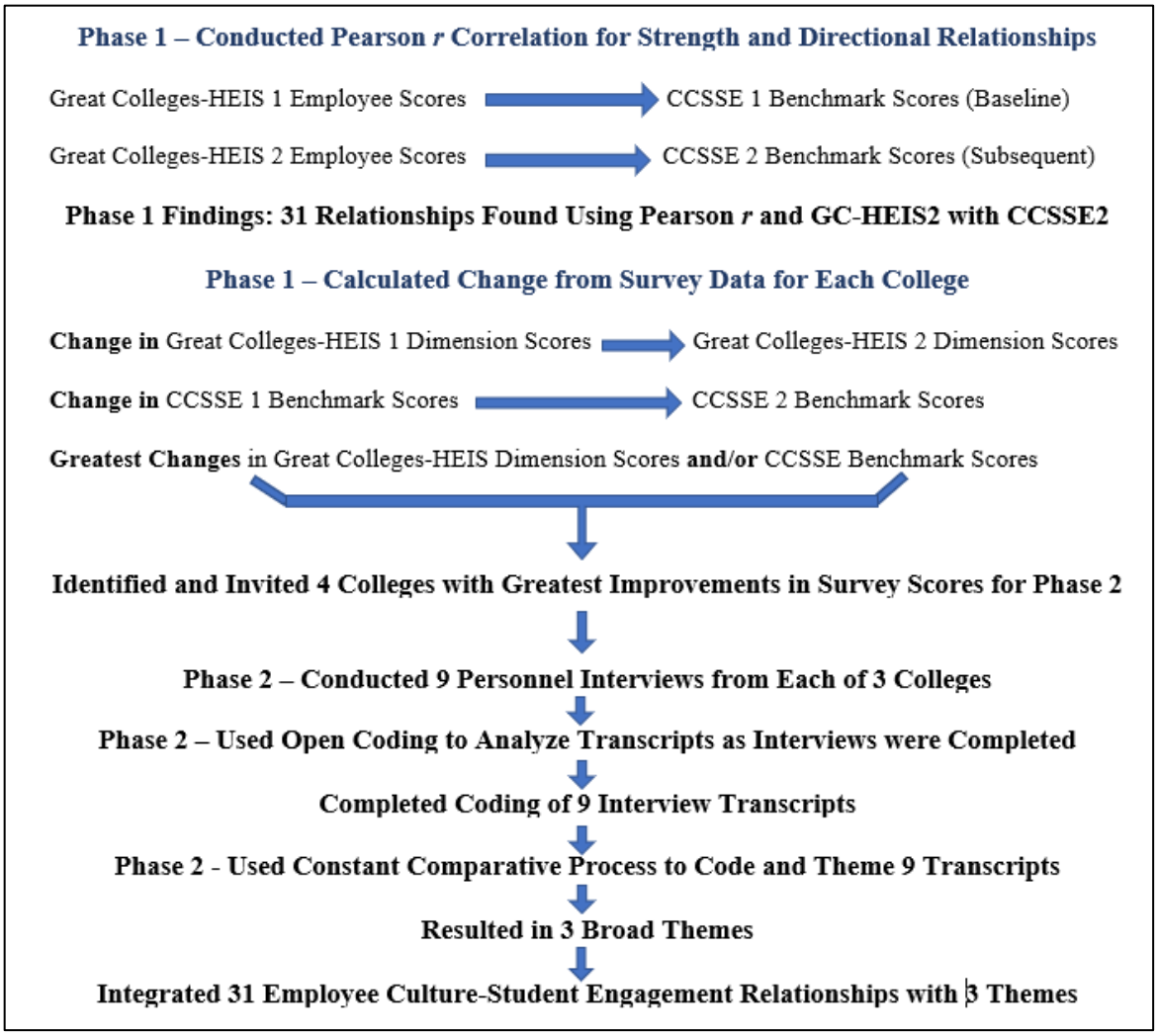
Note. Retrieved from https://www.howtoexcel.org/tutorials/correlation-coefficient/

Phase 2: Interview Data Analysis

The process of open coding for category construction was used to review each transcript as it was completed (Merriam & Tisdell, 2016). The researcher looked for and coded any possible answers to and evidence for the Phase 2 question of "college events, initiatives, or changes that helped improve college climate and student engagement survey scores during the stated time frame." The first two interviews informed the researcher to ask an additional follow-up question specific to hiring for subsequent interviews. The list of codes grew as each transcript was reviewed and coded, but broader categories began to form using the constant comparative process described by Merriam and Tisdell. Once all interviews were completed, the codes were listed in Excel and categorized into several broad categories. The coding was reviewed and analyzed several times against the transcripts to see if areas were overlooked or if any research bias had appeared. After additional review and analysis, the coded data were categorized into meaningful broad categories that fit the framework of the study and included all the coded data (Merriam & Tisdell). Several broad recurring themes emerged during the analytical coding process. Figure 6 summarizes the data and analyses in all phases of this mixed-methods study.

The final summary phase integrated all findings from Phases 1 and 2 using the AACC Framework described in Chapter 1.

Figure 6. Great Colleges-HEIS and CCSSE Data and Analyses



Note: 15 Great College HEIS employee dimensions analyzed for relationships among 5 CCSSEE benchmarks. 1 = Baseline survey administration; 2 = Subsequent survey administration

ETHICAL CONSIDERATIONS

This mixed-methods, two-phase, exploratory design study was approved from Ferris State University's Institutional Review Board (IRB) in Big Rapids, Michigan (Appendix F). A modification and an extension were requested from Ferris State's IRB and are also included in Appendix F. Ethical considerations to protect the study participants are a significant concern and

were taken seriously by the researcher (Merriam & Tisdell, 2016; Trochim et al., 2016). Privacy was protected by the confidentiality of participating colleges' information, identifying results, and saving documents electronically. Numbered coding identified community colleges and their corresponding survey scores using the schema of CC1, CC2, and CC3. Similar numbered and abbreviated coding identified the personnel interviews: CC1AVP (Community College #1 Academic Vice President), CC2FTF (Community College #2 Full-time Faculty), and similar coding for the corresponding interviews of college personnel.

CONTENT VALIDITY AND RELIABILITY

Using a mixed-methods approach helped to ensure internal validity and increase the reliability of the study's findings (Creswell, 2015; Merriam & Tisdell, 2016; Trochim et al., 2016). Pearson *r* correlation identified correlations of the Great Colleges-HEIS employee dimensions with the CCSSE benchmarks since both are continuous interval measures. Personal interviews with three college personnel from each of the three community colleges interviewed served as a check and validation. This triangulation of data, using multiple measures, increased the study's internal validity and reliability (Merriam & Tisdell; Trochim et al.).

Phase 2 of the study helped to uncover factors that potentially contributed to improvements in survey scores. To improve the study's validity, the researcher gave adequate data collection and review time during both phases. Consistency was maintained throughout the study in selecting the colleges to interview, using the same interview approach and format, and coding and theming the interview transcripts.

RESEARCHER BIAS

Several biases were potential threats to the validity of this study. First, the researcher served as both the data collector and analyst. A professional analyst checked the data analysis in Phase 1 to ensure reliability. For Phase 2 interviews, the researcher began each interview with the same general introductory question that related the survey scores of the college to the college leaders. Clarification and follow-up questions were used based on specific areas of the surveys, as outlined in Appendices C and D. The initial general research question focused the subjects on sharing what had occurred at their colleges to improve their survey scores. The follow-up questions, prepared in advance, were rarely used during the interviews. At least two, if not all three, leaders interviewed at a college mentioned the same college events and initiatives as contributing factors to their improved survey scores.

The first two interviews from the same college led to an unexpected finding which informed the researcher to add another topic to the remaining seven interviews. The data collection lasted approximately ten weeks.

The researcher intentionally kept an open mind in reviewing the secondary survey data, the descriptive and statistical results, and the interviews for other perspectives that support alternative explanations for findings. The triangulation of data from the survey results and the interview outcomes helped to reduce researcher bias and increase the validity of the study's findings (Merriam & Tisdell, 2016).

STUDY LIMITATIONS AND DELIMITATIONS

Limitations

For Phase 1, all 44 community colleges fulfilling the study criteria were invited to participate. To attract more colleges for the study, a change in criteria was made and approved by

the Ferris State University IRB. The scope of colleges eligible to participate in the study was broadened by reducing the time between survey administrations from five years originally planned to four years. This reduction to four years between surveys reduced the time colleges had to devote to change initiatives but resulted in an additional 14 colleges eligible to participate. Fourteen of the 44 community colleges invited signed the informed consent and provided the data required; thus, all colleges willing to participate were used in the study. Random probability sampling of the Great Colleges-HEIS and CCSSE population of colleges would have maximized the study's external validity, according to Trochim and colleagues (2016). However, the numbers willing to participate would not allow for random sampling. The researcher thought it better to include more colleges in the study by reducing the time by one year.

For Phase 1 data analysis, composite standardized survey scores were used, which are compared to a cohort of similar-sized colleges and more familiar to college leaders. Comparing colleges over time is not recommended by CCCSE since cohorts, students, faculty, staff, and the institutional focus of a college change (CCCSE, 2022). However, CCSSE can be used by an individual college for: benchmarking within the three-year assigned CCSSE cohort, monitoring their student engagement trends, growth, or decline, and prioritizing the next steps in improving student engagement (CCCSE).

Delimitations

Phase 1 study delimitations included using community colleges that completed the Great Colleges-HEIS and the CCSSE twice, each with a minimum of four years between results from 2008 to 2017. The timeframe to improve college culture and student engagement is relatively short since most cultural changes take several years, and it may be slow for changes to appear in survey scores. However, gathering more colleges to participate was also crucial for the study.

Using the Great Colleges-HEIS survey may limit generalizability, particularly for those colleges that use other culture surveys. However, the study's outcomes may still be applicable in informing community colleges generally on how to transform cultures to be more student-focused and engaging for students.

For Phase 2, purposive sampling was used for interviews of individuals from three colleges exhibiting the greatest improvements in survey scores while representing various enrollments and geographic regions. The parameters for inviting college personnel included those college leaders whose roles included oversight for the areas exhibiting survey improvements, who were present during both survey administrations, and who were willing to be interviewed. For one of the participating colleges, the researcher experienced challenges locating the retired administrators who had been present for both administrations of the surveys, but it was accomplished.

The researcher attempted to focus on faculty-initiated or faculty-facilitated strategies to narrow the scope of the study. However, all subjects interviewed covered several similar aspects of their college's initiatives or events that may have helped contribute to improved survey scores. Asking the general introductory open-ended question seemed to encourage interviewees to cover the pertinent aspects of the college's changes and student success initiatives perceived as resulting in their college's improved survey scores.

Restricting college personnel interviews to three colleges and interviewing only three personnel at each institution may have limited the outcomes or excluded others' perspectives. Generally, most items identified during the interviews were discussed by at least two of the three subjects for each of the three colleges. Interviewing colleges that did not progress in their survey scores may have added additional insights but was outside the scope of this study.

SUMMARY

This mixed-methods explanatory sequential study sought to find relationships among 15 employee dimensions of culture measured by the Great Colleges-HEIS with five CCSSE student engagement benchmarks. Pearson *r* correlational analysis using Excel data analytics identified relationships among employee culture dimensions and student engagement benchmarks. Survey score variances were analyzed for both surveys to identify the colleges exhibiting the greatest improvements in survey scores. Researcher-conducted semi-formal interviews of three college leaders from each of the three community colleges showing the greatest improvements in survey scores revealed college initiatives and events perceived to contribute to the culture and student engagement score improvements.

The study's findings may help community college leaders transform their organizational cultures to support student engagement efforts leading to improved student learning. The interviews may identify challenges and barriers community colleges should avoid in their transformation efforts to improve student engagement.

Chapter Four shares the findings and analyses of both phases of the study. Chapter Five integrates the findings from both phases of the study using the AACC Institutional Responses as the framework which prompted the study.

CHAPTER FOUR: RESULTS AND ANALYSIS

INTRODUCTION

Chapter Four presents the data in this mixed-methods explanatory sequential study to understand better the relationships among community college cultural dimensions and student engagement benchmarks. Phase 1 found 31 relationships out of a possible 75 pairings among 15 Great Colleges-HEIS employee dimensions and the five CCSSE student engagement benchmarks. Interviews from three leaders from each of the three community colleges showing the greatest survey score improvements uncovered probable events, process changes, and college initiatives that may have contributed to the increased survey scores. The findings from the nine community college leader interviews fit into three broad categories: Authentic Relational Leadership, Distinctively Strong Student Focus, and Collegewide Initiatives and Events. The research questions addressed in this study were:

1. How are the employee dimensions of community college culture measured by the Great Colleges-HEIS related to the student engagement benchmarks measured by the Community College Survey of Student Engagement (CCSSE)? (Quantitative Phase 1).
2. What types of college events, initiatives, or changes helped improve college climate and student engagement as measured by the Great Colleges-HEIS and the CCSSE, respectively? (Qualitative Phase 2)

PHASE 1: SURVEY SAMPLE DEMOGRAPHICS AND SECONDARY DESCRIPTIVE DATA COLLECTED

Forty-four community colleges met the study criteria: completing the Great Colleges-HEIS and CCSSE surveys twice, with a minimum of four years between survey administrations,

within the years 2008 through 2017. All 44 community colleges were invited to participate in the study. After a prolonged data collection time of eight months (delayed by the Covid-19 pandemic disruption forcing community college campus closures), 14 community colleges provided the secondary data to complete Phase 1 of the study, resulting in a 32% response rate. The 14 participating community colleges' descriptive survey data for the Great Colleges-HEIS and CCSSE are found in Appendix E, along with the colleges' geographic location and student enrollment (as classified by the Great Colleges-HEIS survey). CC1, CC2, through CC14 identify the participating community colleges. The Great Colleges-HEIS (GC) foundational (or baseline) scores are recorded as GC20##-1, which includes the year administered; the subsequent Great Colleges-HEIS scores from a minimum of four years later are recorded as GC20##-2 with the year administered. Likewise, CCSSE foundational (or baseline) scores are recorded as CCSSE20##-1, which includes the administration year; the subsequent scores from a minimum of four years later are recorded as CCSSE20##-2 with the year administered. Refer to the List of Abbreviations used for the 15 employee dimensions of the Great Colleges-HEIS and the five CCSSE benchmarks.

Changes in college survey scores from the baseline administration (GC1 and CCSSE1) to the subsequent administrations of a minimum of four years later (GC2 and CCSSE2) identified the most improved colleges. The Great Colleges-HEIS scores are reported as an overall percent of positive scores for each dimension, with the difference from GC1 to GC2 reported as the change in percentage units. The CCSSE scores include the standardized composite score for each student engagement benchmark, with the difference from CCSSE1 to CCSSE2 scores calculated as a percentage of change. A positive percent change shows an increase or improvement in the employee dimension or student engagement benchmark; a negative percent change represents a

decrease in the employee dimension or student engagement benchmark between survey administrations.

According to the Community College Survey of Student Engagement (2019) and Great Colleges to Work For (2020), colleges should not compare scores from one college to another. However, cohort data provided by Great Colleges-HEIS and CCSSE allow for benchmarking with colleges of similar student enrollments and urban-rural classifications. It is irrelevant for this study to use other descriptive data such as mean, standard deviation, and range. Instead, this study sought Pearson *r* relationships among employee dimensions of culture with student engagement benchmarks and probable causes for survey improvements through interviews of college personnel from colleges with the greatest survey score improvements. College leaders may use their college's trends and changes in scores to track progress and make informed decisions for strategic planning, improvements in teaching practices and student learning, design of campus facilities, organizational culture, and business practices (Marti, 2008). However, college leaders must realize that students, faculty, and staff change from survey to survey.

Relationships: Great Colleges-HEIS Dimensions and CCSSE Benchmarks

This study used Pearson *r* correlation to seek directional relationships among the employee cultural dimensions of the Great Colleges-HEIS and student engagement benchmarks of the CCSSE. Pearson *r* correlation requires interval measurements to seek the degree of a relationship between two variables (Trochim et al., 2016). The Great Colleges-HEIS employee dimensions and the CCSSE benchmarks are both interval measurements, showing meaningful differences between the score variables. Thus, Pearson *r* correlation was the most appropriate and practical statistical tool to identify relationships and the strength between two survey variables (a composite employee culture dimension and a composite CCSSE student

benchmark). The measurement scales for the Great Colleges-HEIS and CCSSE surveys are different; the surveys focus on different populations (employees and students), and the survey administrations vary from 2008 through 2017. Pearson *r* correlation gives direction and strength of relationships for interval-measured variables and does not test causal relationships.

The researcher selected Excel data analytics for its ease of use and availability. The data variables used were the Great Colleges-HEIS 1 and 2 standardized composite scores and CCSSE 1 and 2 standardized composite scores. Refer to Appendices A and B for the specific statements included within each Great Colleges-HEIS employee dimension and CCSSE student engagement benchmark; each statement impacts a specific Great Colleges-HEIS employee dimension or a CCSSE benchmark score.

This study found several significantly related relationships between the employee dimensions and student engagement benchmarks. Using Excel's data analytics capability, a correlation matrix gives the Pearson *r* correlations for all variables. The significant relationships are noted with asterisks (* for 0.05 p level and ** for 0.01 p level), found in Table 2. Data come from the population of 14 community colleges. The threshold for statistical significance was set at $p <= 0.05$. Pearson *r* correlations always range between -1.0 and 1.0. The closer the Pearson *r* is to 1, the stronger the positive correlation, and the closer the Pearson *r* is to -1, the stronger the negative correlation (Trochim et al., 2016). Thus, as an employee dimension increases, its related CCSSE benchmark should also increase. The reverse is also true; as the CCSSE benchmark increases, the related Great Colleges-HEIS employee dimension should also increase. Again, this study used Pearson *r* correlation to find related variables, not causal relationships.

Table 2. Pearson *r* Correlations for Great Colleges-HEIS Dimensions and CCSSE Benchmarks

	CCSSE				
GREAT COLLEGES-HEIS	1 ACTIVE LEARN2	2 STUDENT EFFORT2	3 ACADEMIC CHALLENGE2	4 STUDENT-FACULTY INTER2	5 SUPPORT FOR LEARNERS2
GC JobSatisfaction2	0.56*	0.58*	0.37	0.14	0.71**
GC Teach Environ2	0.56*	0.69**	0.45	0.24	0.77**
GC Prof. Dev2	0.30	0.61*	0.25	0.42	0.64*
GC Compensation/ Benefits2	0.22	0.53	0.51	0.45	0.75**
GC Facilities2	0.45	0.52	0.52	0.28	0.78**
GC Policies/Resources2	0.44	0.55*	0.48	0.32	0.81**
GC Shared Governance2	0.28	0.62*	0.31	0.38	0.70**
GC Pride2	0.59*	0.64*	0.49	0.40	0.79**
GC Supervision2	0.48	0.52	0.53	0.29	0.82**
GC Senior Leadership2	0.35	0.58*	0.31	0.43	0.72**
GC Faculty/Admin/Staff2	0.41	0.59*	0.43	0.31	0.75**
GC Communication2	0.43	0.60*	0.51	0.40	0.80**
GC Collaboration2	0.42	0.55*	0.50	0.26	0.73**
GC Fairness2	0.35	0.61*	0.51	0.48	0.81**
GC Respect/Appreciation2	0.44	0.63*	0.56*	0.42	0.85**

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Shaded cells show where Pearson *r* was not significant.

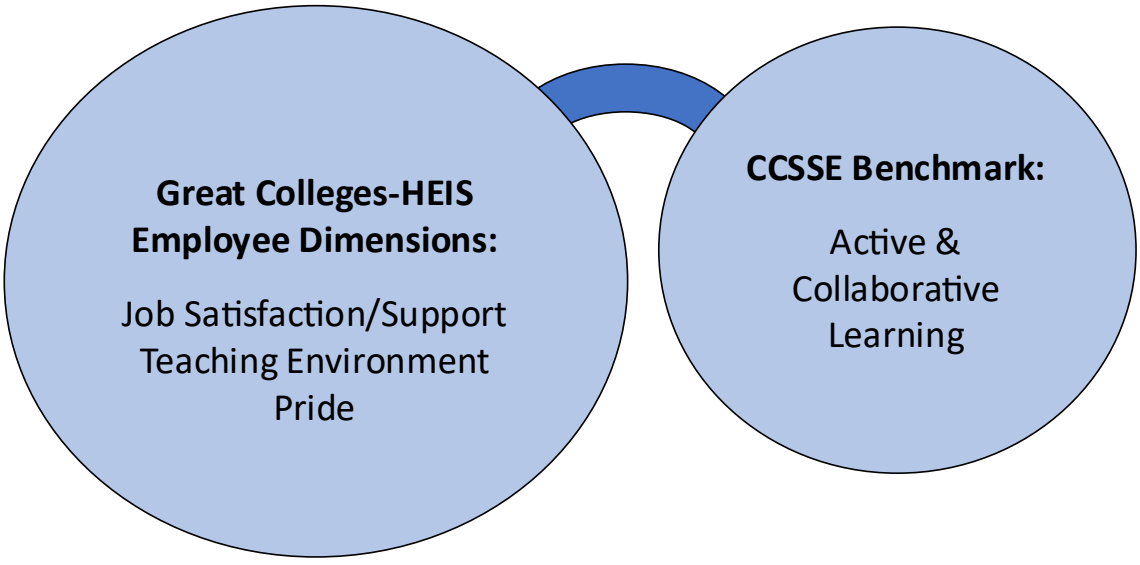
Relationships: Great Colleges-HEIS Employee Dimensions2 and CCSSE's Active and Collaborative Learning2

Three Great Colleges-HEIS employee dimensions were significantly related to the Active and Collaborative Learning benchmark. Job Satisfaction, Teaching Environment, and Pride were positively related to student perceptions of Active and Collaborative Learning, with the Pearson *r* correlates less than 0.60 (Table 2, Column 1).

Analysis: Great Colleges-HEIS2 Employee Dimensions and CCSSE's Benchmark of Active and Collaborative Learning2

Included in CCSSE's Active and Collaborative Learning, students report whether they: ask questions and contribute to class discussions, make class presentations, work with other students on class projects in class and outside of class, tutor or help other students, participate in a community-based class project, and discuss ideas from class and readings with family or friends. As the employee dimensions of Job Satisfaction and Support, the Teaching Environment, and Pride scores go up, the Active and Collaborative Learning benchmark scores also go up. While it is also possible for the reverse to be true, it is more likely that aspects of employee culture measured by Job Satisfaction, the Teaching Environment, and Pride impact the students' experience and perceptions. Figure 7 visually depicts the Pearson *r* correlation.

Figure 7. Correlation with Three Great Colleges-HEIS Employee Dimensions and CCSSE's Active and Collaborative Learning



Note: Refer to Appendices A and B to review individual statements included in the Great Colleges-HEIS employee dimensions and the CCSSE benchmarks

These results support Dennison's research linking organizational culture traits to business performance measures (2009). Dennison's findings imply that employee cultural dimensions, such as Job Satisfaction and Support, Teaching Environment, and Pride, could relate to community college performance measures, such as student learning and CCSSE's Active and Collaborative Learning benchmark. Chickering and Gamson's 1987 principles of developing cooperation among students, using active learning techniques, and faculty communicating high expectations apply to these three relationships. Additionally, Chickering and Gamson's recommended cultural changes of sharing a strong sense of purpose, holding faculty and staff to high expectations, holding employees accountable, and offering adequate support for professional development and physical teaching resources apply to strengthening the three employee dimensions: Job Satisfaction and Support, Teaching Environment, and Pride, all related to Active and Collaborative Learning. Similarly, Barr and Tagg's Learning Paradigm (1995) and O'Banion's Learning College principles (1997) point to employee culture improving student engagement, as these three relationships indicate. Nutt and Hardman's research on GRIT, student beliefs and persistence, and a positive mindset makes positive differences in student engagement and reinforces how faculty and staff also need to change their mindsets to focus more on student learning (2019). Balog and Search's (2006) CCSSE research of Tallahassee Community College linked student engagement with the cultural belief that education is a shared responsibility between a faculty member and a learner. This shared learning principle aligns with and supports relationships found among CCSSE's Active and Collaborative Learning with the Great College's employee dimensions of Job Satisfaction and Support, Teaching Environment, and Pride.

Encouraging, supporting, and facilitating metacognition may be a new role for many faculty. Umbach and Wawrzynski's study of the NSSE (the university version of CCSSE) found that faculty behaviors and practices affect student engagement and learning, thus recommending that higher education leaders create improved methods to incentivize, reward, and support quality faculty practices (2005). Umbach and Wawrzynski's findings relate specifically to the relationships between Job Satisfaction and Support, Teaching Environment, and Pride with Active and Collaborative Learning. Bailey et al. (2015), McGuire (2015), and Stout (2018) all recommended redesigning classroom instruction and teaching metacognition within the classroom to improve student engagement. These recommendations support Active and Collaborative Learning while reinforcing the teaching and practicing of metacognition in the classroom.

Relationships: Great Colleges-HEIS2 Employee Dimensions and CCSSE Student Effort2

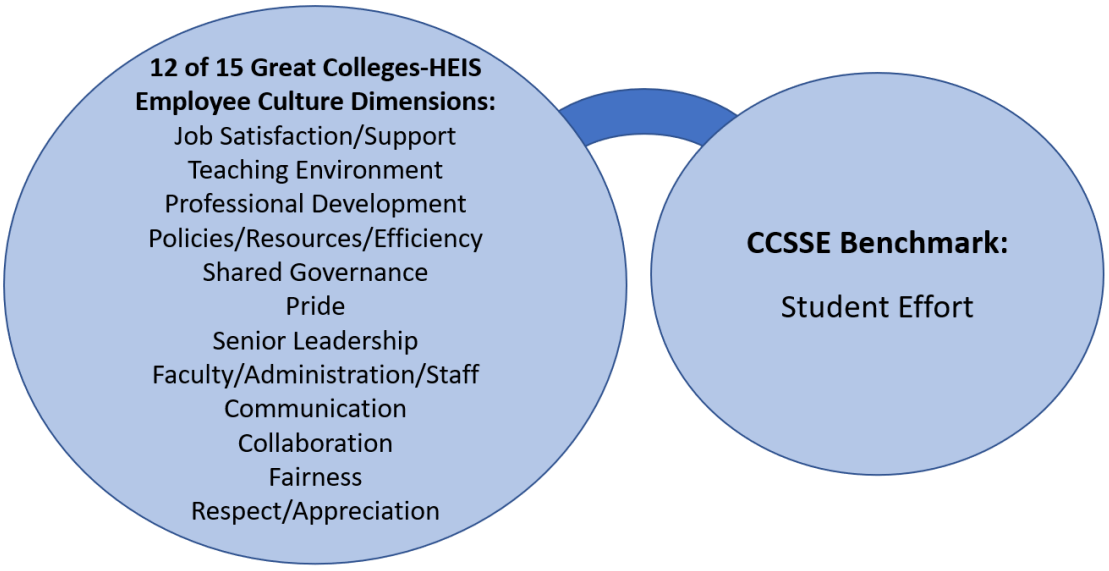
Twelve employee dimensions significantly correlated with the CCSSE benchmark of Student Effort (Table 2, Column 2). Pearson *r* correlations ranged from 0.55 for Policies, Resources, and Efficiency and Collaboration employee dimensions to 0.69 for the Teaching Environment dimension. Of the 12 CCSSE Student Effort relationships identified (Table 2, Column 2), 10 are stronger than the 3 CCSSE Active and Collaborative Learning relationships identified, as shown by comparing Columns 1 and 2 of Table 2. The closer the Pearson *r* is to 1, the stronger the positive relationship or linkage (Trochim et al., 2016). The relationship between Pride with Active and Collaborative Learning correlates at a moderate Pearson *r* of 0.59. In contrast, the relationship of Pride with Student Effort correlates at a stronger Pearson *r* of 0.64. The relationship between Teaching Environment and Active and Collaborative Learning

correlates at a low moderate Pearson *r* of 0.56. In contrast, the relationship of Teaching Environment with Student Effort correlates at a stronger Pearson *r* of 0.69.

Analysis: Great Colleges-HEIS Employee Dimensions and CCSSE Benchmark of Student Effort

Of the 15 dimensions of employee culture measured by the Great Colleges-HEIS, 12 relate to Student Effort, as measured by CCSSE. In summary, students' actions of completing assignments, preparing drafts of papers, working on projects needing integration of sources, reading for pleasure, and using tutoring and skills labs, which make up CCSSE's composite Student Effort benchmark, correlate with 12 employee dimensions of culture, measured by the Great Colleges-HEIS depicted in Figure 8. The Great Colleges-HEIS employee dimensions of Compensation and Benefits, Facilities, and Supervision were not significantly related to CCSSE's Student Effort.

Figure 8. Correlation between Great Colleges-HEIS Employee Dimensions and CCSSE's Student Effort



Note: Refer to Appendices A and B to review individual statements included in the Great Colleges-HEIS employee dimensions and the CCSSE benchmarks

As the scores of these 12 Great Colleges-HEIS employee dimensions go up, the positive correlation indicates that the CCSSE's Student Effort score should also go up, and the converse would also be true. Simply stated, good teaching and strong academic support encourage and motivate students to put more effort into their learning. At the same time, hard-working students motivate faculty and staff to improve their teaching and support.

These 12 related employee dimensions with Student Effort confirm Kadlec and Rowlett's (2014) research demonstrating that a positive student learning culture exists when faculty and academic support services work together to improve student learning. A positive student learning culture, such as Nutt and Hardman's (2019) Students' Belief Agenda at Lone Star-Tomball, also affirms these 12 related pairs of employee dimensions and Student Effort: faculty and staff serve as motivators, coaches, and encouragers for student learning because they feel valued, understand their college's mission, are proud of their work, and feel their skills and talents are used. These 12 related pairs of employee dimensions linked to Student Effort are supported by McGuire's (2015) research that faculty can best motivate students to make changes in their learning through the use and practice of metacognition and by encouraging students to use the college's academic support services.

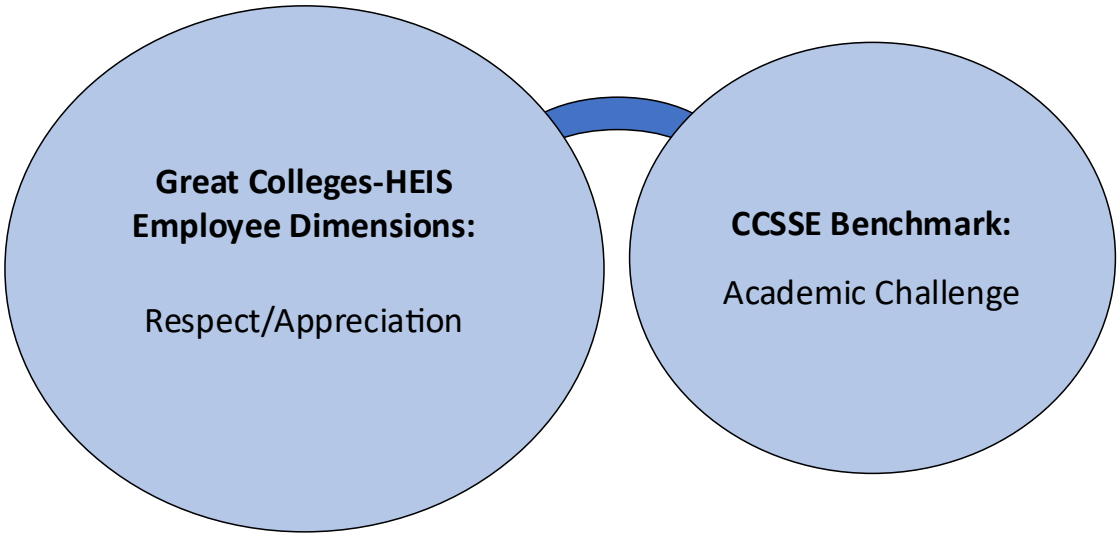
Relationships: Great Colleges-HEIS Employee Dimensions2 and CCSSE Academic Challenge2

Only one of the employee culture dimensions significantly relates to the CCSSE Academic Challenge benchmark (Table 2, Column 3). The related pair of Respect and Appreciation with Academic Challenge shows a moderate Pearson *r* of 0.56 compared to the Pearson *r* of 0.63 for the Respect and Appreciation with Student Effort pair.

Analysis: Great Colleges-HEIS Employee Dimensions2 and CCSSE Benchmark of Academic Challenge2

Only the Great Colleges-HEIS employee dimension of Respect and Appreciation relates significantly to CCSSE's benchmark of Academic Challenge. As the score for Respect and Appreciation increases, Academic Challenge should also increase, as shown in Figure 9, and vice versa. This linkage emphasizes the importance of recognizing and celebrating faculty and staff accomplishments, innovations, and milestones while fostering inclusive, collegial support for all faculty and staff.

Figure 9. Correlation between Great Colleges-HEIS Employee Dimensions and CCSSE's Academic Challenge



Note: Refer to Appendices A and B to review individual statements included in the Great Colleges-HEIS employee dimensions and the CCSSE benchmarks

In summary, CCSSE's Academic Challenge benchmark measures a team effort of learning designed and facilitated by the teacher for student learning: students are challenged to work harder than expected by analyzing, synthesizing, evaluating, applying theories to new situations, and learning new skills. Students are encouraged to read and study more and are

stretched in many ways in CCSSE's Academic Challenge. This CCSSE benchmark is about student rigor, holding and maintaining high expectations, and practicing and demonstrating critical thinking skills. This correlation leads to speculation that faculty and staff may work harder to improve student engagement by using academic rigor, as measured by CCSSE's Academic Challenge when they feel respected, valued, appreciated, and recognized for their teaching.

The linkage of Respect and Appreciation with Academic Challenge aligns with Smart and Hamm's (1992) findings on the differences in the effectiveness of cultures. Smart and Hamm found that colleges displaying the Adhocracy (create) culture of innovation, risk-taking, adaptability, entrepreneurial spirit, and growth appear to be most effective, with Clan (collaborate) and Market (compete) cultures displaying mid-range effectiveness. The research studies cited for improving CCSSE's Active and Collaborative Learning align with improving CCSSE's Academic Challenge, as well (Balog & Search, 2006; Barr & Tagg, 1995; Chickering & Gamson, 1987; Dennison, 2009; Nutt & Hardman, 2019; O'Banion, 1997; Umbach and Wawrzynski, 2005). The CCSSE Academic Challenge benchmark reflects students' perceptions of using higher-order thinking skills and metacognition while held to high expectations, all strategies designed and facilitated by faculty.

Relationships: Great Colleges-HEIS Employee Dimensions2 and CCSSE Student-Faculty Interaction2

None of the Great Colleges-HEIS employee cultural dimensions were significantly related to the CCSSE Student-Faculty Interaction benchmark (Table 2, Column 4). The highest Pearson *r* correlate was Fairness at 0.48 with the lowest Pearson *r* correlate 0.14 with Job Satisfaction/Support.

Analysis: Great Colleges-HEIS Employee Dimensions2 and CCSSE Student-Faculty Interaction2

CCSSE's Student-Faculty Interaction shows no significant relationship with any Great Colleges-HEIS employee dimensions of culture. This CCSSE benchmark covers students and faculty/advisor communications (inside and outside the classroom) regarding grades, assignments, career plans, and ideas gleaned from readings or classes. Students receiving prompt feedback from their faculty and working with instructors outside of class are also included. CCSSE research encourages strong faculty, advisor, and student communication to increase student engagement. No other literature found aligned student-faculty interactions with any employee cultural dimensions. The Center for Community College Student Engagement (CCCSE) reported that student use of email for communicating with faculty rose from 79% in 2004 to 96% in 2014, sharing how CCSSE benchmarks were rising nationally (2015). Perhaps student-faculty interactions are defined too broadly, are too varied, and are too inconsistent to find correlations within the reported data from this study representing 14 community colleges.

Relationships: Great Colleges-HEIS Employee Dimensions2 and CCSSE Support for Learners2

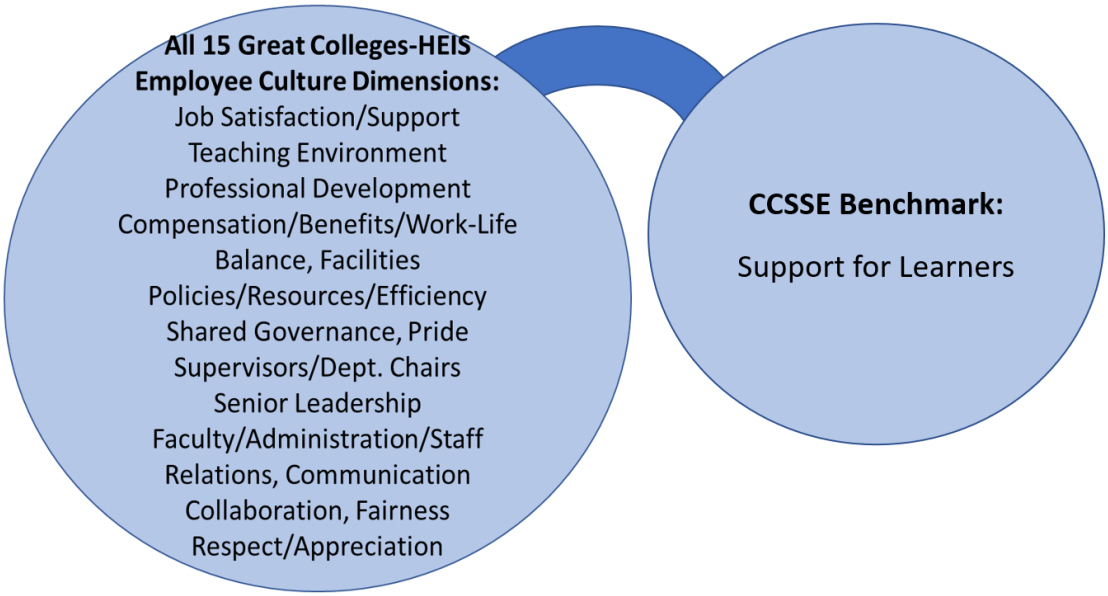
A most affirming finding was that all 15 of the Great Colleges-HEIS employee cultural dimensions related significantly and strongly positively with the CCSSE benchmark of Support for Learners (Table 2, Column 5). The Pearson *r* correlations ranged from 0.64 to 0.85.

Analysis: Great Colleges-HEIS Employee Dimensions and CCSSE Benchmark of Support for Learners

Students' perceptions of their institution's support for student success; encouraging contact among students from all economic, social, racial, and ethnic backgrounds; supporting students with non-academic responsibilities; supporting students financially; and the frequency

that students use advising and career counseling (statements comprising the CCSSE Support for Learners benchmark), are strongly related with all 15 Great Colleges-HEIS employee dimensions of culture. As scores on these 15 employee dimensions of culture increase, the CCSSE Support for Learners should also increase. These strong correlations suggest that improving aspects of CCSSE's Support for Learners should positively impact the 15 Great Colleges-HEIS employee dimensions of culture, as depicted in Figure 10.

Figure 10. Correlation between Great Colleges-HEIS Employee Dimensions and CCSSE's Support for Learners



Note: Refer to Appendices A and B to review individual statements included in the Great Colleges-HEIS employee dimensions and the CCSSE benchmarks

The strong, positive, and significant correlations between the 15 Great Colleges-HEIS Employee Dimensions and CCSSE's Support for Learners benchmark align with McClenney and Arnsparger's (2012) research. McClenney and Arnsparger found that understanding a college's organizational culture and listening to and learning from students help college faculty and staff focus on increasing student engagement inside and outside the classroom. Understanding an

institution's culture before beginning any new institution-wide initiatives was emphasized in Kempner's (1990) case study of college culture. Sokugawa's (1996) study of seven community colleges emphasized the importance of communicating college goals effectively. Kadlec and Rowlett's (2014) research of higher education warned that leaders need to recognize and address the preparedness of their institution for change before initiating any student success initiative.

It appears that the more colleges support students and their learning, the more students' efforts will improve, which may motivate faculty and staff to become better facilitators of learning. This cycle demonstrates the relationships of the Great Colleges-HEIS employee dimensions of Job Satisfaction and Support, Teaching Environment, Pride, Communication, Collaboration, Fairness, and Respect and Appreciation, with CCSSE's Active and Collaborative Learning, Academic Challenge, Student Effort, and Support for Learners, cited previously (Balog & Search, 2006; Barr & Tagg, 1995; Bailey et al., 2015; Cameron & Quinn, 2011; Chickering & Gamson, 1987; Dennison, 2009; Kadlec & Rowlett, 2014; McGuire, 2015; Nutt & Hardman, 2019; O'Banion, 1997; Smart & Hamm, 1992; Umbach and Wawrzynski, 2005). Three Great Colleges-HEIS employee cultural dimensions — Compensation, Benefits, and Work-Life Balance; Facilities; and Supervision — were correlates only of Support for Learners and no other dimensions.

Ranking of Pearson *r* Correlations Found Among Great Colleges-HEIS2 and CCSSE2

Table 3 ranks the 31 significant correlations found, from strongest (highest) Pearson *r* to moderate (lower) Pearson *r*, for all the related pairs of Great Colleges-HEIS2 employee dimensions with CCSSE2 student benchmarks. This ranking may help community college leaders prioritize dimensions of culture to address with the intent of improving student engagement. Four employee culture dimensions relate to at least three different student

engagement benchmarks, highlighted in bold in Table 3: Respect and Appreciation (rankings 1, 18, and 27), Pride (rankings 6, 16, and 24), Teaching Environment (rankings 8, 15, and 29), and Job Satisfaction (rankings 13, 26, and 28). This finding — that four employee dimensions correlate to three different student engagement benchmarks — has implications for cultural transformation to be discussed in Chapter Five. Only CCSSE's Student-Faculty Interaction lacked any Great Colleges-HEIS significant correlates.

Table 3. Ranking of Pearson *r* Correlations, Highest to Lowest in Strength

RANK	PEARSON *r*	GREAT COLLEGES-HEIS2	CCSSE2
1	**0.85****	**Respect & Appreciation**	**Support for Learners**
2	0.82**	Supervision	Support for Learners
3	0.82**	Policies, Resources & Efficiency	Support for Learners
4	0.81**	Fairness	Support for Learners
5	0.80**	Communication	Support for Learners
6	**0.79****	**Pride**	**Support for Learners**
7	0.78**	Facilities	Support for Learners
8	**0.77****	**Teaching Environment**	**Support for Learners**
9	0.75**	Faculty, Administration, Staff	Support for Learners
10	0.75**	Compensation & Benefits	Support for Learners
11	0.73**	Collaboration	Support for Learners
12	0.72**	Senior Leadership	Support for Learners
13	**0.71****	**Job Satisfaction & Support**	**Support for Learners**
14	0.70**	Shared Governance	Support for Learners
15	**0.69****	**Teaching Environment**	**Student Effort**
16	**0.64***	**Pride**	**Student Effort**
17	0.64*	Professional Development	Support for Learners
18	**0.63***	**Respect & Appreciation**	**Student Effort**
19	0.62*	Shared Governance	Student Effort
20	0.61*	Professional Development	Student Effort
21	0.61*	Fairness	Student Effort
22	0.60*	Communication	Student Effort
23	0.59*	Faculty, Staff, Administration	Student Effort

RANK	PEARSON *r*	GREAT COLLEGES-HEIS2	CCSSE2
24	**0.59***	**Pride**	**Active & Collaborative Learning**
25	0.58*	Senior Leadership	Student Effort
26	**0.58***	**Job Satisfaction & Support**	**Student Effort**
27	**0.56***	**Respect & Appreciation**	**Academic Challenge**
28	**0.56***	**Job Satisfaction & Support**	**Active & Collaborative Learning**
29	**0.56***	**Teaching Environment**	**Active & Collaborative Learning**
30	0.55*	Policies, Resources & Efficiency	Student Effort
31	0.55*	Collaboration	Student Effort

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

GREATEST IMPROVEMENTS IN SURVEY SCORES FROM PHASE 2 INTERVIEWS

Phase 1 included analyzing Great Colleges-HEIS and CCSSE survey data to identify community colleges to invite to participate in Phase 2 interviews. Four community colleges were identified purposefully because of their increased scores on the subsequent surveys and their different geographic locations. Four community colleges were invited to participate in Phase 2 interviews; however, CC4 never responded to the invitation after multiple contact attempts. College leaders overseeing functional areas related to the survey score increases and employed during the survey administrations, from CC2, CC6, and CC10, were voluntarily interviewed for the Phase 2 qualitative portion of the study.

Appendix E provides the raw secondary survey data, descriptive data for survey percent changes, the college geographic location, student enrollment size, and explanations regarding Phase 2 selection for interview participation for all 14 participating colleges. Finding college personnel present during both survey administrations and knowledgeable of the areas of improvement proved somewhat challenging, especially for CC2. The bold data in Appendix E,

within shaded gray cells, highlights the more substantive increases in survey percentages for the 14 colleges. The colleges selected for Phase 2 interviews, labeled with an asterisk (*), such as CC2-GC* and CC2-CCSSE*, include brief explanations for the interview selection, CC2*, Interviewed.

A single substantive change in one Great College-HEIS employee dimension or one CCSSE benchmark did not qualify a college for an interview. For example, CC11 realized a 17% increase in Active and Collaborative Learning. However, other increases for CC11 were only 2-5%, whereas another college, CC10, had increases in all five CCSSE benchmarks at 10–12 % ranges. Colleges showing the greatest percentage of change on the Great Colleges-HEIS surveys, the greatest percent change on the CCSSE surveys, and varying regions of the country were selected for Phase 2 interviews. Table 4 summarizes the community colleges and college leader roles interviewed. The interviews revealed the leaders' perceptions of probable college events, initiatives, and process changes that helped improve their college's survey scores.

Table 4. Summary of Community Colleges and Personnel Interviewed in Phase 2

College / Region	Student Enrollment	Great College-HEIS Changes	CCSSE Increases	Personnel Interviewed
CC2 Northeastern	Medium 3,000 – 9,999	• Substantial increases of 15–31% for all 15 employee dimensions	• Active Learning: 9% increase • Academic Challenge: 10% increase	• Former President • Former Faculty/Dean • Former VPA
CC6 Midwest	Medium 3,000 – 9,999	• Minimal increases; several slight decreases	• Active Learning: 9% increase • Student-Faculty Interaction: 10% increase • Support for Learners: 8% increase	• VPA • Dean • Staff/Adjunct

College / Region	Student Enrollment	Great College-HEIS Changes	CCSSE Increases	Personnel Interviewed
CC10 South Central	Large > 10,000	• Compensation/ • Benefits: 10% increase • Shared Governance: 13% increase • Senior Leadership: 9% increase • Faculty/ • Administration/ • Staff Relations: 9% increase • Fair: 9% increase	• Active Learning: 10% increase • Student Effort: 11% increase • Academic Challenge: 10% increase • Student-Faculty Interaction: 12% increase • Support for Learners: 11% increase	• Dean/VPA • Dean • FT Faculty

PHASE 2: INTERVIEWS OF COLLEGE PERSONNEL FROM COMMUNITY COLLEGES WITH THE GREATEST INCREASES IN SURVEY SCORES

The college personnel interviews were rich in discussion after asking the initial question, "What types of college events, initiatives, or changes helped improve college climate and student engagement as measured by the Great Colleges-HEIS climate survey and the CCSSE, respectively?" The researcher used prepared follow-up questions minimally since relevant conversations flowed effortlessly after asking the initial question. The leaders interviewed were provided a summary of their survey score changes when scheduling the interview appointments so they could be prepared to address the data specific to the increased survey scores during the timeframe of the surveys. If needed, follow-up questions were used for clarification and aligned with the college's improved survey score areas. Refer to Appendices C and D for the Semi-Structured Personnel Interview Follow-up Questions based on the Great Colleges-HEIS and the CCSSE survey statements.

Table 5 lists the findings from nine interviews from three community colleges; the answers provided are the interviewee's probable reasons for the college's score improvements. In Table 5, the dates span the years of both surveys, earliest to most recent, and include a

summary of survey score changes. Three broad recurring themes depicted the interview outcomes: Authentic Relational Leadership, Distinctively Strong Student Focus, and Collegewide Initiatives and Events. The findings documented for each college were voluntarily described by at least two of the three leaders interviewed from each of the three colleges; no prompting occurred. The interview findings are explained in more detail using quotes and narrative descriptions following the summary highlights in Table 5.

Table 5: Reasons for Survey Improvements from College Leader Interviews

CC2 PROBABLE IMPACTS 2010-16	CC6 PROBABLE IMPACTS 2009-15	CC10 PROBABLE IMPACTS 2009-17
GREAT COLLEGES-HEIS		
Substantial increases of 15% - 31% for all 15 employee dimensions	Minimal increases; several slight decreases	• Compensation/Benefits: 10% increase • Shared Governance: 13% increase • Senior Leadership: 9% increase • Faculty/Administration/ Staff Relations: 9% increase • Fair: 9% increase
CCSSE		
• Active Learning: 9% increase • Academic Challenge: 10% increase	• Active Learning: 9% increase • Student-Faculty Interact: 10% increase • Support for Learners: 8% increase	• Active Learning: 10% increase • Student Effort: 11% increase • Academic Challenge: 10% increase • Student-Faculty Interact: 12% increase • Support for Learners: 11% increase
Total upgrading of college campus physical facilities and classroom and college technology	Caring, engaging president modeled focusing on students	Founding faculty was a nurturing president leading a strong student-focused culture
Strong, relational servant leadership in president who changed the culture	Faculty-initiated revamping of the developmental education program	Strong student-focused culture encouraged innovation and creativity

CC2 Probable Impacts 2010-16	CC6 Probable Impacts 2009-15	CC10 Probable Impacts 2009-17
Student data sharing for changes toward increased student success	Strong student focus collegewide	Learned teamwork and flexibility during an extreme weather event resulting in temporary college closure
Collaborative and accountable leadership team	Open, trusting college environment	Student data sharing used for changes toward increased student success
Transformed all business processes	Cohesive faculty who collaborate well	Emphasis on hiring for heart and concern for students
Instituted marked improvements for adjunct faculty: compensation, inclusion, onboarding, offices and workspace	Student data sharing for changes toward increased student success	Effective and fair professional development support for on-campus and external conferences
Collaborative working teams for self-study HLC reaccreditation	Training for emphasis on student focus for hiring committees	Instituted a collegewide assessment program
Added industry advisory boards for all programs		Faculty initiative to encourage student participation in campus events
Added 24 new programs		

From these interview findings summarized in Table 10, three broad recurring themes emerged describing probable causes for the three colleges' survey score improvements:

- Authentic Relational Leadership
- Distinctively Strong Student Focus
- Collegewide Initiatives and Events

Specific interview findings, quotations, and explanations follow grouped using the three broad recurring themes, describing how these strengthened and transformed college culture, which positively affected student engagement.

Recurring Theme #1 Findings: Authentic Relational Leadership

"Thoughtful visionary embodied empathy and established an encouraging and nurturing culture" were phrases used by the CC10 full-time faculty member (FT Faculty) to describe their president's leadership as a primary reason for the significant improvements in both CC10's Great Colleges-HEIS and CCSSE survey scores. The FT Faculty was "never discouraged but always encouraged to try new stuff… such as supplemental instruction, student peer-led team learning, and working with the data center in developing new math pathways and a resulting new math course." The CC10 FT Faculty also spoke of knowing the institution's goals. She felt leaders need to share clear goals; it supports faculty in making better student learning decisions. The CC10 FT Faculty stated that guessing what a leader wants is frustrating for faculty, especially when it seems the President and Vice President of Academics (VPA) have differing or competing goals. Information sharing is crucial for leaders; it prepares faculty and staff and builds trust, even when the leader does not know the complete answer but shares what is known, according to the CC10 FT Faculty.

According to CC2 VPA:

> The President [of CC2] was a passionate, strong leader who fully engaged with the students. The President hosted weekly leadership meetings and monthly conversations offered on each campus for all faculty, staff, and students, called "The President Unplugged." It was popular, and any issues could be addressed; all felt communication was open and authentic at the college. The president also instituted a complaint process to gather suggestions and issues to be addressed either by phone directly to the president or online.

According to all three leaders interviewed from CC2, the CC2 President appeared to be a highly interactive, strong servant leader, always at the college conversing or working with students, faculty, and staff or within the community promoting the college. Inclusiveness was a top priority of the CC2 President, exemplified by hosting weekly leadership meetings; inviting adjunct faculty to meetings and college events; adding onboarding for adjunct faculty; forming a

college Senate (the college's governing body) made up of faculty, staff, and students with all departments represented; and establishing industry advisory boards for programs. The advisory boards provided important external feedback for program improvement and helped establish additional student internships. CC2's Former Dean, Former VPA, and Former President all shared these same thoughts on the changes. CC10's Dean/VPA shared:

> Our President was a founding faculty member, most engaging and very nurturing, that led us through [*our catastrophic weather event*] during these surveys and the start of the pandemic, 2008 through 2020.

The president was a great communicator, hosted retreats, held a monthly open forum, and was always approachable and visible on campus, described by the Dean of CC10.

Eight of the nine interviewees spoke of shared governance or participatory governance during their interviews. However, no one could share a formal definition of governance from their institutions since none existed. The interviewees did share standard practices of including faculty and staff in appropriate decisions and communicating early with stakeholders when a potential issue arose. According to the CC6 Dean,

> No matter how hard you try, something's going to happen over the summer (needing faculty involvement) and we try to get faculty involved, but it's a slow process. No matter when, I just try to give my faculty leaders a call right away and send an email to all department faculty (if warranted).

The CC10 FT Faculty member shared, "Faculty Senate meetings get lively since faculty feel comfortable sharing their thoughts without fear of repercussion." This comment speaks volumes about trusting the college leadership and the inclusive and open culture of participatory governance, according to CC10's FT Faculty member. When our new President came to CC2, the CC2 Former Dean stated:

> It was a remarkable change not only to policies, procedures, and operations, but it really was a culture change. People worked in their own departments and did the same thing they have done for the past ten years; the new President came and changed everything

> from the physical buildings to the programs offered to the leadership. He really changed the culture of the college for the better.

According to the CC2 Former Faculty/Dean, the new president of CC2 formed a leadership team of the vice presidents, deans, and all department directors, which met weekly for two to three hours to discuss and implement changes. “We learned to collaborate, speak up, listen, plan, and implement changes together,” shared the CC2 Former Faculty/Dean. She continued explaining that the culture change was immediate since the new president expected communication and accountability from all; leaders were “reminded” during Leadership Team Meetings if tasks were not yet accomplished. The CC2 Former Faculty/Dean shared that this “made some of us bristle, but the accountability expected by the new President was a positive change for our college environment. It was evident that the goal of the college and everything we did was to be student-focused; really, truly, it was.”

The CC6 Dean shared that solid leadership was not coming from the VPA because of the personnel changes and multiple vacancies. However, that did not keep faculty and deans from working together on the developmental education and student engagement initiative. The CC6 Dean reiterated that the “faculty were strong, stable, and cared about the students,” which kept us going even with unstable leadership in the VPA office.

The CC10 FT Faculty member remarked, “our leaders value the faculty, staff, and students. They know people are important, and we feel that.” The CC2 Former Faculty/Dean shared how the president “knew every faculty member, every janitor, every person in all departments, on a conversational level, not just who they were.” The president also interviewed “every (*full-time*) person hired at the college,” according to the CC10 FT Faculty member.

These attributes of change leaders follow the research and recommendations of the American Association of Community Colleges (2012, 2013, 2014); Bailey et al. (2015); Bolman

& Deal (2013); Connors & Smith (2011); Covey & Merrill (2006); Fullan (2001); Kouzes & Posner (2012); and Schein (2017).

Analysis of Authentic Relational Leadership Findings

Using Cameron and Quinn's (2011) Competing Values Framework, the dominant culture of Adhocracy (or Create) with elements of Clan (or Collaborate) and Market (or Compete) was the ideal culture for community colleges, according to Smart and Hamm's research (1992). This blend of Adhocracy with some Clan and Market cultures resembles the cultures of the three community colleges, as surmised from the interviews. The comments from CC10 FT Faculty stating that faculty need to understand the college's goals align with Kadlec and Rowlett's (2014) study of influential change leaders. According to Kadlec and Rowlett, change leaders understand the college's culture and share their vision and passion as they empower faculty and staff to solve challenges while sharpening their focus on student learning.

Excellent communication skills, valuing and empowering people, being visible and engaging, visionary, building trust, and modeling collaboration and teamwork are attributes shared by the nine interviewees of their top executive leaders. These attributes of leadership, described by the nine interviewees, are needed for transformational leaders and coincide with the recommendations of the American Association of Community Colleges (2012, 2013, 2014), the leadership required in redesigning community colleges described by Bailey et al. (2015), and the culture change process outlined by Connors and Smith (2011) and implemented by Nutt and Hardman (2019). The CC10 FT Faculty member spoke of trust and sharing differing perspectives without fear of repercussion. Interviewees from all three colleges commonly shared the relationship-building attributes of their executive leaders that build trust. The interview excerpts on relationship-building, growing trust, and enabling and strengthening others to act follow

Kouzes and Posner's five practices and ten commitments of exemplary leadership (2012). Faculty and staff felt valued, respected, and appreciated by their leaders and colleagues. These features align with Kouzes and Posner and the survey instrument researched by Great Colleges to Work For (2020).

Recurring Theme #2 Findings: Distinctively Strong Student Focus

All nine leaders interviewed expressed their college's exceptionally strong student focus and noted that building relationships were critical: faculty to faculty, faculty to student, students to students, administrators to administrators, administrators to faculty and staff, and college to the community. "Our president is very student-focused here; I feel like not all colleges are true to that," shared the VPA of CC6. "Colleges, even if they want to be, lose sight [*of the students*] and instead get concerned with the cost and time needed, or that's not our process," explained the CC6 VPA. The president came to CC6 in 2013, indicated the VPA of CC6, and focused on building relationships with the college community and employees through authentic conversations and transparency, further increasing our already strong focus on students. "His care for the students really comes through," and this "strongly influences the rest of the college employees," shared CC6's VPA. The Former VPA of CC2, working at the Board of Higher Education prior to her tenure as the VPA, shared how her perspective changed viewing from the side of educational policy to serving within a community college:

> I saw an entirely different perspective and finally understood the plight of community colleges and their students and how hard the faculty and staff work with very few resources. We combined all the student service areas into one central location to keep students from hopping all over campus.

The Dean of CC10 shared how students were more engaged in tutoring once faculty became more involved in publicizing and supporting tutoring, subsequently increasing student learning. She continued to explain that having students enrolled in college-level and

developmental courses with required tutoring dramatically improved their students' success when they consistently attended class and participated in tutoring. At CC6, the developmental education program for math and English was revamped from the placement of students to courses, sequencing, and added required tutoring; these changes helped improve student engagement and increased student success, according to the Director of Learning Support. The CC6 Director of Learning Support shared that:

> I have realized for community college students that it is all about building relationships. Whether it's a tutor, a mentor, a faculty, or an administrator, it really doesn't matter who. If students know there is somebody checking on them, missing them, and caring about them and their college work, they are more likely to come to class and do their work. The [developmental] students [coming for tutoring] respond to the personal approach, the one-on-one personalized instructional time tutors can provide, and the availability of tutors all hours of the day, through 7 p.m.

This quotation from the CC6 Director of Learning Support summarizes the collegewide student focus evident across all three colleges interviewed for this study.

Use of Student Success Data for Improving Learning

The CC10 FT Faculty member remembered her frustration that student success was not defined at their college when each faculty member received a course success data packet from their dean without explanation. Receiving this unannounced student course success data proved problematic for the faculty since it was the first-time faculty had seen such data. The lack of a definition of student success caused faculty concern regarding the use of the data, she explained. However, the conversations explaining the intended use of the data proved beneficial; faculty began to understand the entire process and use of data for increasing student learning, not for faculty evaluation, explained the CC10 FT Faculty. As the CC10 FT Faculty stated, "everybody's heart here is for student success, whatever it takes for [improving] student learning." The Dean/VPA from CC10 shared similar memories of the early years of sharing

course success data with the faculty. He explained that "additional messaging had to occur between leadership and faculty to make sure faculty understood it was not punitive" but used to increase student learning. The dashboard housing all course success data was available for deans to share with their faculty. "For under-performing faculty, private conversations were crucial for deans to hear their faculty stories; that is a big part of developing our faculty for increased student learning," shared CC10 Dean/VPA. Building those relationships allows difficult conversations to occur that may improve student learning, according to the CC10 Dean/VPA: "there's a way that you can present your expectations that is non-confrontational; I couch my expectations carefully during a conversation." The Dean of CC10 also shared the importance of the annual student data retreat hosted by the president for all vice presidents, deans, and the Faculty Senate president. The discussion summary and findings were distributed to faculty representatives from each department. It was interesting to discover that neither the FT Faculty nor the Dean/VPA of CC10 could remember ever sharing CCSSE results with the faculty. The faculty are calmer now regarding the course success data and would like the course success data readily accessible for faculty, not just the VPA and deans, shared the CC10 Dean.

Hiring for Student Focus

In asking how everyone at CC10 seems to have a heart for students, the FT Faculty stated, "I believe the consistent piece is our hiring." Hiring for student focus came up in conversations with leaders from CC6 and CC10. Proper training for hiring committee members, inviting faculty and staff outside the hiring department to serve on hiring committees, and asking an advisor to serve on the hiring committee were all mentioned as effective practices used at CC10. The Dean from CC6 shared that they offer training for hiring committees and use student scenarios during the interviews to gauge a candidate's student focus. Listening for concern and

care for students can be gleaned from the stories interviewees share during the hiring process, explained CC10 Dean/VPA. It is essential to use scenario-based and behavioral questions to bring out those stories that reflect the interviewee's heart for students, according to the CC6 Dean and the CC10 Dean/VPA.

The CC10 Dean/VPA listed the behavior traits especially sought in quality faculty candidates: the ability to work as a team player, get along with colleagues, the ability to engage students, listen effectively, and connect with students and college staff. The CC10 Dean/VPA shared, "there's a lot of gut involved in hiring; it's one of the most important tasks we do and one of the most time-consuming, too." As the CC10 VPA, he interviews all new faculty hires to share his expectations; once hired, after the initial classroom observation, expectations are discussed again in a follow-up meeting. "It's the intermingling of culture and expectations, along with accountability to encourage the growth of care and concern for our students," shared the CC10 VPA. Moreover, he reinforced looking for student focus and engagement throughout the teaching demo and resulting discussion. The Dean shared how CC10 encourages full-time faculty development and professional growth through a year-long Faculty Institute program that concentrates on pedagogy and concludes with an annual contract offered after a successful year of teaching.

Faculty Promote Campus Activities to Encourage Student Attendance

A student engagement initiative at CC10 requested faculty to promote and encourage student participation in appropriate campus-wide activities and events. Tracking attendance resulted in increased participation, according to the Dean of CC10. According to the Dean, this student engagement initiative developed from student retention discussions during the CC10 annual President's Retreat. The initiative began in 2013-14 as part of a student retention program

to engage students in college life, promoting a sense of belonging by building student and faculty-staff relationships, shared the CC10 Dean.

Analysis of Distinctively Strong Student Focus

The community college leaders spoke of students as the focus of all decisions made at their college. However, students do not always feel the focus, care, and concern of faculty and staff, according to McClenney and Arnsparger (2012). All nine college leaders interviewed echoed a genuinely strong student focus from the scenarios shared. This strong student focus aligns with the five desired culture dimensions of connection (belonging), high expectations, student potential, collaboration and integration, and evidence and inquiry of student success data, outlined by McClenney and Arnsparger (2012). The interviews revealed that the presidents led, modeled, and expected this strong student focus in all three colleges; it was authentic care and concern for students and their learning, not just talk.

Reviewing student course success data for improving student learning is an example of a significant change that needs thorough preparation and communication before releasing data to faculty. This preparation and communication before a strategy follow Kadlec and Rowlett's (2014) findings to address the human side of change and making sense of organizations by looking through Bolman and Deal's (2013) four frames: structural, human resource, political, and symbolic. Kerrigan and Jenkins (2013) recommended that deans share their use of student success data for departmental decision-making, which should help faculty grasp the idea of using data to improve student learning.

All three colleges gave examples of using student and course success data to improve student learning. However, the Dean and FT Faculty from CC10 shared more specific details of the lack of communication prior to sharing the first round of student success data packets causing

faculty concern. While the administration and faculty of CC10 recovered from the initial missteps in a lack of communication, college leaders should learn to prepare faculty and staff for these types of significant changes. All three colleges modeled putting learning first by owning their data, as Lipka (2019) stated, as a crucial step in community college transformation. Once the three colleges owned their data, they could use the data to improve student learning. Owning the data aligns with Hersh and Keeling's (2013) research. It follows the methods Broxson (2013) used at Pierce College in listening to their students, reviewing student success data, collaborating, and making instructional changes to improve student learning: all hallmarks of putting student learning first.

Flannigan, Jones, and Moore (2004) researched community college faculty hiring and found that little innovation or change had occurred in moving colleges forward to a student-focused learning environment. The interviews with the Dean/VPA and FT faculty of CC10 both shared "hiring for a student focus" as an answer to their college's improved survey scores and transformation towards a student-focused college. Hiring for a strong student focus was an unexpected finding from the interviews. These early unexpected hiring comments led the researcher to ask the other interview participants a general question about their hiring practices. Hiring for a student focus follows Jenkins and colleagues' (2018) Guided Pathways of Tennessee Community College study, which recommended that colleges rethink approaches and practices in hiring and professional development to encourage and sustain innovation.

The student engagement initiative promoting campus activities at CC10 was successful because the idea bubbled up from the President's Retreat conversations involving many stakeholders, including administration, faculty, staff, and students. Including stakeholders follows the recommendations of Kouzes and Posner's (2012) Five Practices and Ten

Commitments of Exemplary Leadership for the success of new initiatives and change. Additionally, student engagement in campus activities builds community and a sense of belonging and strengthens commitments to their learning, according to Tinto (2002).

Recurring Theme #3 Findings: Collegewide Initiatives and Events

Every leader interviewed shared events, learning initiatives, or educational processes that involved the entire college community when answering the question of probable causes for their college's increased survey scores. Completing a reaccreditation self-study by engaging the college community —faculty, staff, administration, students, and industry partners— supported strengthening a college's culture, according to the former VPA of CC2. She continued that engaged participants of self-study committees and open forums generally feel renewed pride in their college and valued as they see their input taken seriously. Feeling appreciated and pride are two employee dimensions of the Great Colleges-HEIS (Great Colleges to Work For, 2019) related to student engagement. The CC2 former VPA, specifically hired to lead the self-study process, stated:

> I approached the self-study by mobilizing every stakeholder group at the college to participate. Folks get excited when they know they are going to be evaluated by external sources. Working together collaboratively was really important and impacted our overall college culture.

Program review and assessment were revamped significantly and strengthened at CC2 during the survey administrations from 2010 to 2016, according to the Former Faculty/Dean. Faculty were involved in all aspects of program review and assessment, which helped increase faculty participation and support for the established programs moving forward, shared the CC2 Former Faculty/Dean.

The CC6 Dean stated that the transformation of their developmental education program, including testing, placement, changes in course prerequisites, and the development of informal

student learning communities, originated from the faculty after reviewing the program student success data. “The completion rate in developmental education classes changed from 30% to 78-80% completion [after the changes made in developmental education],” shared the CC6 Dean. Along with the developmental education changes, an emphasis on retention and student engagement began collegewide, offering teaching workshops from the Center for Excellence in Teaching and Learning, according to the CC6 Dean.

College Facilities and Learning Environment

At CC2, the Former President shared that the college facilities and working conditions “were dramatically improved” from 2011 to 2018, coinciding with the Great Colleges-HEIS and CCSSE survey score increases. Campus technology and infrastructure were “significantly upgraded,” two new libraries and a bookstore were added, and buildings were acquired to form two distinct, cohesive college campuses, according to the three former leaders interviewed from CC2. Campus utilizations were reviewed and revamped: opening libraries at 7:30 a.m., allowing students to print papers for 8 a.m. classes, keeping administrative offices open until 6:15 p.m. to serve evening students, and providing technology help until 8 p.m. These were all examples listed by the CC2 Former President. The development and offering of 24 new academic programs prompted the hiring of additional full-time faculty as student enrollments and credit hours increased at CC2, reported the CC2 Former President. The college leaders showed they valued adjunct faculty by granting substantial and competitive pay increases; providing shared office space with computers, printers, copy machines, and campus mailboxes; and inviting adjunct faculty to department meetings, faculty workshops, and college events, explained the Former President and Former VPA of CC2. The working conditions for faculty and staff and the learning environment for students “dramatically improved,” which spearheaded a renewed sense

of pride among all employees and students, improving the college's overall culture, shared CC2's Former President and Former VPA. CC2's Great Colleges-HEIS Pride score increased by 16 percentage points, and the College Facilities score increased by 31% from 2012 to 2016. The Great Colleges-HEIS scores demonstrated this positive culture, shared overwhelmingly by all three former leaders representing CC2. The planning and implementation for all the CC2 physical, technological, and campus use improvements involved the appropriate faculty, staff, and administration. "Providing input helped them feel valued and connected to their work and the college," according to the CC2 Former Faculty/Dean.

Professional Development and Conference Travel

According to the VPA and Dean, CC6 supported a strong teaching and learning center offering internal teaching workshops on student engagement strategies from 2009 to 2017. CC2 and CC10 aggregated all professional development monies to provide funds for faculty and staff conference travel. Faculty growth and development were encouraged at CC10 through a year-long faculty institute for new faculty, concentrating on pedagogy, and offered through the college's teaching and learning center, according to FT Faculty. Additionally, student engagement professional development was offered to veteran and adjunct faculty at CC10.

Academic Leadership Uses Proximal and Flexible Space

The Dean/VPA of CC10 spoke of the college's catastrophic weather event resulting in the closure of most campus buildings and the necessity to provide online learning for almost all classes. Surprising to the CC10 leadership, difficulties arose after the college's recovery when employees returned to work; reengaging the faculty and staff was more challenging than anticipated. They formed five volunteer teams to work on the "new normal" for the college, as shared by the Dean/VPA of CC10. Upon returning to campus, CC10 built a flexible meeting

space housing all academic leadership to encourage teamwork and collaboration to occur quickly and naturally. The proximity of the VPA, deans, and academic directors, along with shared meeting space, allowed teamwork to continue smoothly throughout the academic work week, according to the CC10 Dean/VPA. The ease of virtual team meetings and urgency of decision-making for CC10 during the catastrophic weather event were positive discoveries they wanted to continue once they returned to campus.

Analysis of Collegewide Initiatives and Events

Moving a college from its focus on teaching to a focus on student learning requires the involvement of the entire college community, with all employees collaborating at new levels. This collegewide involvement was proclaimed by the American Association of Community Colleges (2012, 2014), documented in the research of Bailey et al. (2015), and recommended and supported by Stout (2018) and Achieving the Dream (2019). Strong working relationships and support are necessary to sustain the motivation to work toward community college transformation, according to Kouzes and Posner's (2012) recommendations for making the extraordinary happen. Following Kouzes and Posner's Five Practices of Exemplary Leadership, transformative leaders at all levels in the college should:

- Model the way to share the mission and values of the college
- Inspire a shared vision and enlist others
- Challenge the process, which means taking risks and learning
- Enable others to act through building relationships and trust and developing confidence through professional growth,
- Encourage the heart, recognizing and celebrating victories and accomplishments.

The three colleges interviewed shared leaders and collegewide events that seemed to follow Kouzes and Posner's Five Practices. The colleges' cultures appeared to fit Cameron and

Quinn's (2011) Adhocracy culture of creativity, innovation, and taking risks, which Smart and Hamm's study (1992) found to be the most effective culture for adapting and transforming.

In 2018, Stout pleaded for renewed urgency for transformation in teaching since reform had not occurred within the college classroom, also concluded by Wyner (2014) and Bailey et al. (2015). Pierce College modeled putting student learning first in a community college: they listened to their students, reviewed data, collaborated, and made instructional changes to improve student learning (Broxson, 2016). Pierce College faculty exemplified what Hersh and Keeling (2013) termed "taking learning seriously." However, no actual classroom teaching reform initiatives were discussed or shared by any of the nine community college leaders interviewed: developmental education reform, supporting tutoring, and highlighting various college events in the classroom were the areas involving faculty that were shared, but no actual instructional strategies or student engagement classroom initiatives were shared. Based on these results, community college leaders still have work to complete regarding transforming the focus from teaching to student learning in the classroom.

SUMMARY

The data presented in this chapter were collected from the Great Colleges-HEIS and CCSSE secondary survey data from 14 participating community colleges representing various enrollments and geographic areas of the nation. Phase 1 of this mixed-methods explanatory sequential study used Pearson *r* correlation to identify 31 significant relationships among a possible 75 pairings of 15 employee dimensions of the Great Colleges-HEIS climate survey and the five CCSSE benchmarks of student engagement. Phase 2 of the study interviewed three leaders from each of three community colleges showing the greatest improvements in their Great Colleges-HEIS and CCSSE scores. Following a systematic process of coding, analyzing,

categorizing, reviewing, and rechecking the nine interview transcripts, the researcher documented responses from each college. Interview data revealed three broad recurring themes of answers to what contributed to their colleges' increased survey scores: Authentic Relational Leadership, Distinctively Strong Student Focus, and Collegewide Initiatives and Events. Interview quotes and descriptions helped explain the three themes further and showed how the literature reviewed supported this study's findings.

The findings in this study strengthened the awareness and understanding of community college culture and how it relates to student engagement. Chapter Five integrates the key relationships found with the three recurring themes and specific examples using the AACC Framework of Institutional Responses (2012). This visual, although overwhelming, may aid community colleges in transforming their focus from teaching to student learning. Chapter Five also addresses recommendations for further research discovered through this study.

CHAPTER FIVE: DISCUSSION AND IMPLICATIONS OF RESULTS AND FUTURE RESEARCH

INTRODUCTION

This mixed-methods study sought to investigate the relationships among the 15 Great Colleges to Work For-HEIS employee dimensions and the five student engagement benchmarks of the Community College Survey of Student Engagement (CCSSE). For Phase 1, the researcher gathered and analyzed secondary survey results from 14 community colleges that administered both nationally benchmarked surveys twice from 2008 to 2017, with at least four years between survey administrations. Using Pearson *r* correlation, the study identified 31 pairs of relationships among a possible 75 of the Great Colleges-HEIS employee dimensions with the CCSSE student engagement benchmarks (Table 2). Uncovering these employee culture/student engagement relationships and the information gained from Phase 2 interviews provide direction to community college leaders transforming their focus from teaching to student learning by improving student engagement.

In Phase 2, the researcher interviewed three leaders from each of the three community colleges that showed the greatest improvements in survey scores; thus, nine leaders total. The interviews gathered the leaders' perceptions of college events, initiatives, and process changes that appeared to help improve their college culture and student engagement scores as measured by the Great Colleges-HEIS and the CCSSE. From the nine interviews, three broad recurring themes emerged of probable reasons for improved culture and student engagement survey scores (Table 5):

- Authentic Relational Leadership,
- Distinctively Strong Student Focus, and
- Collegewide Initiatives and Events.

The two phases of the study answered these research questions:

1. How are the employee dimensions of community college culture measured by the Great Colleges-HEIS related to the student engagement benchmarks measured by the Community College Survey of Student Engagement (CCSSE)? (Quantitative Phase 1).
2. What types of college events, initiatives, or changes helped improve college climate and student engagement as measured by the Great Colleges-HEIS and the CCSSE, respectively? (Qualitative Phase 2)

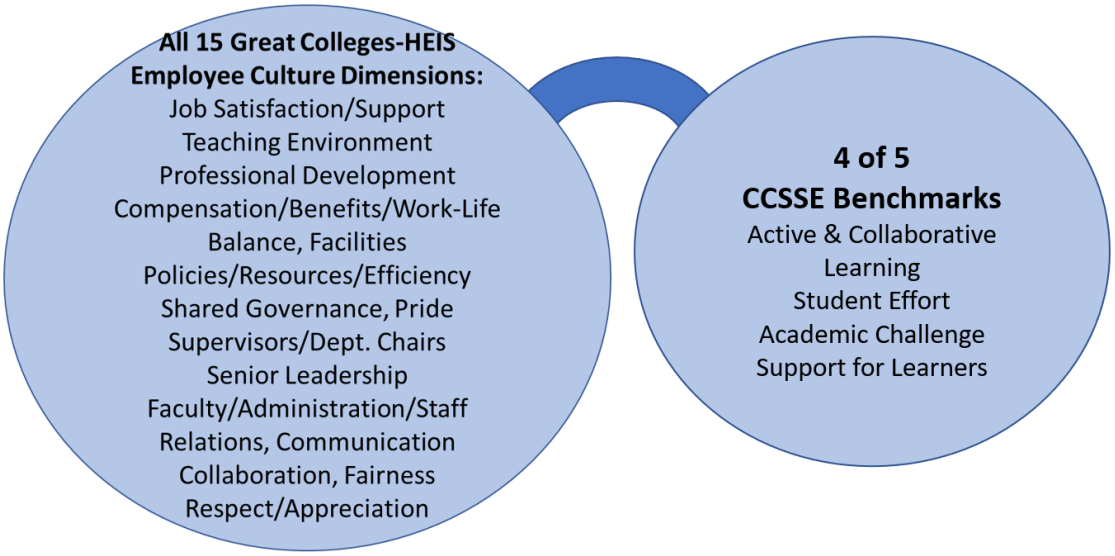
In this chapter, the researcher integrates data from both phases of the study to highlight implications for community colleges using the AACC Framework of Institutional Responses, discussed in Chapter One, which prompted this study. This chapter also addresses the limitations and generalizability of the study. Recommendations for further research from this study may encourage community college leaders to continue their transformational journeys toward improved student learning.

INTEGRATION OF THE MIXED METHOD STUDY RESULTS

The findings from the first research question in Phase 1 identified 31 relationships among community college culture dimensions with student engagement benchmarks using Pearson *r* correlation. These relationships, outlined in Chapter Four, Table 3, are ranked from highest to lowest as Pearson *r* correlations. Strengthening any of the 15 college employee culture areas measured by the Great Colleges-HEIS should also positively affect CCSSE's Support for Learners; the reverse is true since CCSSE's Support for Learners correlates with all 15 of the employee dimensions. Figure 11 shows a simple visual graphic depicting that some to all of the

15 Great Colleges-HEIS employee dimensions affect four of the five CCSSE benchmarks. The CCSSE benchmarks may also positively impact some of the 15 Great Colleges-HEIS employee culture dimensions.

Figure 11. Correlation between the 15 Great Colleges-HEIS Employee Dimensions and Four CCSSE Benchmarks



Note: Refer to Appendices A and B to review individual statements included in the Great Colleges-HEIS employee dimensions and the CCSSE benchmarks

Simplifying these findings further, as illustrated in Table 6, four Great Colleges-HEIS employee culture dimensions, Respect and Appreciation, Pride, Teaching Environment, and Job Satisfaction, relate positively to at least three CCSSE student engagement benchmarks. Since a strong culture can support or negate a college's change initiatives, it appears that addressing these four culture dimensions could positively influence the four CCSSE benchmarks (AACC, 2012; AACC, 2014; Alamuddin et al., 2016; Aspen Institute, 2014; Cameron, 1997; Deal & Kennedy, 1982/2000; Kadlec & Rowlett, 2014; Kempner, 1990; McClenney & Arnsparger, 2012; Nutt & Hardman, 2019; Rick, 2020; Sokugawa, 1996). Thus, improving these four Great

Colleges-HEIS culture dimensions of Respect and Appreciation, Pride, Teaching Environment, and Job Satisfaction should strengthen the CCSSE student engagement benchmarks of Support for Learners, Student Effort, Active and Collaborative Learning, and Academic Challenge. Therefore, the specific relationships found for community colleges to target for the broadest impact would be:

- Strengthening Great College-HEIS's Respect and Appreciation employee dimension could positively affect CCSSE's Support for Learners, Student Effort, and Academic Challenge, as well as the inverse.
- Growing the Great Colleges-HEIS's Pride employee dimension could positively impact CCSSE's Support for Learners, Student Effort, Active and Collaborative Learning, and vice versa.
- Improving Great Colleges-HEIS's Teaching Environment employee dimension could positively impact CCSSE's Support for Learners, Student Effort, and Active and Collaborative Learning, as well as the inverse.
- Increasing Great Colleges-HEIS's Job Satisfaction employee dimension could positively affect CCSSE's Support for Learners, Student Effort, Active and Collaborative Learning, and vice versa.

Addressing a college's weakest dimension of the four employee cultural dimensions (documented in Table 6) should assist college leaders in transforming teaching by strengthening their focus on student engagement. Questions (derived from individual Great Colleges-HEIS statements) to address these four employee culture areas are included in Table 6 and paired with the related student engagement benchmarks. Improving the employee cultural dimension or the student engagement benchmark could positively affect the other since they are related. However, as supported by the literature, culture typically overpowers college strategies and initiatives; thus, addressing employee culture dimensions first should make a greater, more lasting impact on increasing student engagement.

Improving any of the four dimensions of culture should positively affect the related areas of student engagement. Table 6 may guide college leaders in prioritizing the employee cultural

dimensions that could impact student engagement the most by reviewing their college's recent climate survey results. Leaders could then identify their weaker areas of culture and student engagement to transform for the greatest impact for increasing student engagement.

Table 6: Transforming Culture Makes a Broader Impact on Improving Student Engagement

PEARSON *r*	GREAT COLLEGES-HEIS	CCSSE
0.85**	Respect & Appreciation	Support for Learners
0.63*	Respect & Appreciation	Student Effort
0.56*	Respect & Appreciation	Academic Challenge
Respect & Appreciation Cultural Reflections →	• How are faculty and staff recognized for their contributions? • Are recognition and awards programs meaningful? • Do colleagues feel included, heard, and supported by the college faculty, staff, administration, and peers? • How are significant milestones and accomplishments celebrated?	
0.79**	Pride	Support for Learners
0.64*	Pride	Student Effort
0.59*	Pride	Active & Collaborative Learning
Pride Cultural Reflections →	• Do employees understand how their job contributes to the college's mission? • Do employees feel their departments are good places to work? • Do employees feel proud to be part of the college? • Do employees perceive the college's culture as special? Something you don't find just anywhere? • Do employees overall think the college is a great place to work?	
0.77**	Teaching Environment	Support for Learners
0.69**	Teaching Environment	Student Effort
0.56*	Teaching Environment	Active & Collaborative Learning
Teaching Environment Cultural Reflections →	• Is there a good balance of teaching, service, and research at this institution? • Is teaching recognized appropriately in the evaluation and promotion process? • Is there appropriate recognition of innovative and high-quality teaching?	
0.71**	Job Satisfaction	Support for Learners
0.58*	Job Satisfaction	Student Effort
0.56*	Job Satisfaction	Active & Collaborative Learning
Job Satisfaction Cultural Reflections	• Does each employee's job make good use of their skills and abilities? • Are employees given the responsibility and freedom to do their jobs?	

⟶	• Are employees provided the resources needed to be effective in their jobs?

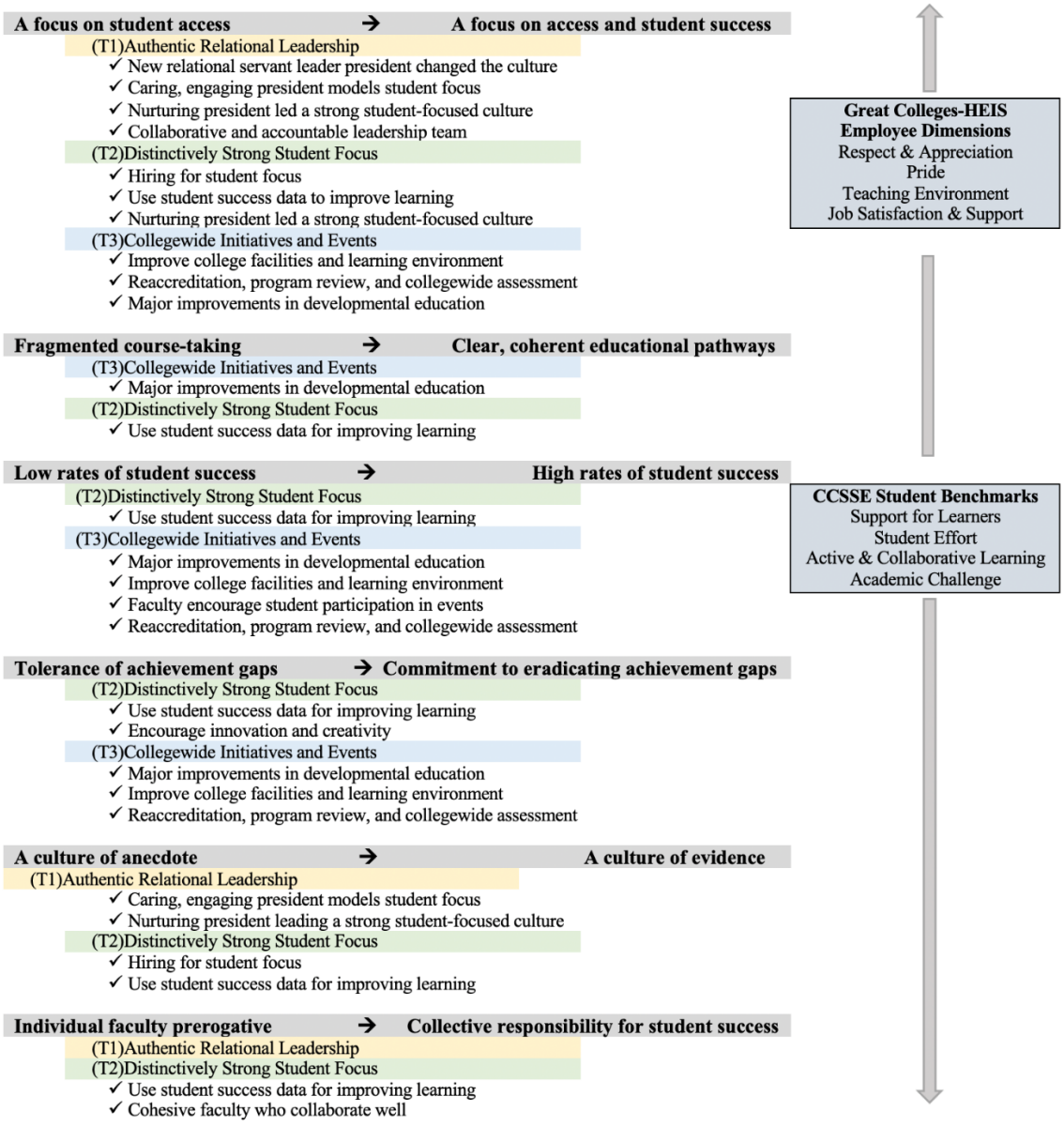
*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

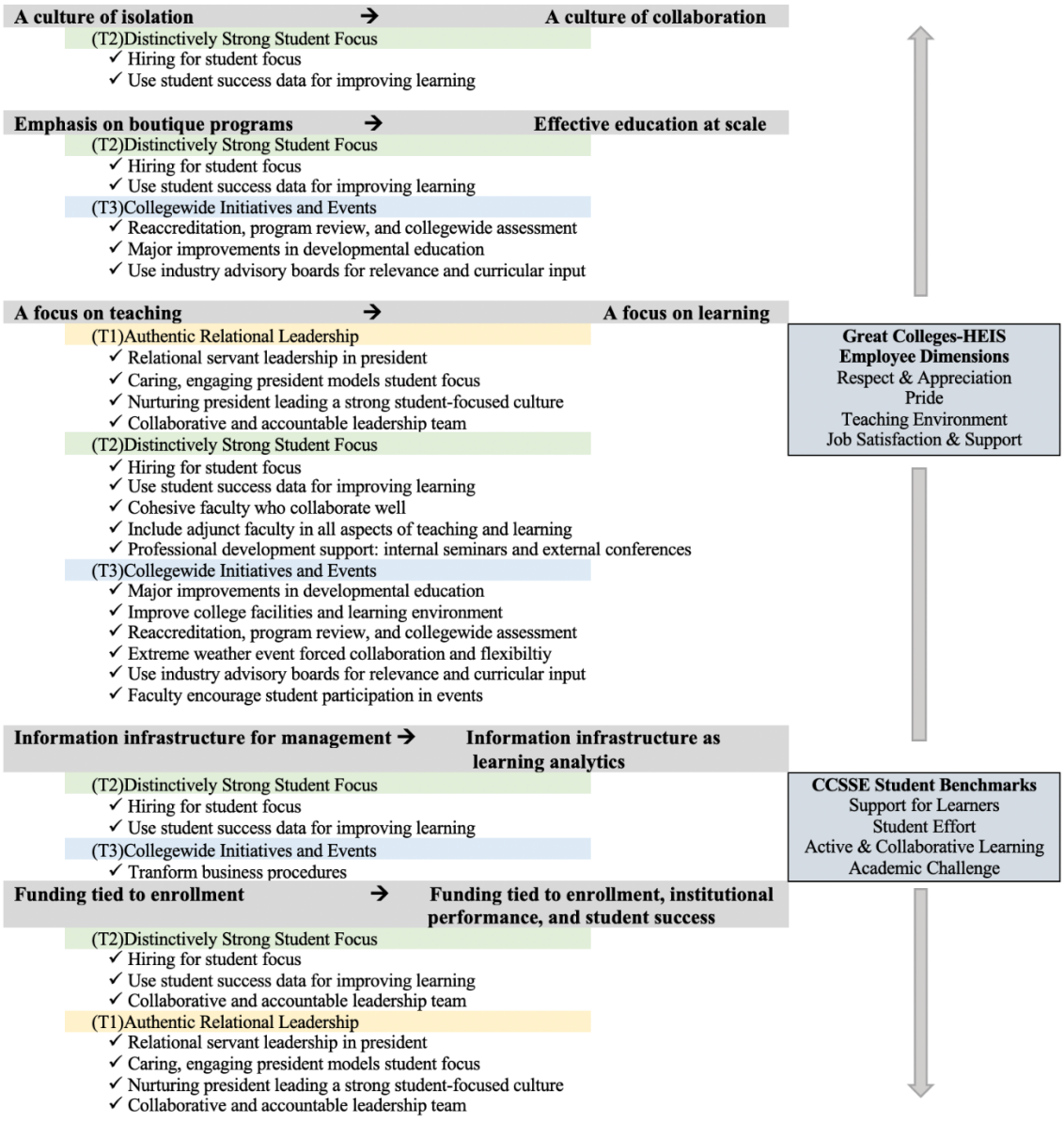
Three broad recurring themes developed from the nine community college leader interviews identified probable causes for improved survey scores: Authentic Relational Leadership, Distinctively Strong Student Focus, and Collegewide Initiatives and Events. These themes also shared three common attributes: intentionality, collegewide systemic approaches, and inclusive, engaged collaboration. As evidenced in the literature review, this study's results, and the researcher's career experiences, community college transformation is not a one-time event. Community college transformation is an ongoing gradual process as college leaders, faculty, and staff continually sharpen their focus on student learning. Transformation requires intentionality, college-wide involvement with strategic initiatives, and engaged collaboration from all stakeholders addressed and affirmed by AACC (2012), Bailey and coauthors (2015), and Stout (2018).

Figure 12 integrates the study's findings with the AACC Framework of Institutional Responses, which prompted this study and formed its framework (2012). The figure depicts the 11 AACC Institutional Responses needed to move community colleges toward a keener focus on student learning. The bulleted list accompanying each institutional response summarizes the major findings from the Phase 2 interviews, with each main bullet point referencing one of the three broad recurring themes (T1, T2, and T3). The perceptions the college interviewees identified as likely improving their Great Colleges-HEIS and CCSSE survey scores make up the sub-bullet checkmarks. The arrows and descriptions on the right signify connections between four (of 15) Great Colleges-HEIS employee dimensions and three (of the four) CCSSE student

engagement benchmarks. Again, each of the four employee dimensions relates to three different student engagement benchmarks. Thus, Figure 12 depicts the best areas for colleges to target their cultural transformations for the greatest impact on increasing student engagement through intentional college initiatives (Tables 2 and 6 provide additional information on these relationships). College leaders should refer to their most recent climate and student engagement surveys to identify the employee dimensions and student engagement benchmarks needing the greatest improvements (the weakest areas). Reviewing the surveys will inform their next steps to continue their transformational journey towards increased student engagement to improve student learning.

Figure 12: Integration of Study's Findings with the AACC Framework of Institutional Responses





IMPLICATIONS OF THE STUDY

This study shows that community college culture and student engagement are related by finding 31 pairs of Great Colleges-HEIS employee dimensions with CCSSE student engagement benchmarks using Pearson *r* correlation. Thus, understanding a community college's culture should rise in importance as administrators, faculty, and staff work to increase student engagement to improve student learning. As college leaders, faculty, and staff view their

college's employee climate survey results alongside their CCSSE student engagement results, conversations of needed transformation may naturally develop. This collaborative review of survey results could prompt courageous conversations as college leaders (administrators, faculty, and staff) search for strategies to transform their culture to increase student engagement. No longer should a college's culture be ignored or serve as an excuse for not tackling challenging academic practices, as in transforming teaching in the classroom, which did not surface as an outcome from the college leaders interviewed in this study. Instead, collaboratively reviewing culture and CCSSE surveys and comparing survey results to course success data could open challenging conversations about a college's cultural transformation towards a stronger student focus. Following the examples of Pierce College, Valencia College, and Lone Star Colleges, culture can change, and student engagement can increase, even within the classroom.

Understanding the community college culture is enormous in successfully launching student engagement initiatives. Four of the five CCSSE student engagement benchmarks — Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, and Student Effort — require faculty to transform their teaching methods and practices, redesign course curricula and assignments, improve communication with students, teach higher-order thinking skills and metacognition, and maintain high student expectations to increase student engagement. Moreover, the fifth CCSSE benchmark of Support for Learners requires faculty to serve as student concierges or connectors to invite, incent, and encourage students to use the college's academic support resources.

As faculty's roles transform from the knowledgeable lecturer and "sage on the stage" to the encourager, designer, and facilitator of learning, defining, supporting, and rewarding effective teaching to improve student learning are necessary steps in a college's transformation

to a strong focus on student learning. College boards and administrative leaders should note Smart and Hamm's (1992) findings that colleges displaying the Adhocracy culture appeared to be the most effective, with Clan and Market cultures displaying mid-range effectiveness, using Cameron and Quinn's four models (2011). The Hierarchy culture was the least effective culture found for community colleges. Hiring administrators, faculty, and staff open to transforming their teaching, hiring, and working practices to engage students more in their learning is an unexpected outcome of this study.

The solid related pair of Respect and Appreciation with Support for Learners, which shows a Pearson *r* of 0.85, the highest score in the study, highlights the respect, inclusion, and support faculty need from their faculty peers, staff, and college administrators. Faculty are critical participants in a college's cultural transformation. Community colleges need to support a culture where faculty consistently strive for higher levels of student learning and feel safe while piloting new learning strategies. The human side of change must be addressed for transformation to occur successfully and to stick (Kadlec & Rowlett, 2014). Innovation requires a safe environment where mutual trust among administration, faculty, and staff can develop and grow; the nine college leaders interviewed affirmed this. Colleges need a cohesive and collaborative leadership team facilitating its transformation, with the president or a key executive administrator filling the relational nurturing leader role, as found by the nine college leaders interviewed. All three colleges experienced significant improvements in their culture and student engagement. These nurturing, trusting administrative leaders and their positive relationships with faculty were needed to support and encourage teaching innovations without fear of failing.

An innovative and supportive professional development center/teaching and learning center offering individual assistance and internal workshops can assist faculty with support, professional development, and transformation in their teaching.

LIMITATIONS AND GENERALIZABILITY OF THE STUDY'S FINDINGS

Several limitations influenced the generalizability of the findings in this study for use in most community colleges. The study focused on community colleges that had taken the Great Colleges-HEIS and the CCSSE twice from 2008–2017. Many colleges use other climate surveys, while some may not use either of the surveys for measuring college climate or student engagement. Perhaps this study will encourage their use and application of the data. Depending on the climate survey used, a college may not be able to relate to the employee dimensions measured by the Great Colleges-HEIS. However, a majority of community colleges, 952, have used the CCSSE (CCSSE, 2022). This study should, at minimum, encourage college leaders to review their climate and CCSSE surveys simultaneously to look for areas of culture that may need changing to bolster student engagement. Only 44 community colleges fit the criteria for the study, and only 14 participated (for a 32% response rate). The 14 participating colleges were identified after reducing the years between survey administrations from five to four years. More community colleges may have increased the generalizability of the study. However, colleges were from various regions of the nation and varied student enrollments to broaden the study's generalizability.

The nine college leader interviews were a small sample size. However, the interviews garnered initiatives and college events that seemed to have improved their survey scores resulting in improved student engagement and a more positive employee culture. Increased numbers of participating colleges may have allowed for additional correlations, but the 31

correlations identified proved that relationships exist between employee culture and student engagement.

The researcher's 38-year community college career of teaching and leading organizational learning, particularly faculty and staff development, brings broad experiences and great passion that brought familiarity to the study. However, these experiences brought the challenge of subduing personal biases.

SUGGESTIONS FOR FUTURE STUDY

This study uncovered gaps for future research during the literature review, in completing both phases of data collection, and in the analysis and integration of the study's findings. During data collection of Phase 1 surveys, it became apparent that college leaders use their Great Colleges-HEIS and CCSSE data in varying degrees and methods. Difficulty locating a college's climate survey data was reasonably common among the 14 colleges, with several requiring an email request from the college president to ModernThink (the administrators of the Great Colleges-HEIS) to retrieve and redistribute their data. The researcher facilitated this survey data redistribution with ModernThink at no cost to the college since it was for this study. The retrieval of data for both the Great Colleges-HEIS and CCSSE within the institution proved challenging for colleges because of changes in staffing and responsibilities, different departments handling surveys and results, and an assumed apparent lack of data use, especially regarding climate survey data. Additionally, all nine college leaders interviewed from the three colleges could not remember sharing CCSSE data with their faculty or staff. Researching how college leaders use their climate and student engagement survey results may prove enlightening in identifying promising practices, especially for those leaders intentionally transforming their culture to sharpen their student focus.

Duplicating this study with more recent survey results, including more participating colleges, and using different or additional climate surveys should garner meaningful outcomes. However, the full impact of the Covid-19 pandemic is yet unknown and may skew outcomes. How can the aftermath of and the learning through the pandemic propel community college leaders into cultural transformations to sharpen the focus on student learning?

Researching promising practices in nurturing trust among administration, faculty, and staff would prove helpful for many community colleges since trust is crucial during times of change (Bailey et al., 2015; Covey & Merrill, 2006; Kotter, 1996; Kouzes & Posner, 2012; Tschannen-Moran, 2014). Trust appeared to be a non-issue for this study's three community colleges interviewed. Instead, those leaders interviewed shared how crucial authentic, timely communication and inclusive collaboration were to their college's success. Growing trust could be studied while defining participatory governance, rewarding quality teaching, or seeking practices used in hiring for student focus. These three topics surfaced in the interviews and called for courageous conversations involving collegial trust. These studies could reveal differences and practices between unionized faculty community colleges and non-union community colleges, a topic not addressed in this study.

Reviewing the employee dimension–student engagement benchmark correlations and the college leader interview outcomes revealed several areas needing further research. The lack of significant correlations between student-faculty interactions and the employee culture dimensions is an area needing further study. The Compensation, Benefits, and Work-Life Balance could also use further study. As seen in Table 2, the Pearson *r* was strongest for Compensation, Benefits, and Work-Life Balance with Support for Learners at 0.75, which is strong. However, the other four CCSSE benchmarks, which are more faculty-facilitated, were

not significantly related. These findings beg the question, “Is there an incentive for improving student engagement in one’s teaching using work-life balance or similar benefits more meaningful to reward faculty for improving student engagement?” Perhaps, reviewing faculty teaching loads may reveal possible answers.

All nine college leaders interviewed discussed hiring for a student focus, with the CC2 and CC10 college leaders being most passionate about the topic. Researching practices addressing the hiring of community college personnel for their student focus is a gap uncovered in this study. Hiring for student focus would aid community colleges in their cultural transformation towards a sharpened focus on student learning. The literature review found few changes in community college hiring practices have occurred over the years (Flannigan et al., 2004; Jenkins et al., 2018).

It is not easy for a college to encourage and reward good, quality teaching if quality teaching is not defined collegewide (Umbach & Wawrzynski, 2005). Good teaching can be challenging for faculty and administration to define, which opens another opportunity to hold courageous collaborations. Each college should define quality teaching, including practices relating to student engagement, to encourage, recognize, and reward deserving faculty and help develop those faculty struggling with student engagement. As seen from Chapter Two’s literature review, almost forty years of research have provided the changes needed to move higher educational institutions from a focus on teaching to a focus on student learning. However, making the actual transformation to student-focused engaging teaching remains challenging. How do we gather more examples of college cultural transformations to a strong focus on student learning, as in Pierce College, Lone Star-Tomball, and Valencia? Perhaps the questions college leaders need to ask are:

- What does placing learning first look like in community colleges, both in and outside the classroom?
- What are quality teaching practices used to engage students in their learning?
- How do we encourage, support, develop, recognize, and reward faculty for engaging students in their learning?
- How do we encourage, support, develop, and reward staff for quality support of student learning?
- How can faculty and staff improve their partnering to increase student engagement?

Using the lessons learned from Pierce, Lone Star-Tomball, and Valencia Colleges, along with this study's findings relating culture to student engagement, more college leaders may intentionally take their next steps in sharpening their focus on student engagement.

CHAPTER CONCLUSION

The outcomes of this study that all community college leaders can apply are elevating the importance of community college culture, teaching for increased student engagement, and the urgency needed to improve student learning. Student learning should improve if faculty and staff genuinely comprehend their vital roles in increasing student engagement. The best incentive may appear when hard-working, engaged students motivate faculty and staff to work harder to improve student learning. Instilling and supporting this cycle of good teaching occurs when faculty "develop their abilities through constant self-evaluation, reflection, and a willingness to change," stated succinctly by Bain (2004, p. 172).

This study reinforced, emphasized, and discovered that:

- Community college culture matters; it is vital to sharpen the focus on student learning.
- Student engagement improves student learning; many community colleges must transform their cultures to increase student engagement.

- Community college culture can overpower student success initiatives. Therefore, understand and address a community college's culture before launching a new strategic student learning initiative.

- View culture and student engagement results together. Employee cultural dimensions are related to student engagement benchmarks. Use this knowledge to prioritize the next steps in community college culture transformation to increase student engagement and improve student learning.

Many community colleges need to improve student learning by transforming their cultures, where faculty and staff consistently aim for higher levels of learning. Authentic, relational community college leaders can use these study outcomes to prepare faculty and staff for further cultural transformation. Leaders should study, understand, and address deficiencies in their college's culture before attempting new student success initiatives. Using college climate and student engagement surveys supports community college leaders by measuring progress and guiding them toward future areas to enhance student learning.

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APPENDIX A: GREAT COLLEGES – HIGHER EDUCATION INSIGHT SURVEY EMPLOYEE DIMENSIONS WITH STATEMENTS

Great Colleges – Higher Education Insight Survey Employee Dimensions and Statements

The Chronicle of Higher Education, 2017.

GREAT COLLEGES-HEIS EMPLOYEE DIMENSIONS	GREAT COLLEGES–HEIS EMPLOYEE RATED STATEMENTS
Job Satisfaction/ Support (JobSS)	1. My job makes good use of my skills and abilities. 2. I am given the responsibility and freedom to do my job. 4. I am provided the resources I need to be effective in my job.
Teaching Environment (TeachEn)	33. There is a good balance of teaching, service and research at this institution. 40. Teaching is appropriately recognized in the evaluation and promotion process. 51. There is appropriate recognition of innovative and high quality teaching.
Professional Development (ProfDev)	6. I am given the opportunity to develop my skills at this institution. 10. I understand the necessary requirements to advance my career.
Compensation, Benefits & Work-Life Balance (CompB)	11. I am paid fairly for my work. 34. This institution's benefits meet my needs. 47. My supervisor/department chair supports my efforts to balance my work and personal life. 53. This institution's policies and practices give me the flexibility to manage my work and personal life.
Facilities (Facilities)	29. The institution takes reasonable steps to provide a safe and secure environment for the campus. 31. The facilities (e.g., classrooms, offices, laboratories) adequately meet my needs.
Policies, Resources & Efficiency (Policy)	17. Our review process accurately measures my job performance. 28. My department has adequate faculty/staff to achieve our goals. 30. Our orientation program prepares new faculty, administration and staff to be effective. 49. This institution actively contributes to the community. 50. This institution places sufficient emphasis on having diverse faculty, administration and staff. 57. This institution is well run.
Shared Governance (ShGov)	38. The role of faculty in shared governance is clearly stated and publicized. 39. Faculty are appropriately involved in decisions related to the education program (e.g., curriculum development, evaluation). 42. Faculty, administration and staff are meaningfully involved in institutional planning.
Pride (Pride)	5. I understand how my job contributes to this institution's mission. 25. Overall, my department is a good place to work. 36. I am proud to be part of this institution. 59. This institution's culture is special - something you don't find just anywhere. 60. All things considered, this is a great place to work.
Supervisors/ Department Chairs (Suprv)	3. My supervisor/department chair makes his/her expectations clear. 7. I receive feedback from my supervisor/department chair that helps me. 12. I believe what I am told by my supervisor/department chair. 15. My supervisor/department chair regularly models this institution's values. 19. My supervisor/department chair is consistent and fair. 20. My supervisor/department chair actively solicits my suggestions and ideas. 24. I have a good relationship with my supervisor/department chair.
Senior Leadership (SrLead)	27. Senior leadership provides a clear direction for this institution's future. 32. Our senior leadership has the knowledge, skills and experience necessary for institutional success. 37. Senior leadership shows a genuine interest in the well-being of faculty, administration and staff. 41. Senior leadership communicates openly about important matters.

GREAT COLLEGES-HEIS EMPLOYEE DIMENSIONS	GREAT COLLEGES–HEIS EMPLOYEE RATED STATEMENTS
	48. Senior leadership regularly models this institution's values. 56. I believe what I am told by senior leadership.
Faculty, Administration & Staff Relations (FacAdSta)	46. Faculty, administration and staff work together to ensure the success of institution programs and initiatives. 55. There is regular and open communication among faculty, administration and staff.
Communication (Comm)	8. When I offer a new idea, I believe it will be fully considered. 21. In my department, we communicate openly about issues that impact each other's work. 22. Changes that affect me are discussed prior to being implemented. 43. At this institution, we discuss and debate issues respectfully to get better results.
Collaboration (Collab)	13. We have opportunities to contribute to important decisions in my department. 23. People in my department work well together. 26. I can count on people to cooperate across departments. 58. There's a sense that we're all on the same team at this institution.
Fairness (Fair)	14. I can speak up or challenge a traditional way of doing something without fear of harming my career. 16. Promotions in my department are based on a person's ability. 18. Issues of low performance are addressed in my department. 44. This institution's policies and practices ensure fair treatment for faculty, administration and staff. 54. This institution has clear and effective procedures for dealing with discrimination.
Respect & Appreciation (Respect)	9. I am regularly recognized for my contributions. 35. Our recognition and awards programs are meaningful to me. 45. At this institution, people are supportive of their colleagues regardless of their heritage or background. 52. We celebrate significant milestones and important accomplishments at this institution.

APPENDIX B: CCSSE STUDENT BENCHMARKS WITH STATEMENTS

CCSSE Student Benchmarks with Statements
Center for Community College Student Engagement, 2017.

CCSSE STUDENT BENCHMARKS	CCSSE STUDENT RATED STATEMENTS
Active and Collaborative Learning (ActiveLearn)	4a. Frequency: Asked questions in class or contributed to class discussions 4b. Frequency: Made a class presentation 4f. Frequency: Worked with other students on projects during class 4g. Frequency: Worked with classmates outside of class to prepare class assignments 4h. Frequency: Tutored or taught other students (paid or voluntary) 4i. Frequency: Participated in a community-based project as part of a regular course 4r. Frequency: Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)
Student Effort (StuEffort)	4c. Frequency: Prepared two or more drafts of a paper or assignment before turning it in 4d. Frequency: Worked on a paper or project that required integrating ideas or information from various sources 4e. Frequency: Come to class without completing readings or assignments 6b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment 10a. Hours spent per week: Preparing for class (studying, reading, writing, rehearsing, doing homework, or other activities related to your program) 13d1. Frequency of use: Peer or other tutoring 13e1. Frequency of use: Skill labs (writing, math, etc.) 13h1. Frequency of use: Computer lab)
Academic Challenge (AcChallenge)	4p. Frequency: Worked harder than you thought you could to meet an instructor's standards or expectations 5b. Amount of emphasis in coursework: Analyzing the basic elements of an idea, experience, or theory 5c. Amount of emphasis in coursework: Synthesizing and organizing ideas, information, or experiences in new ways 5d. Amount of emphasis in coursework: Making judgments about the value or soundness of information, arguments, or methods 5e. Amount of emphasis in coursework: Applying theories or concepts to practical problems or in new situations 5f. Amount of emphasis in coursework: Using information you have read or heard to perform a new skill 6a. Number of assigned textbooks, manuals, books, or book-length packs of course readings 6c. Number of written papers or reports of any length 7. Rate the extent to which your examinations have challenged you to do your best work 9a. Amount of emphasis by college: Encouraging you to spend significant amounts of time studying

CCSSE STUDENT BENCHMARKS	CCSSE STUDENT RATED STATEMENTS
Student-Faculty Interaction (Stu-Fac)	4k. Frequency: Used email to communicate with an instructor 4l. Frequency: Discussed grades or assignments with an instructor 4m. Frequency: Talked about career plans with an instructor or advisor 4n. Frequency: Discussed ideas from your readings or classes with instructors outside of class 4o. Frequency: Received prompt feedback (written or oral) from instructors on your performance 4q. Frequency: Worked with instructors on activities other than coursework
Support for Learners (Support)	9b. Amount of emphasis by college: Providing the support you need to help you succeed at this college 9c. Amount of emphasis by college: Encouraging contact among students from different economic, social, and racial or ethnic backgrounds 9d. Amount of emphasis by college: Helping you cope with your non-academic responsibilities (work, family, etc.) 9e. Amount of emphasis by college: Providing the support you need to thrive socially 9f. Amount of emphasis by college: Providing the financial support you need to afford your education 13a1. Frequency of use: Academic advising/planning 13b1. Frequency of use: Career counseling

APPENDIX C: PERSONNEL INTERVIEW FOLLOW-UP QUESTIONS FOR GREAT COLLEGES-HEIS EMPLOYEE DIMENSIONS

Phase 2 Semi-Structured Personnel Interview Follow-Up Questions for Great Colleges HEIS Employee Dimensions

GREAT COLLEGES HEIS EMPLOYEE DIMENSIONS	GREAT COLLEGES – HEIS PERSONAL INTERVIEW QUESTIONS FOR EMPLOYEE DIMENSIONS
Job Satisfaction/ Support	1. How does your college provide employees the responsibility and freedom to teach (or complete one's assigned job)? 2. How have faculty (or employee) resources changed at your college in recent years? 3. What support and resources do employees lack at your college? 4. What other factors may have contributed to (increased) results in the Great Colleges HEIS Job Satisfaction/Support employee dimension?
Teaching Environment	5. What are the college's expectations of faculty regarding teaching, service, and research? 6. How does your college recognize faculty for their teaching contributions? 7. How does your college recognize faculty (or employees) for their innovative contributions? 8. Does this recognition include both full-time and part-time faculty (or employees)? 9. How have your college's faculty recognition programs changed in 10. recent years? 11. What other recognition or celebration opportunities does your 12. college offer employees? 13. What other factors may have contributed to (increased) results in the Great Colleges HEIS Teaching Environment employee dimension?
Professional Development	14. What opportunities are employees provided to learn new skills or advance one's career? 15. What are the opportunities for career advancement at this college? 16. How do you know about advancement opportunities? 17. What other factors may have contributed to (increased) results in the Great Colleges HEIS Professional Development employee dimension?
Compensation, Benefits & Work-Life Balance	18. What is your perceptions of the salary and benefits provided to employees by the college? 19. How does the college's personnel policies and supervisors support good work and personal life balance for all employees? 20. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Compensation, Benefits & Work-Life Balance employee dimension?
Facilities	21. How does the college provide a safe and secure environment for all employees? 22. How does the college provide adequate facilities to meet the employees' needs? 23. What more could the college provide in the area of facilities and safety? 24. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Facilities employee dimension?
	25. In your opinion how effective is the college's performance review process in accurately measuring an employee's job performance?

GREAT COLLEGES HEIS EMPLOYEE DIMENSIONS	GREAT COLLEGES – HEIS PERSONAL INTERVIEW QUESTIONS FOR EMPLOYEE DIMENSIONS
Policies, Resources & Efficiency	26. Is your department (or college) staffed adequately to achieve the planned goals? Explain. 27. How effective is the college's orientation program for new employees? 28. How do you know that inclusion and diversity of staff are important at your college? 29. How would you describe your college's contributions to the community? 30. Describe your perception of how well the college is run. 31. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Policies, Resources & Efficiency employee dimension?
Shared Governance	32. Does your college practice shared governance or a similar process of participatory decision-making? Explain. 33. How are the governance practices and role of faculty and staff defined and publicized? 34. How are faculty involved in educational programming decisions? How do you know? 35. How would you describe the involvement of faculty, staff, and administrators in college planning? 36. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Shared Governance employee dimension?
Pride	37. How does your job contribute to the college's mission? 38. What makes you proudest to work at this college? 39. How would you describe your college's culture? 40. What makes this college a good place to work? 41. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Pride employee dimension?
Supervisors/ Department Chairs	42. Describe the working relationship you have with your supervisor. 43. Ask the following questions, if not covered. 44. How does your supervisor share his/her expectations of employees? 45. How does your supervisor provide feedback that helps employees improve? 46. How does your supervisor model the college's values? 47. How does your supervisor demonstrate consistency and fairness? 48. How does your supervisor show employees they are valued? 49. What other factors may have contributed to the (increased) results in the Great Colleges HEIS for Supervisors/Department Chairs?
Senior Leadership	50. Describe the college's senior leadership's effectiveness in leading the institution. Ask the following questions, if not covered.. 51. How does the college's senior leadership provide direction for the institution and its future? (Is this direction clear to employees?) 52. What is the perception of the senior leadership's knowledge, skills, and experience necessary for the college's continued success? 53. How do you know the college's senior leadership show a genuine interest in the well-being of the faculty, staff, and administration? 54. How effectively does the senior leadership communicate about important matters?

GREAT COLLEGES HEIS EMPLOYEE DIMENSIONS	GREAT COLLEGES – HEIS PERSONAL INTERVIEW QUESTIONS FOR EMPLOYEE DIMENSIONS
	55. Do you believe what the senior leadership says? 56. How do the senior leadership model the institution's values? 57. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Senior Leadership employee dimension?
Faculty, Administration & Staff Relations	58. How do the faculty, staff, and administration work together to ensure the success of the institution, its programs, and initiatives? 59. Describe the communication among faculty, staff, and administration? (Is it regular, open, not frequent enough, too detailed, unclear, or too detailed.) 60. How could communication among faculty, staff, and administration be improved at your college? 61. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Faculty, Administration & Staff Relations employee dimension?
Communication	62. How do you know the college considers ideas that employees offer? 63. In your department, how do employees communicate about issues that impact each other's work? Provide a specific example. 64. How are college changes discussed with employees who could be affected? 65. How do employees discuss and debate issues to improve project or initiative outcomes? 66. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Communication employee dimension?
Collaboration	67. In your department and college-wide, how can you contribute to important decisions? 68. How well does your department work together? 69. Describe interdepartmental communication and co-operation at your college. 70. How well do college employees (or faculty, staff, administration) feel they are all working on the same team? 71. What other factors may have contributed to the (increased) results in the Great Colleges HEIS Collaboration employee dimension?
Fairness	72. How do you and other employees feel about speaking up or challenging ideas or ways of working at your college? 73. How are promotions determined within your department? (Skills, ability, experience) 74. How are issues of low performance addressed within your department? 75. How do the college's policies and practices ensure fair treatment for faculty, staff, and administration? 76. Does your college have clear and effective procedures for dealing with discrimination? Explain. 77. What other factors may have contributed to the (increased) results in the Great Colleges HEIS *Fairness* employee dimension?
Respect & Appreciation	78. How are employees recognized for work contributions at your college? 79. What recognition, awards, or celebration opportunities does your 80. college offer employees? Are they meaningful?

GREAT COLLEGES HEIS EMPLOYEE DIMENSIONS	GREAT COLLEGES – HEIS PERSONAL INTERVIEW QUESTIONS FOR EMPLOYEE DIMENSIONS
	81. How are employees encouraged and supported by their colleagues? Is this true for all employees, regardless of their heritage, education, or backgrounds? 82. How are significant milestones and accomplishments supported and valued at your college? 83. How has your college's employee recognition programs changed in recent years? 84. What other factors may have contributed to the increased results in the Great Colleges HEIS *Respect and Appreciation* employee dimension?

APPENDIX D: PERSONNEL INTERVIEW FOLLOW-UP QUESTIONS FOR CCSSE BENCHMARKS

Phase 2 Semi-Structured Personnel Interview Follow-Up Questions for CCSSE Benchmarks

CCSSE STUDENT BENCHMARKS	CCSSE PERSONAL INTERVIEW QUESTIONS FOR STUDENT ENGAGEMENT
Active and Collaborative Learning (class discussions, student presentations, group projects, community-based projects)	1. How have the faculty focused on improving active and collaborative learning (as measured by the CCSSE) recently at your college? 2. What active and collaborative learning initiatives have been promoted recently at your college? 3. How were faculty integrated into active and collaborative learning initiatives at your college? 4. What helped most to improve the active and collaborative learning at your college?
Student Effort (prepared paper drafts, research paper or project, preparation for class, used academic tutoring and other resources)	5. How have the faculty focused on improving student effort (as measured by the CCSSE) recently at your college? 6. What student effort initiatives have been promoted recently at your college? 7. How were faculty integrated into the student effort initiatives at your college? 8. What helped most in the success of the student effort initiatives at your college?
Academic Challenge (high expectations; emphasis on analyzing theory, organizing, synthesizing ideas, making judgments, problem-solving, and performing new skills; readings and written reports; study and preparation)	9. How have the faculty focused on improving academic challenge (as measured by the CCSSE) recently at your college? 10. What academic challenge initiatives have been promoted recently at your college? 11. How were faculty integrated into the academic challenge initiatives at your college? 12. What helped most in the success of the academic challenge initiatives at your college?
Student-Faculty Interaction (email; discussed grades/assignments, career plans, ideas;provide feedback on performance; worked on activities outside of coursework)	13. How have the faculty focused on improving student-faculty interaction (as measured by the CCSSE) recently at your college? 14. What student-faculty interaction initiatives have been promoted recently at your college? 15. How were faculty integrated into the student-faculty interaction initiatives at your college? 16. What helped most in the success of the student-faculty interaction initiatives at your college?
Support for Learners (academic support, inclusion, and diversity, personal support, financial support, advising, career counseling)	17. How have the faculty focused on improving support for learners (as measured by the CCSSE) recently at your college? 18. What support for learners' initiatives have been promoted recently at your college? 19. How were faculty integrated into the support for learners' initiatives at your college? 20. What helped most in the success of the support for learners' initiatives at your college?

APPENDIX E: DESCRIPTIVE SURVEY DATA AND DEMOGRAPHICS FOR 14 COMMUNITY COLLEGES

Descriptive Survey Data and Demographics for 14 Community Colleges

CC1-GC	GC2010-1	GC2016-2	GC Unit Change
JobSS	75	79	4
TeachEn	64	71	7
ProfDev	74	74	0
CompB	66	78	**12**
Facilities	63	76	**13**
Policy	59	69	**10**
ShGov	68	78	**10**
Pride	75	85	**10**
Suprv	76	79	3
SrLead	60	80	**20**
FacAdSt	60	77	**17**
Comm	60	66	6
Collab	60	72	**12**
Fair	62	71	**9**
Respect	65	71	6
AVE	65	75	**10**

CC1-CCSSE	CCSSE2009-1	CCSSE2015-2	CCSSE %Change
ActiveLearn	46.0	45.6	-1%
StuEffort	50.5	44.3	-12%
AcChallenge	47.9	46.4	-3%
Stu-Fac	51.2	53.1	4%
Support	51.0	47.1	-8%

CC1 - Mideastern USA

Medium college size of 3,000 - 9,999 students

Not Interviewed: Other colleges showed greater improvements in scores. This could prove interesting due to decrease in four of five CCSSE scores and increases in many Great Colleges culture scores.

CC2-GC*	GC2012-1	GC2016-2	GC Unit Change
JobSS	56	78	**22**
TeachEn	52	70	**18**
ProfDev	56	76	**20**
CompB	58	83	**25**
Facilities	47	78	**31**
Policy	52	71	**19**
ShGov	53	75	**22**
Pride	66	82	**16**
Suprv	64	79	**15**
SrLead	51	75	**24**
FacAdSt	54	75	**21**
Comm	48	69	**21**
Collab	52	76	**24**
Fair	48	74	**26**
Respect	56	75	**19**
AVE	55	76	**21**

CC2-CCSSE*	CCSSE2010-1	CCSSE2014-2	CCSSE %Change
ActiveLearn	42.5	46.3	**9%**
StuEffort	46.5	48.9	5%
AcChallenge	47.2	51.9	**10%**
Stu-Fac	47	48.1	2%
Support	46.9	49.3	5%

***CC2 - Northeastern USA**

Medium college size of 3,000 - 9,999 students

***Interviewed:** Initially refused Phase 2 due to institutional capacity concerns. Upon further investigation, interviewed administration/staff no longer at college but present during time of surveys. Interviewed due to strong increase in all Great Colleges culture areas and two CCSSE benchmarks.

CC3-GC	GC2009-1	GC2016-2	GC Unit Change	CC3-CCSSE	CCSSE2008-1	CCSSE2014-2	CCSSE %Change
JobSS	87	80	-7	ActiveLearn	47.1	46.5	-1%
TeachEn	79	74	-5	StuEffort	51.3	50.3	-2%
ProfDev	85	78	-7	AcChallenge	48.5	46.4	-4%
CompB	79	75	-4	Stu-Fac	50.3	48.6	-3%
Facilities	90	77	-13	Support	46.1	47.8	4%
Policy	80	65	-15				
ShGov	89	76	-13				
Pride	95	77	-18	**CC3 - Mideastern USA**			
Suprv	83	73	-10	**Small college size of < 3,000 students**			
SrLead	90	69	-21				
FacAdSt	87	67	-20	Not Interviewed: Decreased scores on all of Great Colleges			
Comm	79	59	-20	and four of the five CCSSE scores.			
Collab	83	62	-21				
Fair	71	64	-7				
Respect	88	66	-22				
AVE	84	70	-14				

CC4-GC	GC2011-1	GC2016-2	GC Unit Change	CC4-CCSSE	CCSSE2008-1	CCSSE2014-2	CCSSE %Change
JobSS	62	65	3	ActiveLearn	50.8	48.6	-4%
TeachEn	32	48	**16**	StuEffort	48.9	47.5	-3%
ProfDev	65	64	-1	AcChallenge	51	47.5	-7%
CompB	49	65	**16**	Stu-Fac	51.8	51.1	-1%
Facilities	54	59	5	Support	49.7	43.5	-12%
Policy	32	43	11				
ShGov	30	51	**21**				
Pride	53	67	**14**	**CC4 - Northwest USA**			
Suprv	49	62	**13**	**Small college size of < 3,000 students**			
SrLead	36	50	**14**				
FacAdSt	25	38	**13**	Not Interviewed: No response to invitation; hoped to			
Comm	43	46	3	interview due to increase in most culture scores, but			
Collab	43	45	2	decreased CCSSE scores.			
Fair	36	53	**17**				
Respect	45	51	6				
AVE	43	54	**11**				

CC5-GC	GC2010-1	GC2015-2	GC Unit Change	CC5-CCSSE	CCSSE2008-1	CCSSE2016-2	CCSSE %Change
JobSS	84	86	2	ActiveLearn	55.6	54.5	-2%
TeachEn	77	80	3	StuEffort	57.3	53.3	-7%
ProfDev	84	81	-3	AcChallenge	52.9	50.5	-5%
CompB	76	77	1	Stu-Fac	54.5	51.1	-6%
Facilities	71	75	4	Support	53.7	51	-5%
Policy	69	70	1				
ShGov	80	76	-4				
Pride	90	90	0	**CC5 - Northwest USA**			
Suprv	82	77	-5	**Medium college size of 3,000 - 9,999 students**			
SrLead	84	79	-5				
FacAdSt	79	77	-2	Not Interviewed: Most scores decreased.			
Comm	72	69	-3				
Collab	80	76	-4				
Fair	69	68	-1				
Respect	71	72	1				
AVE	78	77	-1				

CC6-GC*	GC2009-1	GC2015-2	GC Unit Change	CC6-CCSSE*	CCSSE2009-1	CCSSE2015-2	CCSSE %Change
JobSS	87	80	-7	ActiveLearn	45.8	49.8	**9%**
TeachEn	67	62	-5	StuEffort	47	47.9	2%
ProfDev	81	80	-1	AcChallenge	45.5	48.7	**7%**
CompB	78	79	1	Stu-Fac	46.9	51.5	**10%**
Facilities	90	78	-12	Support	47.5	51.2	**8%**
Policy	70	72	2				
ShGov	64	64	0				
Pride	83	78	-5	***CC6 - Midwest USA**			
Suprv	74	77	3	**Medium college size 3,000 - 9,999 students**			
SrLead	66	71	5				
FacAdSt	69	62	-7				
Comm	63	66	3				
Collab	70	65	-5	***Interviewed:** Strong increase in 4 areas of CCSSE; minimal			
Fair	62	67	5	improvements or slight decrease in Great Colleges.			
Respect	76	70	-6				
AVE	72	72	0				

CC7-GC	GC2009-1	GC2014-2	GC Unit Change	CC7-CCSSE	CCSSE2008-1	CCSSE2016-2	CCSSE %Change
JobSS	80	85	5	**ActiveLearn**	55.7	53.3	-4%
TeachEn	80	88	8	**StuEffort**	58.8	55.9	-5%
ProfDev	83	88	5	**AcChallenge**	54.9	52.9	-4%
CompB	69	88	**19**	**Stu-Fac**	61.7	56.1	-9%
Facilities	95	97	2	**Support**	63	59.4	-6%
Policy	81	87	6				
ShGov	82	90	8				
Pride	90	95	5	**CC7 - South Central USA**			
Suprv	84	85	1	**Small college size of < 3,000 students**			
SrLead	86	90	4				
FacAdSt	84	87	3	Not Interviewed: Decrease in CCSSE scores; minimal			
Comm	76	76	0	increases in Great Colleges scores, except in			
Collab	81	80	-1	Compensation/Benefits.			
Fair	77	85	8				
Respect	82	86	4				
AVE	82	87	5				

CC8-GC	GC2009-1	GC2015-2	GC Unit Change	CC8-CCSSE	CCSSE2008-1	CCSSE2012-2	CCSSE %Change
JobSS	80	75	-5	**ActiveLearn**	44	47.4	**8%**
TeachEn	55	59	4	**StuEffort**	44.4	44	-1%
ProfDev	76	70	-6	**AcChallenge**	47.1	48.6	3%
CompB	63	69	6	**Stu-Fac**	45	48.2	**7%**
Facilities	68	78	**10**	**Support**	42.7	43.6	2%
Policy	56	60	4				
ShGov	48	52	4				
Pride	77	73	-4	**CC8 - North Central USA**			
Suprv	80	67	-13	**Medium college size of 3,000 - 9,999 students**			
SrLead	46	50	4				
FacAdSt	50	43	-7	Not Interviewed: Other colleges had greater increases.			
Comm	56	50	-6				
Collab	62	54	-6				
Fair	57	53	-4				
Respect	68	57	-11				
AVE	62	60	-2				

CC9-GC	GC2009-1	GC2017-2	GC Unit Change	CC9-CCSSE	CCSSE2009-1	CCSSE2015-2	CCSSE %Change
JobSS	81	82	1	**ActiveLearn**	52.1	53	2%
TeachEn	70	77	7	**StuEffort**	50.3	50.8	1%
ProfDev	78	73	-5	**AcChallenge**	50.8	49.8	-2%
CompB	66	76	**10**	**Stu-Fac**	49.2	49	0%
Facilities	85	83	-2	**Support**	49.5	52.5	**6%**
Policy	69	72	3				
ShGov	59	72	**13**				
Pride	82	85	3	**CC9 - South Central USA**			
Suprv	77	81	4	**Large college size of > 10,000 students**			
SrLead	63	72	**9**				
FacAdSt	65	74	**9**	Not Interviewed: CC9 - CC13 are in same geographic area			
Comm	63	65	2	and same college system (system administered one Great			
Collab	70	71	1	Colleges survey for all colleges in the system). Selected			
Fair	60	69	**9**	the college with the greatest improved CCSSE scores.			
Respect	74	72	-2				
AVE	70	75	5				

CC10-GC*	GC2009-1	GC2017-2	GC Unit Change	CC10-CCSSE*	CCSSE2009-1	CCSSE2015-2	CCSSE %Change
JobSS	81	82	1	**ActiveLearn**	47.4	52.1	**10%**
TeachEn	70	77	7	**StuEff**	44.5	49.5	**11%**
ProfDev	78	73	-5	**AcChall**	47.6	52.5	**10%**
CompB	66	76	**10**	**Stu-Fac**	45.8	51.1	**12%**
Facilities	85	83	-2	**Support**	46.3	51.4	**11%**
Policy	69	72	3				
ShGov	59	72	**13**				
Pride	82	85	3	***CC10 - South Central USA**			
Suprv	77	81	4	**Large college size of > 10,000 students**			
SrLead	63	72	**9**				
FacAdSt	65	74	**9**	***Interviewed:** Strongest increase in all 5 CCSSE scores of			
Comm	63	65	2	system colleges (CC9-CC13) and increases in the 5 areas of			
Collab	70	71	1	the Great College culture scores (as all other colleges in the			
Fair	60	69	**9**	system).			
Respect	74	72	-2				
AVE	70	75	5				

CC11-GC	GC2009-1	GC2017-2	GC Unit Change	CC11-CCSSE	CCSSE2009-1	CCSSE2015-2	CCSSE %Change
JobSS	81	82	1	**ActiveLearn**	45.1	52.8	**17%**
TeachEn	70	77	7	**StuEffort**	48.1	50.5	5%
ProfDev	78	73	-5	**AcChallenge**	48.8	50	2%
CompB	66	76	**10**	**Stu-Fac**	47.3	49.7	5%
Facilities	85	83	-2	**Support**	47.8	50.4	5%
Policy	69	72	3				
ShGov	59	72	**13**				
Pride	82	85	3	**CC11 - South Central USA**			
Suprv	77	81	4	**Large college size of > 10,000 students**			
SrLead	63	72	**9**				
FacAdSt	65	74	**9**	Not Interviewed: CC9 - CC13 are in same geographic area			
Comm	63	65	2	and same college system (system administered one Great			
Collab	70	71	1	Colleges survey for all colleges in the system). Selected			
Fair	60	69	**9**	the college with the greatest improved CCSSE scores.			
Respect	74	72	-2				
AVE	70	75	5				

CC12-GC	GC2009-1	GC2017-2	GC Unit Change	CC12-CCSSE	CCSSE2009-1	CCSSE2015-2	CCSSE %Change
JobSS	81	82	1	**ActiveLearn**	46.9	52.8	**13%**
TeachEn	70	77	7	**StuEffort**	50	52.9	**6%**
ProfDev	78	73	-5	**AcChallenge**	49.5	50.6	2%
CompB	66	76	**10**	**Stu-Fac**	47.6	49.4	4%
Facilities	85	83	-2	**Support**	54	56.5	5%
Policy	69	72	3				
ShGov	59	72	**13**				
Pride	82	85	3	**CC12 - South Central USA**			
Suprv	77	81	4	**Large college size of > 10,000 students**			
SrLead	63	72	**9**				
FacAdSt	65	74	**9**	Not Interviewed: CC9 - CC13 are in same geographic area			
Comm	63	65	2	and same college system (system administered one Great			
Collab	70	71	1	Colleges survey for all colleges in the system). Selected			
Fair	60	69	**9**	the college with the greatest improved CCSSE scores.			
Respect	74	72	-2				
AVE	70	75	5				

CC13-GC	GC2009-1	GC2017-2	GC Unit Change	CC13-CCSSE	CCSSE2009-1	CCSSE2015-2	CCSSE %Change
JobSS	81	82	1	**ActiveLearn**	46.8	50.1	**7%**
TeachEn	70	77	7	**StuEffort**	45.5	47.6	5%
ProfDev	78	73	-5	**AcChallenge**	46.7	50.6	**8%**
CompB	66	76	**10**	**Stu-Fac**	46.5	50.1	**8%**
Facilities	85	83	-2	**Support**	47.6	50.3	**6%**
Policy	69	72	3				
ShGov	59	72	**13**				
Pride	82	85	3	**CC13 - South Central USA**			
Suprv	77	81	4	**Large college size of > 10,000 students**			
SrLead	63	72	**9**				
FacAdSt	65	74	**9**	Not Interviewed: CC9 - CC13 are in same geographic area			
Comm	63	65	2	and same college system (system administered one Great			
Collab	70	71	1	Colleges survey for all colleges in the system). Selected			
Fair	60	69	**9**	the college with the greatest improved CCSSE scores.			
Respect	74	72	-2				
AVE	70	75	5				
CC14-GC	**GC2011-1**	**GC2016-2**	**GC Unit Change**	**CC14-CCSSE**	**CCSSE2008-1**	**CCSSE2016-2**	**CCSSE %Change**
JobSS	89	78	-11	**ActiveLearn**	51.1	51.1	0%
TeachEn	81	70	-9	**StuEffort**	55.5	49.9	-10%
ProDev	90	73	-17	**AcChallenge**	55.2	54.8	-1%
CompB	84	78	-6	**Stu-Fac**	53.8	54.8	2%
Facilities	84	79	-5	**Support**	54.3	53.4	-2%
Policy	79	67	-12				
ShGov	82	68	-14				
Pride	92	81	-11	**CC14 -Mideastern USA**			
Suprv	90	78	-12	**Medium college size of 3,000 - 9,999 students**			
SrLead	83	66	-17				
FacAdSt	82	68	-14	Not Interviewed: Most scores decreased on both surveys.			
Comm	77	64	-13				
Collab	82	67	-15				
Fair	81	68	-13				
Respect	82	71	-9				
AVE	84	72	-12				
	14 of 44 potential community colleges provided the necessary data for a 32% response rate.						

APPENDIX F: IRB APPROVAL LETTERS

FERRIS STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECT RESEARCH
1010 Campus Drive FLITE 410 Big Rapids, MI 49307 | (231) 591-2553 | www.ferris.edu/irb

Date: May 29, 2019

To: Sandra Balkema
From: Gregory Wellman, R.Ph, Ph.D, IRB Chair
Re: IRB Application *IRB-FY17-18-210 Community College Culture and Student Engagement*

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, *Community College Culture and Student Engagement(IRB-FY17-18-210)* and approved this project under Federal Regulations Exempt Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Approval has an expiration date of one year from the date of this letter. **As such, you may collect data according to the procedures outlined in your application until May 27, 2020.** Should additional time be needed to conduct your approved study, a request for extension must be submitted to the IRB a month prior to its expiration.

Your protocol has been assigned project number IRB-FY17-18-210. Approval mandates that you follow all University policy and procedures, in addition to applicable governmental regulations. Approval applies only to the activities described in the protocol submission; should revisions need to be made, all materials must be reviewed and approved by the IRB prior to initiation. In addition, the IRB must be made aware of any serious and unexpected and/or unanticipated adverse events as well as complaints and non-compliance issues. Understand that informed consent is a process beginning with a description of the study and participant rights, with the assurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document and investigators maintain consent records for a minimum of three years.

As mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) the IRB requires submission of annual reviews during the life of the research project and a Final Report Form upon study completion. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor.

Regards,

Gregory Wellman, R.Ph, Ph.D, IRB Chair
Ferris State University Institutional Review Board

FERRIS STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECT RESEARCH
1010 Campus Drive FLITE 410 Big Rapids, MI 49307 | (231) 591-2553 | www.ferris.edu/irb

Date: February 11, 2020

To: Sandra Balkema, PhD
From: Gregory Wellman, R.Ph, Ph.D, IRB Chair
Re: IRB Application *IRB-FY17-18-210 Community College Culture and Student Engagement*

The Ferris State University Institutional Review Board (IRB) has reviewed and approved your request for revisions to the study, *Community College Culture and Student Engagement(IRB-FY17-18-210)*. Revision Approved follows the expiration date of your initial application Approved. **As such, you may collect data according to the procedures outlined in your application until May 27, 2020.**

Your project will continue to be subject to the research protocols as mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) for using human subjects in research. It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in your application. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,

Gregory Wellman, R.Ph, Ph.D, IRB Chair
Ferris State University Institutional Review Board

FERRIS STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECT RESEARCH
1010 Campus Drive FLITE 410 Big Rapids, MI 49307 | (231) 591-2553 | www.ferris.edu/irb

Date: April 16, 2020

To: Sandra Balkema, Ph.D
From: Gregory Wellman, R.Ph, Ph.D, IRB Chair
Re: IRB Application *IRB-FY17-18-210 Community College Culture and Student Engagement*

The Ferris State University Institutional Review Board (IRB) has reviewed and approved your request for an extension to continue using human subjects in the study, *Community College Culture and Student Engagement (IRB-FY17-18-210)*. This approval has an expiration date of one year from your previous study expiration. **As such, you may collect data according to the procedures outlined in your application until May 27, 2021.**

Your project will continue to be subject to the research protocols as mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) for using human subjects in research. It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in your application. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,

Gregory Wellman, R.Ph, Ph.D, IRB Chair
Ferris State University Institutional Review Board