

BEST PRACTICES TO IMPROVE ATTRITION

by

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A Scholarly Delivery Submitted in Partial Fulfillment

of the Requirements for the Degree

DOCTOR OF EDUCATION

Educational Leadership

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Canyon, Texas

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Approved:

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*Qualified Signature	✓	Yes		No		Literature Review		Case Study	✓	Empirical Study
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*The qualified signature of the methodologist indicates agreement only with the scholarly deliverable(s) checked. The lack of one or more checked scholarly deliverables is not indicative of disagreement, but instead reflects a lack or absence of the methodologist's involvement with the unchecked scholarly deliverable(s).

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Scholarly Delivery Framework

This final composite examines decision making and attrition in healthcare disciplines through two artifacts. The first scholarly deliverable is a case study that can be used for teaching doctoral or master's candidates in the field of educational leadership. The title of this article is "Attrition and Efficacy: A New Dean's Challenge". This case represents the struggles of a new dean and how the attrition and efficacy problem is addressed. This article offers teaching opportunities that can be used to navigate decision making and addressing the problem of attrition and efficacy. The final scholarly deliverable is an empirical article titled "Best Practices to Lower Attrition". This empirical article focuses on the practices used to lower attrition in community college healthcare disciplines in the State of Texas.



INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS
Letter of Amendment Approval

October 13, 2021
Dr. Hooper
OM
Canyon, TX 79016

Dr. Hooper:

The West Texas A & M University Institutional Review Board is pleased to inform you that upon review, the amendment to proposal # **2021.04.007** for your study titled, “**Best Practices to Lower Attrition,**” meets the requirements of the WTAMU IRB Manual, and approval for the amendment is granted until **April 14, 2022**.

Principal investigators assume the following responsibilities:

1. **Continuing Review:** The protocol must be renewed on or before the expiration date if the research project requires more than one year for completion. A [Continuing Review form](#) along with required documents must be submitted on or before the stated deadline. Failure to do so will result in study termination and/or loss of funding.
2. **Completion Report:** At the conclusion of the research project (including data analysis and final written papers), a [Close out form](#) must be submitted to AR-EHS.
3. **Unanticipated Problems and Adverse Events:** Pursuant to [SOP No. 15.99.05.W1.13AR](#), unanticipated problems and serious adverse events must be reported to AR-EHS.
4. **Reports of Potential Non-Compliance:** Pursuant to [SOP No. 15.99.05.W1.05AR](#), potential non-compliance, including deviations from the protocol and violations, must be reported to the IRB office immediately.
5. **Amendments:** Changes to the protocol must be requested by submitting an [Amendment form](#) to AR-EHS for review by the IRB. The IRB must approve the Amendment before being implemented. Amendments do not extend time granted on the initial approval
6. **Consent Forms:** When using a consent form, only the IRB approved form is allowed.
7. **Audit:** Any proposal may be subject to audit by the IRB Administrator during the life of the study. Investigators are responsible for maintaining complete and accurate records for five years and making them available for inspection upon request.
8. **Recruitment:** All recruitment materials must be approved by the IRB. Recruitment materials distributed to potential participants must use the approved text and include

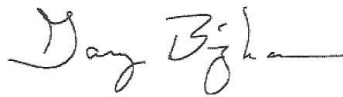
the study's IRB number, approval date, and expiration dates in the following format:
WTAMU IRB# #####.##.### Approved: ####/####/#### Expiration Date: ####/####/####.

9. **FERPA and PPRA:** Investigators conducting research with students must have appropriate approvals from the Family Education Rights and Privacy Act (FERPA) administrator at the institution where the research will be conducted in accordance with the Family Education Rights and Privacy Act (FERPA) if applicable to the research being proposed. The Protection of Pupil Rights Amendment (PPRA) protects the rights of parents in students ensuring that written parental consent is required for participation in surveys, analysis, or evaluation that ask questions falling into categories of protected information.

Sixty days prior to the expiration of this proposal, you will receive a notification of the approaching expiration date at which time you will need to submit an [Amendment/Continuation/Close out](#) form.

Thank you for your cooperation with the IRB and we wish you well with your research project.

Sincerely,



Dr. Gary Bigham
Chair, WTAMU IRB



Dr. Angela Spaulding,
Vice President of Research and Compliance

Acknowledgments

First, I would like to thank my wife, Tina, and our kids, Ashlea, Tyler, and Alyson for enduring this journey with me. The sacrifices and utmost patience you showed through the last three years has been amazing and appreciated. I love you all with all my heart.

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To the inaugural cohort of West Texas A&M's Doctor of Educational Leadership program, I say thank you. I have made friendships that will last a lifetime. I have no doubt that without your support I would not have been able to complete this program.

Table of Contents

Signature Page	ii
Scholarly Delivery Framework.....	iii
IRB Approval.....	iv
Acknowledgements.....	vi
Table of Contents	vii
Case Study Article	1
Abstract	2
Behavioral Approach to Leadership	4
Efficacy	5
Attrition.....	5
Leadership in Healthcare	6
Community College/High School Partnerships	7
Case Narrative.....	7
Teaching Notes	10
References.....	14
Empirical Article.....	16
Abstract	17
Research Methods.....	27
Findings.....	29
Discussion	35
References.....	41

Attrition and Efficacy: A New Dean's Challenge

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Abstract

This case study addresses culture change with new administration, specifically the position of dean and how they affect the environment and ultimately success within programs. This is no different within medical disciplines in the college setting. Deans within medical disciplines in community colleges are driven by enrollment and completion, with many variables from enrollment to attrition impacting success. Within the teaching notes, discussion questions and scenario-based examples, participants are encouraged to allow their mind to roam outside of the box and explore the opportunities new administrators have within the community college setting.

Keywords: Dean practices, community colleges, efficacy, and attrition

Within any college and particularly community colleges, focus is and should be on student success. Community colleges are historically driven by enrollment and completion, with many variables from enrollment to attrition impacting success (Summers, 2003). That has not changed. What has changed are administrative job descriptions. With new administration there normally comes waves of change, some subtle and some very direct, but what has changed within colleges without the stimulus of new administration are the roles of dean and department head (De Boer & Goedegebuure, 2009). Those roles have grown in their scope and responsibility. Both have moved from more of a student-focused role, academics, to the role of a business manager with the department head role more of a middle manager bridging faculty and students with the dean (De Boer & Goedegebuure, 2009).

The stimulus for this change seems to be the stakeholders. De Boer and Goedegebuure (2009) studied the demands placed upon the university by increasingly vocal, influential, and diverse groups of stakeholders. Those stakeholders include students, parents, upper administration, boards of regents, and the general public. There is a demand for productivity while being fiscally responsible and that demand has trickled down from president to dean to department head, to create an environment that requires deans and department heads to be more business managers than academic overseers (De Boer & Goedegebuure, 2009). Leadership is perceived as an instrument to support “planning”, “development”, “implementation” and “evaluation” of academic work in order to achieve “excellent” performance (Juntrasook, 2014, p. 19). Leadership can be defined many different ways and these different types of leadership are as vast as the

definitions you can find on the subject. Defining leadership as a process means that it is not a trait or a characteristic that resides in the leader (Northouse, 2019).

Behavioral Approach to Leadership

There are two distinct traits that make up the behavioral approach to leadership: task behavior and relationship behavior (Nordback & Espinosa, 2015). Task behaviors facilitate goal accomplishment. They help the group members to achieve their objectives, while relationship behaviors help followers feel comfortable with themselves, with each other, and with the situation in which they find themselves (Northouse, 2019). Blake and Mouton (1964) developed the managerial grid that divided leadership into five categories: country club, team, impoverished, authority-compliance, and middle of the road. This grid breaks down the task and relational behaviors into more definable categories to further evaluate the behaviors of leaders.

A shared leadership approach while incorporating the behavioral model creates a very effective leadership approach. Nordback and Espinosa (2015) studied leadership from the shared approach while incorporating behaviors to promote shared leadership. The shared leadership approach worked due to leaders in all areas coordinating their efforts in order to offer a unified front both cognitively and behaviorally. This type of leadership led to not only improvement in members taking their own initiative, but shared leadership led to increased decision quality and speed which can lead to increase in productivity. The behavioral approach provides a framework for assessing leadership in a broad way, as behavior with a task and relationship dimension (Northouse, 2019). The behavioral approach can be used to evaluate all levels of the organization to create more

effective leaders. This is a diverse approach that lends itself well to training and development programs (Juntrasook, 2014).

Efficacy

Results are what drive community colleges and the ability to create collective teaching efficacy is paramount in attaining those results. When collective teaching efficacy is implemented it allows for better goal setting, motivation and effort among colleagues (Fives & Looney, 2009). Having multiple teachers in the classroom allows for more opportunity to meet the students' needs and decreases the demands of a single teacher (Krammer, et al., 2018). The ability of the leader to set attainable and realistic goals is necessary in nurturing collective teaching efficacy. Teaching within itself is very unique but teaching in higher education creates a new challenge for efficacy (Fives & Looney, 2009). From a situational leadership approach, development of the group is paramount in team performance (Bosse et al., 2017). Bringing efficacy into a collective model within higher education creates both a better leader and a better teacher.

Attrition

Attrition within community colleges is not a new phenomenon, but the strain that it places on departments is acute, especially in the healthcare discipline division as they are smaller in enrollment than arts and sciences divisions. There are many variables to attrition including student characteristics and academic ability (Summers, 2003). High attrition rates within programs equates to less dollars in the coffers of the community college. State funding tied to course and degree completion have raised the stakes at community colleges (Michalski, 2014). With high demand on lower attrition, which in turn creates more retention, graduates, and positive job placement, the ability to acquire

and retain quality students is even more important (Summers, 2003). While there are numerous empirical articles on attrition in the arts and sciences, there is very little relating to healthcare disciplines within community colleges. The ability of a leader to set retention and attrition goals for faculty can create a positive outcome for both the student and the institution (Summers, 2003).

Leadership in Healthcare

Johnson (2016) examined how students are trained at the community college level for healthcare disciplines, which are more specifically labelled as health care navigators. The healthcare navigator professions represent a host of interrelated professions or job titles that have traditionally been associated with frontline public health service (Johnson, 2016, p. 20). While this study looked at several areas it lacked the breadth needed to fully understand the all areas of the community college healthcare fields. More literature and research is needed in this area to specifically evaluate the common healthcare disciplines offered in community college settings and the leadership styles and practices of department heads that lead these areas in regard to efficacy and attrition.

Research indicates that deans and department heads who work to create partnerships with high schools ensure student success at the community college level. Assessment of academics and interests are key components when assisting students to make the best decisions regarding their high school and postsecondary educational plans (Lindahl et al., 2002). Secondary education leaders can take an active role in the school improvement process by encouraging cultural change for their campuses through two key initiatives: (a) promoting a rigorous curricula by encouraging more students to take Advanced Placement and/or dual-enrollment classes, and (b) entering into credit-based

transition agreements with local colleges to help academically motivated and prepared students to successfully transition to postsecondary institutions (Fowler & Luna, 2009).

Community college/high school partnerships

Science, technology, engineering, and mathematics (STEM) programs in high school are paramount in creating a healthcare workforce that meets the job demand (Hagedorn & Purnamasari, 2012). The ability of high schools and community colleges to create a partnership that will allow students an easy transition to college could allow the STEM programs to flourish and could prevent attrition. Hagedorn and Purnamasari (2012) examine STEM and the unequal access by ethnic group and gender and how these shortages could have a negative effect on the workforce. The community college, where most associate's degrees are conferred, plays a pivotal role in training the next generation of work-ready students. Hagedorn and Purnamasari (2012) state that job growth within the nursing field will grow by 22.2% in 2018 for those graduating with an associate's degree. This job growth will necessitate the need for high school STEM programs to be able to transition that student to college for their degree so they enter the workforce job ready. This collective teaching efficacy between high schools and colleges creates a unified focus that will allow the efficacy in teaching to be a smooth transition with a common goal in mind (Hagedorn & Purnamasari, 2012).

Case Narrative

After 10 years with the institution and moving up through the ranks, instructor, assistant professor, chair, John has finally attained one of his goals, dean. It was definitely a highlight to his career thus far, but there was a problem. The new half of the department he was now in charge of had a culture and attrition problem. Part of the angst

he felt was the fact that as chair he had built a relationship with half of the group he now oversaw. This group had worked together for around five years, he knew them and they knew him. He had a rapport with them, knew their programs, their accrediting bodies, their retention and attrition, their pass rates on credentialing exams. With this relationship he was able to be more of a hands-off administrator and was able to create varying leadership styles that worked well with this group. He knew that if there was an issue with a program that these faculty would keep him in the loop and he didn't have to worry about what was going on within these programs.

Now enter the other half of the new department, we will call them the old guard, the ones he did not know, was not familiar with and the previous Dean was partial towards. The only person he knew in this new area was the administrative assistant. He was charged, at his hire, with changing three things within in this new department; culture, environment, and attrition. All three of these areas were having a major negative impact on perception and enrollment. Building a relationship was going to be difficult. This group was not receptive of John because he was not "one of them", his background and experience was not in their field, and therefore, in their minds he did not know what he was doing.

John was named interim dean for six months before the job became permanent. This further complicated issues as the new group saw him as a lame duck, unable to exact any change or carry any authority as he was only the interim. John did his best to try and learn the program, faculty, and staff. The thing you need to know about John is that he is very relational. He is not a sit in your office type of guy. He wants to be out in the halls, talking with students, faculty and staff. He was very intentional in this endeavor, making

time to go to each faculty member's office just to talk, not about work or the challenges of a college department but just to talk about himself and learn about the employees. Some were very receptive and some were not but that did not deter John from trying to get to know these group of people. He was also very transparent in everything job related. He tried to ensure that not only did everyone know what was going on but the why behind the what. The other thing you must know about John is that he is a student advocate almost to a fault. He sees the potential in all students and wants to ensure that they have every opportunity to succeed.

John used his first opportunity in meeting with the entire faculty to ensure them that his goal was not only for students to succeed but for faculty to have the tools needed to make that happen. As a college instructor for the past 15 years, John had stood in front of many students and was fairly good at reading his audience. This audience was not receptive. Yes you had a select few that were engaged with the discussion, but for the most part the group was disinterested. As the weeks went by in that fall semester he found himself in a meeting with the president of the college and the vice president of academic affairs, it was a pretty mundane meeting until the end when the president brought up a conversation he had with the faculty of the old guard. They had bypassed all lines of authority and gone straight to the President to complain that "this new dean" was too involved in their business, didn't know how they did things and demanded that the President do something about it. John sat there and listened to the laundry list of things this group of faculty thought he was either doing wrong or should change. John left this meeting not angry or defeated, but emboldened by the president's words; "I trust you and know that you will do what is right, the you can't turn a ship on a dime, it takes time".

John was more determined than ever to not only maintain what he was doing but he had a renewed passion to work to get this group on his side.

Teaching notes

This case study can be used to project, reflect, evaluate, and discuss the challenges that a new dean is faced with when entering a new environment. There are many leadership styles and many ways in which the dean can move forward with what he or she was charged with improving; culture, environment, and attrition. There are also many factors that play into changing the culture and improving attrition. The behavioral leadership approach can allow the leader to look at both the task and the relationship. Both of these are desperately needed in John's case. Below are two decisions that John is considering. The questions for each are structured to examine what results might occur from each decision.

Scenario 1

John walks out of the president's office emboldened and immediately sets up a meeting with the faculty and staff. It is with the entire faculty and staff and not just the old guard. He does not wait to cool off or reflect on what the president had said but has the meeting with the faculty at the end of the day before everyone goes home. His is intent on letting them know who is in charge and what they will be expected to do. There will be no discussion and no questions and the meeting will be very one sided and a very top down model.

1. What are the positives and negatives to this approach?
2. What leadership style, if any, is John utilizing?

3. Based on your experience with this type of leader how will you feel when you walk out?
4. Should John show the hard data and demand that a SWOT analysis be administered to faculty, staff, and students to identify areas of concern to further solidify his stance? Explain your answer.
5. Discuss the potential ramifications for the students after this meeting?
6. Discuss how this approach helps get to the heart of why there is a culture and attrition.
7. Discuss how this very one sided discussion can be implemented using the behavioral leadership approach to improve the efficacy and attrition issue.

Scenario 2

John takes time to digest what he has been told. He is a bit discouraged but more emboldened. He creates a plan that will include data from previous semesters that outline the positive aspects of the program along with areas of concern. He plans to meet with just the new group of faculty and staff to discuss the issues addressed to him from the president. He wants to be firm but flexible to the concerns of this group. His goal is to get them on his side and understand that his focus is student success and with student success the faculty need the tools in which to be successful. Before the meeting he meets with the vice president to go over the topics he will discuss to ensure that the approach he is going to use is validated by his superior.

1. What are the positives and negatives to this approach?
2. What leadership style, if any, is John utilizing?

3. Discuss the potential ramifications for the students after this meeting?
4. Based on your experience with this type of leader how will you feel when you walk out?
5. Discuss how this approach can be more beneficial to the outcome that John desires.
6. Discuss how productive it will be to show hard data to the group in order to help them understand his desired outcome; the faculty on his side and student success.
7. Explain how much focus should be put on student success and its correlation to decreasing attrition?
8. Discuss how the behavioral leadership approach can improve the efficacy and attrition issue.

General Questions

1. Discuss how a collective teaching efficacy model can bridge the gap between faculty and administration and also correct the attrition problem?
2. How can John take his relational style and work it to his benefit using the behavioral leadership approach?
3. Explain how can John take the goal of student success and start building a successful group of faculty using the behavioral approach? How can he accomplish the same thing using a hierarchical approach?
4. Discuss as dean, should John incorporate a top down or bottom up model of leadership or should it be somewhere in between?

5. What other leadership style approaches can work for John in his new position, while incorporating efficacy and turning the tide on attrition?
6. Based on the literature that attrition creates a financial burden, especially on the healthcare divisions in community colleges, discuss the leadership styles that are best suited to tackle this issue given the case narrative.
7. With the great demand being placed on deans by the various stakeholders, discuss whether John should be focused on this finite group of faculty or looking more at the big picture.
8. After reviewing different leadership styles, which style is would you employ in this case narrative?
9. Research says that collective teaching efficacy helps meet student needs and decreases demands on teachers. Discuss how the different leadership styles could implement a collective teaching environment.

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Best Practices to Lower Attrition

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Abstract

Purpose: Attrition is a problem that effects students personally and community colleges financially. With the community college persistence rates falling it necessitates an evaluation of the practices used to lower attrition. The purpose of this study is to explore the perspective of college deans regarding lowering the attrition rate in students at risk of failing in a health science discipline in community colleges in Texas. **Research**

Methods: This descriptive qualitative study of 10 deans of health sciences in community colleges in Texas utilized a semi-structured interview process that was transcribed and coded to reveal emerging themes. Data analysis included transcribing interviews, coding, recoding, and forming themes. **Findings:** There were three themes that emerged from the study: faculty involvement, college/faculty resources, and student resources. There was a relationship between faculty involvement and college/faculty resources, which was student meetings. Having face-to-face meetings with students that are at high risk of failing, according to the deans, is an important practice to implement to reduce attrition.

Implications: This study's findings suggest that building a relationship with the at-risk student is increasingly important in reducing attrition. A deans' ability to develop these practices with faculty will have far-reaching effects on the at-risk community college student.

Keywords: deans, healthcare disciplines, attrition, communication, relationships, empirical study

Best Practices to Lower Attrition

Within any college or community college the focus is on student success.

Community colleges are historically driven by enrollment and completion, with many variables, from enrollment to attrition, impacting that success. This necessitates accountability not only for the institution but within each academic department. That accountability is even more prevalent within healthcare disciplines as there are many more stakeholders that demand it (Osmani, 2013). Also, accountability within community colleges has become increasingly important as the use of public funds becomes more important (Summers, 2003). All stakeholders have a right to have healthcare practitioners who are well prepared and able to function adequately in the work environment (Yates & Sandiford, 2013). The dean's role, even in attrition, relates to the many stakeholders who should be considered, all the while maintaining a focus on what is best for the students.

Administrators within community colleges have grown over the years from being strictly academic to more of a business manager (de Boer & Goedegebuure, 2009). This change has occurred at a time when awareness has spiked that the institution's commitment to the student drives student retention and success (Sydow & Sandel, 1998). Moreover, we know that student success is the focus of not only the community college but, more particularly, the dean. However, a dean's role has changed from an academic leader to more of a business leader (de Boer & Goedegebuure, 2009). Ironically, with this change comes a renewed focus on attrition, as attrition can equal revenue for the institution and program.

Research Problem

Two-year colleges have the lowest completion rates of any category of an educational institution (Hanson, 2021). According to the Texas Higher Education Coordinating Board (2020), the one-year persistence rate for Texas community colleges is 63.7%, and the two-year rate is 52.1%. It is also important to note that only 5% of two-year college students graduate on time with a two-year degree (Hanson, 2021). Dropping out of college has a negative effect on those leaving without a degree. Adults without a college degree earn about \$30,000 less per year than college graduates. In 2018, the unemployment rate for high school graduates who dropped out of college was 18.6% (Thompson, 2021). The overarching problem in this study is the high attrition rates within community college healthcare disciplines.

This attrition rate not only negatively affected the individuals who have dropped out, but also the revenue of the community college. Financial pressures and more accountability requirements are facing many community colleges (Farmer & Paris, 2000). These financial pressures can create an environment that values enrollment and student success over quality and job readiness. Many institutions are funded from three main sources: tuition, tax base, and state appropriations, with some states appropriating funding based on performance. Since tuition is the main income source for the institution, reducing attrition is a matter of financial longevity and stability (George, 2002).

The practices the administration utilizes to decrease student attrition can not only create a positive environment for faculty and students; they can also facilitate future growth. Community colleges need to look at historical data to determine the reasons students are leaving their programs or even college altogether (Davidson et al., 2009).

Community colleges are being asked by stakeholders to create evidence-based options to curb attrition (Kubec, 2017). These evidence-based options are driven by the administration and the changes that they are willing and able to make to curb attrition. There were two research question that guided this study, “What practices and leadership styles of health science deans in community colleges lowers attrition in students at risk of failing in a health science discipline in community colleges in Texas?”

Review of Literature

High levels of attrition with first-year community college students have been a historically difficult problem (Schuetz & Schuetz, 2005). The attrition issue is both multi-dimensional and complex, with no easy answer (Beer & Lawson, 2017). Leadership plays a key role in the efforts of decreasing the attrition rate. Leadership is seen as an instrument to support planning, development, implementation, and evaluation of academic work in order to achieve excellent performance (Juntrasook, 2014). The need for the leader to navigate these ideas is even more pressing within higher education (Jones et al., 2012).

Leadership styles can be based on the mission of the institution, demographics, business ties, high school relationships, and transfer opportunities (Eddy & Khwaja, 2019). Leadership within the context of healthcare disciplines is as complex as the variables that are related to attrition (El-Awaisi et al., 2017). What leadership style is utilized is not the most important issue for the dean of health science within a community college. Whether one uses a singular leadership approach, a few, or many styles, the leader helps define a department or an organization and that is what can be powerful. Within any leadership style, there is a power that is essential but also complex. How a

leader uses their power can be the determining factor in their success (Lumby, 2019). The power and decision-making process for a leader is multidimensional (Bozeman et al., 2013). Being in a leadership position by default carries the power to be a decision maker.

To have that power and the ability to make good sound decisions, the leader should be able to communicate with everyone effectively. What is crucial is the ability of the leader to be able to communicate with and influence their employees (Parris & Peachey, 2013). This communication has to occur between the leader and their superiors and their subordinates, as well as outside stakeholders (Findlen, 2000). Communication is important in all areas of life, but the need for a leader to be able to communicate well defines their leadership legacy (Ayers, 2002). Taking a specific leadership style and addressing the issue of attrition can have a positive impact on both student and leader.

Student Attrition and Leadership. The administrative dean role has grown in its scope and responsibility. The role of the dean has changed from focusing on the students and academics to the role of a business manager bridging faculty and students and juggling the ever-increasing demands of fiscal responsibility. The stimulus for this change seems to be the stakeholders. The pressures stakeholders place on institutions are vocal, diverse, and greatly influential (de Boer & Goedegebuure, 2009). These stakeholders include students, parents, upper administration, faculty, boards of regents, and the general public. There is a demand for productivity that is fiscally responsible. This demand has come down from the president to the dean and creates an environment that requires deans to be more business managers than academic overseers. Based on a fiscally-focused business model, attrition is moving toward the forefront due to the funding losses that result from it (Summers, 2003).

There is a long history of collaboration in training healthcare workers at the community college level (Johnson, 2016). Community college healthcare programs are not only bound by college rules, standards, and guidelines, but are also bound by external accreditors. These added areas that healthcare programs should adhere to place such a program in a tough spot. The healthcare program is expected to have high enrollment, maintain that enrollment, and ultimately have high pass rates on post-graduation credentialing exams that enable the student to enter the workforce. This expectation can place a high financial burden on individual programs in the healthcare disciplines. Not only does it strain a student with tuition, lab fees, and testing fees; it also places a burden on the department to ensure that the student gets a quality education at an affordable price. The financial strain experienced by students, programs, and the college as a whole is great (Kubec, 2017). Not only is the dean juggling the attrition issue, but they should also ensure that their programs are viable, affordable, and marketable.

Financial Implications of Attrition

The attrition problem at the community college level intensifies as there is more pressure for accountability and how the public's money is used (Summers, 2003). Though rarely made public, failure in the academic setting is the common thread when it comes to attrition (Lewis, 2018). Community college funding can be directly tied to the successful completion of a program, so it is imperative that both faculty and the administration address attrition. The institution as a whole stakes its reputation on student success while understanding the financial burdens that they will face if students do not succeed (Jobe & Lenio, 2014).

A robust enrollment can create a financial boost for community colleges as long as the student persists to graduation. This outcome-based approach is the premise for performance-based funding. Performance-based funding is a funding model that allows a college to be funded based on student success. (McKinney & Hagedorn, 2016). Performance-based funding models, outlined by the state government, are based on many metrics, including enrollment, persistence, graduation, low-income students, and post-graduation credentialing. Within the healthcare disciplines, performance and persistence are not only important to the college for funding; these are also mandated from their respective external accreditors. This type of performance-based funding based on student success, makes the issue of attrition even more important and the leadership styles utilized by community college deans to exact that change is equally important (Bragg, 2000). The ability to retain students is not only the ultimate goal of the college, which improves the financial status of both college and student, there are many other factors that contribute to attrition.

Factors that Contribute to Attrition

There are several factors that contribute to the attrition of students in community colleges. Those factors can be categorized as personal, academic, and faculty related. Attrition is of concern in higher education institutions across the globe. An advantageous and purposeful way of evaluating attrition is to look at the factors that lead the student to not complete a semester (Prymachuk et al., 2009). Students dropping general coursework, a program, or college altogether come from many factors and they fall into three categories: personal, academic, and faculty related (Davidson et al., 2009).

Financial strains, family issues, and life changes are all reasons why students may find it necessary to drop out (McKinney et al., 2019). While the personal issues that contribute to the attrition problem are not directly connected to academics, they are variables that should be considered. These personal issues can manifest in many ways. Personal stress and inability to cope are directly related to attrition (Eick et al., 2012). External and financial pressures were more likely to be the cause of attrition for the at-risk demographic of students (McAnulla et al., 2020).

One of the greatest challenges for colleges and students in particular, is academic, as in a lack of preparation, which places a strain on the college that is trying to help them be successful (Hoyt, 1999). Faculty feel that even students who make a move from high school to college are not prepared for the transition to college (Brinkworth et al., 2009). This phenomenon can be associated with not only high school transition as well with any student entering college, no matter their background. Though rarely made public, failure in the academic setting is the common thread when it comes to attrition (Lewis, 2018). As student's progress through their studies, they adapt and overcome both academic expectations and ever-changing clinical environments. This requires the college to put practices in place to assist the student in adapting to the college environment (Hamshire et al., 2019).

The remaining factor that leads to high attrition is the relationship the faculty has with the student outside of the classroom. A contributing factor to attrition is poor relationships with faculty (Gansemer-Topf et al., 2014). Students that have more frequent contact with faculty outside of class have been reported to have lower attrition rates. (Schuetz & Schuetz, 2005). Students must be willing to make the effort to communicate

with faculty in an effort to succeed. Community college students neglect to initiate contact with faculty outside of class (Schuetz & Schuetz, 2005). Being able to support students through a program by developing a strong identity for the student within the course setting will help them to learn at an optimal level and meet the rigors of the program (Whannell & Whannell, 2015). This development moves the student towards success and graduation. Perceived staff support that focused on individual needs were pathways to completion (Eick et al., 2012).

Practices that Lower Attrition

There are several strategies or practices that can lower the student attrition rate. These strategies are the involvement of the faculty, college resources, and student resources. The study of student attrition focuses on personal and institutional variables that may influence a student to withdraw from courses (Martinez et al., 2015). Strategies that further academic success, lower attrition, and the ability to show student persistence are relevant for the community college (Popiolek et al., 2013).

The faculty's ability to connect with a student can lead to a more successful outcome. When faculty members welcome students into the program personally, the students feel as if they belong (Ebrahim et al., 2021). This belonging creates a relationship that will inherently help a student succeed. The coordination of faculty, staff, and administration are important in building a successful student intervention. The personalities of instructors have an influence on student outcomes in college (Mahlberg, 2015). Students and faculty getting to know one another increases self-efficacy. This self-efficacy gives the student the path to success (Hempel et al., 2020).

A resource that community colleges can use to prevent attrition is early identification of those students who are at risk. Early identification causes institutions to look at the students' overall college experience from preparation to completion. Identification is the first step in intervening with the high-risk student (Daniel, 2020). Focus is placed on identifying the student that is at-risk of failing. At-risk students flagged for an early intervention campaign had an extremely positive impact on student outcomes (Cox & Naylor, 2018). The opportunity to offer assistance to those at-risk students in need of remediation comes from colleges having an early identification system (Stein, 2018). It would be imperative that much focus be put on promoting the university's support system (Williams & Seary, 2018). This support system can assist those at risk students with personal issues that effect attrition.

The personal issues a student brings to college with them are vast. Student attrition due to personal reasons can cover many circumstances (Deary et.al., 2003). For example, the personal baggage a student enters college with can be tied to their perceived academic success or failure. A student's background can be related to college attrition (Ishitani, 2006). This background, along with a lack of programmatic knowledge can cause a student to leave a program. Students leave coursework because they anticipate failing, or the program was not what was expected. The personal issues a student brings to college with them are vast. Issues of finances, quality of advising and personal well-being are all identified as reasons students leave higher education. Being able to intervene early can lead to a successful student (Willcoxson et al., 2011).

Research Methods

Research Design

This study adopted a descriptive qualitative approach. A recruitment survey was sent for respondents to identify themselves as one of three leadership styles; servant, shared, and situational. The individual interview questions centered on the practices that recruited community college deans use to reduce attrition. A semi-structured interview format was used to ensure consistency. Interview questions were open ended with follow up questions driven by previous answers to allow for a more detailed response.

Participants

The sampling for this study was nonrandom, purposeful, and small (Merriam & Tisdell, 2016). Respondents were from Texas community college deans that oversee healthcare disciplines that lead to a degree or certificate. The healthcare disciplines targeted for the study were accredited by outside accrediting agencies and consisted of emergency medical services, nursing, respiratory care and surgical technology. All programs had an attrition rate of between 10% and 50%. Potential participants were chosen from the 50 public community colleges in Texas. Surveys were sent to the 50 community college deans of health sciences in Texas in order to recruit participants. A total of 11 responses were received, with one respondent declining to participate for a response rate of 20%. This select group of 10 were the subjects of the research study.

Data Collection

The 10 deans that completed the survey were contacted by email requesting a follow up interview. Dates and times of the interviews were determined by each dean's availability and were conducted through Zoom, a cloud-based video communication

platform, due to health guidelines from the Centers for Disease Control due to COVID-19. This platform allowed for recording and transcription of the interview. The data collected was used to determine what practices are being used by deans to lower attrition. Participants answered a series of open-ended questions to determine practices used to lower attrition. Questions were asked such as, “What specific practices are used to lower attrition rates within the health sciences?” “What factors do you believe affect student attrition the most?” and “What approaches are used for students who are struggling to succeed.” The interviews lasted between 30 and 45 minutes and were recorded with the permission of the participants in order to transcribe the interview (Appendix A).

Data Analysis

Transcripts were created from the recordings of the interviews and entered into a table based on responses to the questions from each dean. Initial coding took place by reading the transcripts line by line and sorting the data into word groups, direct quotes, and general ideas. Transcribing the semi-structured interviews allows the transcription to come to life while searching for themes and relationships (Bradshaw et al., 2017). This data was placed into a table with each dean’s responses in separate columns. The second step utilized focused coding with the development of categories and themes. Coding was undertaken using data produced from the interview process. Memoing was used to compare researcher reflections during the coding phase. Codes were then analyzed to determine themes, that is patterns and relationships. Once data saturation was achieved, by no further themes emerging, the data collection process ended. In conclusion, this process allows for a determination to be made regarding the practices utilized by health science deans in community colleges in Texas to lower attrition.

Findings

Leadership styles emphasized a team approach for servant leadership, a nurturing approach for shared leadership, and direct and supportive approach for situational leadership. The self-identified leadership styles showed that 50% identified as servant leaders, 30% as situational leaders, and 20% as shared leaders. Table 1 outlines the survey results from each participant with pseudonyms being used as identifiers.

Table 1

Survey Results

	1 st Generation Students (%)	Non- Traditional Students (%)	Full-Time Students (%)	College Classification	Years in current position
Dean Anderson	75	65	50	Small	0-3
Dean Braun	75	40	25	Very Large	3-5
Dean Conrad	25	25	100	Large	0-3
Dean Davis	Unsure	12	56	Medium	5-10
Dean Eckel	25	30-40	75	Small	3-5
Dean Fine	50-60	30	3	Very Large	Over 10
Dean Griffith	30	80	90	Medium	Over 10
Dean Hodge	90	50	60	Small	3-5
Dean Iverson	30	40	60	Medium	3-5
Dean Jones	No answer	No answer	No answer	Medium	5-10

There were three themes that emerged from the analysis: faculty involvement, college/faculty resources, and student resources. There was a relationship between faculty involvement and college/faculty resources and that was “student meetings.” Having face to face meetings with students that were at high risk of failing, according to the deans, was an important practice to implement to reduce attrition. Faculty involvement found that all 10 deans identified one or more of the codes that described this theme. The theme of college/faculty resources found that, mandatory student meetings and early alert were identified by 100% of deans as an important resource faculty have to reduce attrition. 90% of deans found that the student resources were a factor in attrition in health sciences. Based on these results there was no correlation between a specific leadership style and any of the themes that were identified.

Theme #1: Faculty Involvement

All of the deans identified some type of faculty interaction with students as a major contributor to reducing student attrition. The key indicators of faculty involvement included mentoring, engaging with students, student/faculty meetings, communication, and student/faculty relationships. While all deans found that faculty play some role in student success, 60% of the deans felt that faculty play a large role in the success of the student and not just from the material that was lectured on a weekly basis. As Dean Jones stated, “The faculty are key, how they develop a relationship with the students.” The ability to be relational had a profound effect on student success. Dean Davis identified the importance of the faculty/student relationship as “a segue to them being successful.” While relationships played a large role in success, the ability of faculty to be engaging to the student outside of the classroom was also important. This engaging relationship

allowed for the student to see the professor as someone who actually cared about their success and genuinely wanted them to succeed. As Dean Davis commented regarding faculty involvement, “Take the time to talk to them and listen to them and show them that they care.”

Another type of interaction with students is the student meeting and mentoring opportunities that students have with faculty. Student meetings and mentoring were identified by 90% of the deans as playing a large role in reducing attrition. This gave the faculty a chance to discover reasons a student was not being successful. Dean Davis identified their best practice as mentoring, stating, “It has really surprised me as to how important the connection is that a student needs to have with someone. That connection was created by mentoring and meeting with students on a regular basis.

The final type of faculty interaction was communication. While all deans felt communication was an important factor, only 40% identified it as a major factor. Deans were of the belief that communication is a natural part of the process of interacting with the at-risk student. Communication between the faculty and student supports the relationship, something deans identified as a precursor to reducing attrition. Dean Braun listed communication as a major practice in helping reduce attrition. They stated, “I think that there is a value in communication with faculty and the student early on, before they hit those big benchmarks of success.” Faculty involvement from mentoring to communication was a major factor in a student’s ability to succeed and therefore reduce attrition.

Theme #2: College/Faculty Resources

Faculty development focusing on struggling students happened occasionally according to the interviewees. There were only 20% of deans that had faculty professional development specific to identifying and working with the at-risk health science student. Dean Braun described the situation for his/her faculty this way: “The college has in-services, workshops, and there are sessions that deal with the difficult or challenging student.” Specific opportunities for faculty in relation to professional development for at-risk students did not exist for the deans interviewed.

Early alert system utilization was identified by 60% of deans as a common practice. This system allowed faculty to identify students that were struggling and get them in touch with college counselors to assist them with skills they needed to be successful. Adding support to the first theme, mandatory student meetings were a major factor in reducing attrition. There was a need for faculty to engage the student outside of the classroom to identify the cause of the students’ lack of success. While early alert was only specifically used by 60% of deans interviewed, the remaining deans had developed a divisional system that resembled early alert but was very specific to the health sciences with faculty and/or staff specifically dedicated to working with the at-risk student.

Dean Anderson identified a major factor in reducing attrition was recognition by the college that some families have limited economic resources. They stated, “One thing our institution did was our chancellor eliminated all fees.” This fee elimination relieves the financial stress experienced by college students. Limited economic resources, as identified by deans, were a common thread. The ability of the college to identify those students with limited economic resources and offer assistance for them to attend school

and not have the financial and personal struggle they felt was a key factor in the student being successful. 70% of deans placed the colleges ability to identify and help those students struggling financially as important to alleviating the financial burden on the student, thus creating the opportunity to focus on academics. Dean Jones stated passionately, “Factors can be personal tragedies in life. As in cancer, jobs, partners losing jobs.” The resources that the college and faculty have at their disposal, early alert, mandatory meetings, student support, economic assistance, and professional development help create conditions for supports for struggling students, where they can not only seek the help they need but find it and be guided to success.

Theme #3: Student Resources

The final theme is student resources. Deans identified factors, from the students perspective, that they believe effect student attrition the most. This theme identified, time and money management, socio-economic status, early alert, and family/personal attrition issues. Many students have the ability to be successful but lack a stable socio-economic structure to do so. 50% of deans identified the socio-economic status of the student as a risk factor that effected attrition. Dean Anderson stated, “I think a lot of it is socio-economic status. You know it is not necessarily ability as much as it is their socio-economic status.” The remaining 50% of deans did not identify the socio-economic status as a trigger for attrition but identified that all students must meet the same pre-requisites and rigor, therefore their socio-economic status did not play a role in their ability to succeed. Healthcare disciplines, by in large, have stringent academic entrance requirements, so the ability is there but financial support to be successful may be lacking. A student’s ability to manage their time well while in a rigorous program is of the utmost

importance. Dean Eckel identified time as the biggest hinderance to success and stated, “We found that a lot of students are burning the candle at both ends.” A student not only has to be able to withstand the rigors of the program but must be able to manage the school/life relationship well in order to be successful.

Dean Hodge identified money as the biggest resource needed to facilitate student success and reduce attrition. They stated, “There is never enough money. Never enough money to do all the things we want to do.” Money through grant programs, tuition and fee assistance can reduce the financial burden and allow the student to focus on their studies. A recurring theme has been early alert. 100% of deans interviewed identified the early alert system, either a college wide system or a department specific system as very important. This tool enables students to get the assistance they need to get on a path to success. When Dean Eckel was asked what specific practices are used to lower attrition, they simply stated, “Early alert.” This tool, as stated in its title, allows for early intervention for the struggling student to get them back on the path to success. When entering a healthcare program, students often do not fully understand the rigors and time commitment that it will take to be successful. Dean Fine best described how a student’s trajectory can change once they enter a healthcare program. The dean stated, “Their life will change as an individual and the priorities that they are going to have will change based on who they are and their family’s situation or their work situation.” Students must be informed on the challenges and expectations of a healthcare discipline in order for the college to address the attrition problem.

Discussion

The study explored the practices that ten deans of health sciences in community colleges in Texas utilize to help reduce attrition in their respective student populations. These practices were related to for-credit students in a healthcare discipline that led to a certificate or associates of applied science degree. Deans were asked to identify specific practices that they felt were paramount in helping reduce attrition. Healthcare deans at community colleges face the challenges of attrition within their programs on a daily basis. The attrition issue is both multi-dimensional and complex, with no easy answer (Beer & Lawson, 2017). An advantageous and purposeful way of evaluating attrition is to look at the factors that lead the student to not complete (Prymachuk et al., 2009). Deans are tasked with evaluating the attrition rates within their programs and analyzing the practices that are used to reduce their attrition rates. Most community colleges find that their completion statistics and persistence through their respective programs have remained incredibly low (McKinney & Hagedorn, 2016). While there was no defined relationship between leadership styles of the deans and practices used to lower attrition, there was one practice, building a relationship with students, that emerged as the most discussed best practice.

The results from this study allow deans to identify a group of best practices to lower attrition in their student population. Those best practices were faculty involvement, college/faculty resources, and student resources. The study also identifies the importance of communication and relationship in the colleges ability to retain health science students.

The survey results and subsequent interviews did not identify a defined correlation between the identified leadership styles and practices that are used to lower attrition. Based on the interviews with the 10 deans, there were three solid themes that emerged: (a) faculty involvement, (b) college/faculty resources, and (c) student resources. The faculty involvement theme included mentoring, engaging, student meetings, communication, and relationships. This theme revolved around the relationships that were built between the student and faculty. Student meetings surfaced as the bridge to building those relationships. Faculty are able to not only address the academic struggles of the student but can identify extraneous factors outside of academics that may be hindering the students' ability to succeed and allow for early intervention.

The literature supported this theme by identifying the faculty's need to help a student develop as they moved through their respective program. Being able to support students through a program by developing a strong identity for the student within the course setting helped them to learn at an optimal level and meet the rigors of the program (Whannell & Whannell, 2015). When faculty welcome students into the program personally, the students feel as if they belong (Ebrahim et al., 2021). This involvement from faculty was built around the relational aspect of faculty/student interaction.

The second theme, college/faculty resources, identified the tools available to students and how the faculty play a role in those tools. Faculty professional development, early alert, mandatory student meetings, fee elimination, and support for family/personal attrition issues. Deans identified that while faculty receive some training on how to not only identify those at-risk students but what resources were available to them to help the student, meeting with the students and building that relationship still played a major role

in the success of the student. All of the categories in this theme revolved around the student meeting with the faculty member.

Literature corroborates the theme that college and faculty resources play a role in a student's success by putting systems in place to identify the at-risk student. The institution's commitment to the student drives student retention and success (Sydow & Sandel, 1998). The opportunity to help those at-risk students in need of remediation comes from colleges having an early identification system (Stein, 2018). Having proper resources in place to assist the at-risk student can decrease the financial burden on both student and college. Institutions are always concerned with student attrition, especially in relation to the resources, it requires as well as the financial burden it places on students and the organization (Beer & Lawson, 2017). It is of the utmost importance that healthcare programs develop and implement strategies to not only attract but maintain students who are likely to be successful (Renkiewicz & Hubble, 2015).

The third and final theme, student resources, focused on the challenges the student faces while in a health science program. Money and time management, socio-economic status, early alert, and family/personal attrition issues were the categories identified in this theme. The rigors of the health science program both academically and clinically, require that students be able to manage their school/life well in order to stay on track. The student's socio-economic status comes into play when these students are trying to figure out how to pay for college, keep their jobs, and taking care of their family, all while going to school. These issues, coupled with the early alert system working well will allow these students to move towards successful completion of the health science program.

Supporting literature finds that socio-economic issues fuel the attrition issue for students. The financial strain experienced by students, programs, and the college as a whole is great (Kubec, 2017). College attrition can be related to a student's background (Ishitani, 2006). This background can be economic, familial, or personal. The institution as a whole stake its reputation on student success while understanding the financial burdens that they will face if students do not succeed (Jobe & Lenio, 2014). These financial burdens can be long lasting for the student.

Limitations

There were limitations that existed in this study. The study focused only on deans of health sciences in community colleges in Texas. This limited the potential responses to that specific group. The timing of the survey and subsequent interviews limited the responses, due to the survey and interview occurring at the end of the spring semester and into the summer when there is an increase in workload for health science deans. Due to this workload increase, some deans were unable to participate which could have provided valuable information for this study.

Another limitation was attempting to conduct interviews during a global pandemic. Conducting the interviews strictly online via Zoom, due to COVID-19, along with the increase in workload for deans during the pandemic, potentially affected participation. The challenges of shifting interviews to an online platform removed the ability of the interviewer to have the face to face personal interaction with the interviewee.

Implications

The findings in this literature review carry value for community colleges, stakeholders, deans, faculty, and students. With these findings, comes great promise in relation to developing a set of practices to reduce attrition, which begins with leadership. For community colleges, the ability to decrease attrition can lead to more money in the coffers by improving persistence, enrollment, and recruitment from high schools, as well as an increase in non-traditional students looking for a career change. As enrollment numbers drive the finances of the college, it stands to reason that increased enrollment and decreased attrition can lead to better funding. With better funding, the college can not only attract new faculty but can also spend money in areas that will attract students.

Although it cannot be generalized, the ability to decrease attrition has positive effects for the student, faculty, and college as a whole as more healthcare workers are needed. For example, the estimated unmet demand for nursing will be 60,000 by 2030. The necessity to retain all students, even those at risk, will be important in meeting the healthcare worker shortage. Addressing attrition will have a positive impact on the various stakeholders as well. The stakeholders will be able to see that the funds of the college are not only spent wisely but are creating positive outcomes. The various stakeholders, especially in healthcare disciplines, want to know that the program is improving the attrition issue and that the programs are putting out high-quality healthcare providers. More students and less attrition mean more workers in the workforce. The implications for deans are also far-reaching. Deans should be able to tap a defined set of practices to combat attrition. Understanding the numerous variables that cause attrition enables deans to create a roadmap to success.

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Appendix A

Interview Questions

How do you approach leadership and how does that leadership style guide you?

What factors do you believe effect student attrition the most?

What specific practices are used to lower attrition rates within Health Sciences?

How are students identified as at a high risk of failing?

What criteria is used to identify these students?

Do faculty meet regularly with students, if so how often?

Individually or as a group?

What support is offered to faculty to identify at-risk students?

In regards to emergency medical services, nursing, respiratory care, and surgical technology:

What approaches are used for students who are struggling to succeed?

Is an approach dependent on the program (nursing, etc.)?

What type of faculty professional development is offered that pertains to retention?

Does the program type (nursing, etc.) define the professional development offered to faculty?

Are pre-tests and post-tests administered to students in these specified disciplines?

Is there a specific cut score for those tests?

Do you find that 1st gen students struggle more with these tests?

Do you find that non-traditional students struggle more with these tests?

Do all programs require pre-requisites prior to application and entry?

Are the pre-requisites the same for each program?

What are those pre-requisite requirements?

What practices to lower attrition have worked best?

Specific examples of those practices.

What hinders efforts to help reduce student attrition the most?