Grade Point Average (GPA) as a Criterion for Admission to Two-Year Nursing Programs: The Impact of GPA Use on Student Learning, How GPA Informs Program Admission Decisions, and What Ethical Frameworks Support Admission Decisions

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Grade Point Average (GPA) as a Criterion for Admission to Two-Year Nursing Programs:
The Impact of GPA Use on Student Learning, How GPA Informs Program Admission Decisions, and What Ethical Frameworks Support Admission Decisions

Luke Green

This Dissertation Is Submitted in Partial Fulfillment of the Requirements for the Educational Doctorate Degree in Educational Leadership

Mankato State University, Mankato

Mankato, Minnesota

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Grade Point Average (GPA) as a Criterion for Admission to Two-Year Nursing Programs: The Impact of GPA Use on Student Learning, How GPA Informs Program Admission Decisions, and What Ethical Frameworks Support Admission Decisions

Luke Green

This dissertation has been examined and approved by the following members of the student’s committee.

Dr. Melissa Krull, Chair

Dr. Candace Raskin, Committee Member

Dr. Beatriz DeSantiago-Fjelstad, Committee Member
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The following work was made possible as a result of those who serve others. Individuals and groups of people who dedicated time, energy, and resources to the promotion, betterment, and growth of another at the sacrifice of utilizing those resources for their own pursuits. I have been tremendously blessed to be the beneficiary of the efforts produced by those in the service of others and hope to give to others as much as I have received.

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Researchers
Colleagues
Caregivers
Friends
Family
Henrik
Dedication

To my sixth-grade math teacher (and educators like her) whose coercive and pedagogically-divorced use of grades motivates students to pursue careers in education in an attempt to rectify the harm caused.
Abstract

The use of grade point average (GPA) to guide and inform decision-making permeates many corners of the educational landscape, including admission decisions into collegiate academic programs. Using GPA in this way turns an individual academic measure into a commodity that can be used to settle a competition amongst applicants. The rationale for using GPA in this way often goes undiscussed by policymakers who select it as a criterion. Additionally, turning GPA into a commodity that unlocks academic opportunity runs the risk of affecting how students approach learning in order to get an advantage over those whom they are competing against. This study sought to answer the ways in which GPA affects student learning, the understood rationale of policymakers for why GPA should be used as a metric in this way, and the role consequentialist and deontological ethics have in guiding the rationale. To address the research questions of this study a mixed methods design utilized data collected from two-year nursing programs throughout a state college system, and survey and interview data from students within the programs and educators who set admission policy for the programs. The research determined that using GPA as a criterion can affect student learning behavior, policymakers believe that GPA provides an objective measure that can predict academic readiness and therefore success on credentialing exams, and that consequentialist ethics often are utilized more frequently than deontological ethics to support decisions made concerning admission policy.
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Chapter I: Introduction

A determined student who has spent years away from school may enroll in college with hopes of being admitted into a two-year nursing program. Prior to earning admission into their desired nursing program, they must complete general education requirements and prerequisite courses. Their first semester is a huge struggle, but with hard work and the support of their institution, they are able to pass with straight Cs (yielding a grade point average (GPA) of 2.0). During the second semester the student develops in their academic ability and earns a grade of B (3.0 GPA) in each course. By the beginning of semester three they have become a model student going on to earn nothing but As (4.0 GPA) in semesters three and four. Two years into their collegiate experience they are ready to begin applying for their academic program. They are now demonstrating mastery as a top performer in their individual classes; however, due to the struggle, growth, and development that took place through the educational process during semesters one and two, they apply with a hardly competitive GPA of 3.25 to a program whose average of admitted students is a 3.60 GPA. Within the impending rejection letter, the student will be reassured that the process was fair, pedagogically sound, and aligned with the missions of the program and institution that denied them access.

The current practice of using grades to inform admission decisions is widespread and well accepted as a “proverb of education” (Souja, 2020) insomuch that it is largely accepted as the way things are and goes largely unquestioned. The purpose of this research seeks to draw attention to the current state of affairs regarding the use of GPA within application processes and identify the impact that these policies are having on our students and our institutions in effectively achieving their goals.

Background of the Problem
When it comes to admission into certain academic programs or institutions there are often more applicants than available seats (Bissett, 1995). Framed in economic terminology, this creates a marketplace in which demand (students wishing to become educated) outweighs the supply (available seats in the program). The scarcity forces students to compete in the marketplace for the limited seats available in any given cohort.

As regulators of the marketplace colleges and universities are responsible for being arbiters of admission decisions often relying on criteria established by faculty committees. By establishing clear criteria of what factors are considered in making admission decisions it provides the institutions with the ability to claim that their decisions were guided in an objective and fair manner insulated from arbitrary and unjust influences. By providing applicants with the criteria of which they are to be judged allows students to best align themselves with what is expected of the receiving institution.

A popular metric that admission committees include in their criteria is that of GPA due to the perception that it is an objective method of measurement that is fairly and consistently applied to all students who will eventually apply to a program (Brookhart, et al., 2016). It is a quantitative metric that allows for easy comparison with other students and reflects past academic performance which is perceived to indicate a certain level of competency related to being a student. In the past grades were used solely to chart the summative evaluation of a given course or time at an institution (Durm, 1993). When grades began being used as a criterion for influencing placement and admission decisions, GPA emerged. Grades were no longer just reflections of past learning. When combined and calculated into a GPA grades become a currency that can be used to gain, or be denied, access to additional educational opportunities (Guskey, 2009). As the role of grades continue to broaden, they shift from a reflection of
learning into a commodity which extrinsically motivates students in the learning process (Kohn, 2018). The impact of this extrinsic motivation is that students become motivated by the shiny letter bestowed upon them at the end of the year rather than engaging in classroom activities for the primary purpose of becoming more knowledgeable and capable individuals (Solomon & Piggott, 2018). As the perceived importance of grades increases the primary motivator of knowledge and capability wanes, effectively altering the learning process and student behavior in classrooms (Kohn, 2018). The shift may be justifiable if what students are now chasing after is equal in value to the learning or knowledge they could get out of a course. Unfortunately, that is not the case as validity and reliability problems plague grades and GPA (Beatty, Walmsley, Sackett, Kuncel, & Koch, 2015; Brookhart, et al., 2016; Brimi, 2011; Farr, 2008; Lipnevich, Guskey, Murano, & Smith, 2020). The result is students pursuing a largely symbolic metric at the expense of authentic learning.

Though GPA is traditionally valued for its quantitative and objective qualities, upon closer inspection it is a flawed and subjective metric (Warner, 2020). Awareness of this reality is often overlooked due to its history of being accepted as a measure. The lack of consistent methods used to generate letter grades, which are the building blocks of GPA, produce labels that are ascribed to students in ways that often promote inequity and disguise the somewhat arbitrary nature in which grades were assigned to students (Bahr et al, 2019; Beatty et al., 2015; Blum, 2020; Brimi, 2011; Brookhart, et al., 2016; Farr, 2000; Geiser & Santelices, 2007; Lipnevich et al., 2020; McMillan, 2001; Reeves, 2004; Smith & Smith, 2009; Solomon & Piggott, 2018).

As GPA has much prominence in representing student achievement it has an effect on how students approach their education (Solomon & Piggott, 2018), creates additional stress
students face while chasing grades (Kohn, 2018), and creates potential harm experienced by institutions basing decisions on inequitable and flawed metrics which may undermine their mission statements.

**Topic**

Unpacking how GPA influences the learning and admission process in two-year nursing programs is the central purpose of this research. It seeks to address: how the presence and awareness of GPA based admission policy alters the approach students have in the classroom; the use, rationale, and justification for why GPA is selected as a criterion by admission committees; and what role ethical frameworks play in the inclusion and construction of admission criteria.

The negative impact that extrinsic motivation can have on learning, which occurs when a reward (e.g., high GPA) is attached to high learning performance is well documented (Kohn, 2018). This study will explore if the competitive nature of two-year nursing programs generates the type of problematic consequence associated with these types of learning environments described by Kohn.

Despite GPA having several pedagogic weaknesses it still enjoys tacit acceptance as a metric for admissions criteria and this research seeks to understand why its reputation endures. By understanding the weaknesses of GPA as an indicator of academic potential it follows that an understanding of the epistemological rationale (i.e., reasons education policymakers believe they are correct in their logic) provided by those who continue to endorse GPA-based admission policies would be of benefit.

Lastly, the ethical frameworks that motivate inclusion or exclusion of GPA (i.e., reasons they believe it is fair to use GPA) will be explored to see if they align more closely with a
consequentialist (i.e., success or fairness of policy measured by actual outcomes) or deontological (i.e., success or fairness of policy measured by consistent application of principles) approach and what impact the chosen approaches will have on advancing the missions of the nursing programs and educational institution.

Context

This research will focus on these concepts within the context of two-year associate degree in nursing (ADN) programs in the Minnesota State Colleges and Universities System (MinnState). Contemporary ADN programs have admission policies that are tremendously relevant due to their application pools being consistently larger than available seats in the programs. The confluence of increased competitiveness for program admission, standardized test scrutiny, and systemic inequities make this research tremendously relevant. The results will be able to shed light and clarify why certain students are admitted while others are not, and identify what justifications are provided for those admission decisions. Additionally, it will provide insight to the potential impact these policies have on student approaches to learning and what ethical frameworks are guiding policy decisions.

Purpose of the Research

The purpose of this research is to investigate how GPA is being used to guide admission decisions in two-year nursing programs which traditionally have many more applicants than seats available which magnifies the impact of admission policy. This investigation seeks to yield insight related to: how admission policy affects the learning experience of potential applicants during their pre-admission studies, the epistemological rationale of admission committees for the selection of criteria used in guiding their admission decisions, whether ethical frameworks used to promote fairness in admission decisions align more closely with consequentialism or
deontology, and whether or not those frameworks match up with program and institutional missions.

**Research Questions**

1. In what ways does the use of GPA in informing two-year ADN program admission impact the learning process of program applicants?
2. What epistemological reasons are provided by two-year ADN admission committees for utilizing GPA as an admission criterion?
3. Do the ethical frameworks used by two-year ADN programs that incorporate GPA as a measure more closely align with a consequentialist or deontological approach to guide admission policy?
4. Do the ethical frameworks used to determine the inclusion of GPA as a measure in two-year ADN programs align with the stated missions/values of their institution?

**Significance of the Research**

The focus of this research has potential benefit for guiding two-year nursing program advisory committees that establish admission policy within the MinnState system, and similarly structured programs nationwide, toward a better understanding of their admission policies. This research highlights a small and targeted landscape within the field of education of which GPA use in a prescriptive way alters myriad aspects of how education is understood and accessed. More broadly, insights from this research can help to inform any aspect of education that is reliant on making sense of GPA data as a form of measure.

Education policy has as much power to destroy students as it does to empower them. Therefore, it is beneficial to ensure policies allow students to learn in a safe environment free from undue stress caused by every course assignment becoming a high-stakes referendum on
their future. Policy should also ensure that the methods and processes by which we distribute access to education when demand outnumbers supply are equitable, supported, and aligned with ethical frameworks best suited to advance the missions of our programs and institutions.

**Delimitations and Limitations**

This research is limited by the idiosyncrasies that are present within MinnState as well as the field of nursing. Though information that is derived from this study will hold predictive value within MinnState, because of the multiple variables in play, some aspects of the research may not be as generalizable as others. Admission policy is often influenced by accrediting bodies and discipline-specific aptitude tests. As this research only focuses on the field of nursing, there are potentially compounding variables that are unique to nursing, and related healthcare fields, that may affect how decisions are made which may not be as salient in admission policy of different kinds of programs.

Though possibly constrained by factors mentioned above, the ability for admission committees and institutions to evaluate how admission criteria, regardless of if GPA is on the list, are being used to influence decisions to ensure congruence between policies and desired outcomes.

**Theoretical Framework**

Frameworks found in *Punished by Rewards* (Kohn, 2018) will be used to guide analysis of the impact of introducing extrinsic motivators into learning environments. This theory indicates that the more extrinsic motivators are introduced or valued in an effort to compel learning it leads to erosion of intrinsic motivation to learn as the pursuit of success in education becomes separated from the acquisition of knowledge. As applied to the current study, this theory holds that I would expect my independent variable, using GPA to base program admission
decisions, leads to students reporting less intrinsic motivation for learning coupled with additional stress due to the heavy importance placed on grades as a barrier for admission.

An ethnographic lens will be used to explore the epistemological reasons given for why admission committees feel GPA is a good measure to base program admission decisions. As applied to my study, this theory holds that I would expect the trust admission committees place in GPA as a representative measure of a student, to be established because of personal experiences and stories shared concerning GPA rather than an academically grounded understanding of the variability of how student GPAs are constructed and what they represent.

Lastly, I will explore admissions criteria, the reported justification of why the current criteria are used, and analyze applicant pools versus admitted students to establish whether admission decisions are being guided by the ethical framework of consequentialism (which asks “what will create the most beneficial end result?”), or if they are being guided by ethical framework of deontology (which asks “what allows for one to live out their duties and obligations as an educational program?”). What is discovered will then be compared to their broader institutional mission statements to check for compatibility and alignment.

**Definition of Key Terms**

**GPA.** Grade point average (GPA) is an average of a student’s academic history using a four-point scale. Although primarily intended for representing a collection of averaged grades, GPA is sometimes used to refer to a single grade within a prerequisite.

**MinnState.** Minnesota State Colleges and Universities System (MinnState) is a public higher education system comprised of 30 colleges and seven universities throughout the state of Minnesota.

**Philosophy Terms**
**Consequentialism.** Consequentialism is a branch of philosophy and ethics believing that the morality of a decision is determined by the consequences and outcomes of said decision.

**Deontology.** Deontology is a branch of philosophy and ethics believing that the morality of a decision is based on one’s ability to uphold duty and obligation with little consideration of the consequences and outcomes of the decision.

**Epistemology.** Epistemology is the study of methods used to form and verify justifiable beliefs and understandings. Epistemological rationale relates to the logical framework for why someone trusts the validity of their beliefs.

**Extrinsic Motivation.** Extrinsic motivation is a concept from behavioral psychology related to behavior induced by external rewards and punishments that is not inherently intrinsic in the activity itself. Example: Giving a child additional screen time for eating their vegetables. The screen time is extrinsic to the flavor and nutrients of the vegetables.

**Intrinsic Motivation.** Intrinsic motivation is a concept from behavioral psychology related to behavior that is motivated by rewards and punishments found within the activity itself. Example: A child eating their vegetables because of an understanding of the sustenance and nutrients found within the vegetables.

**Nursing Terms**

**ADN.** Associate Degree of Nursing (ADN). Though there are other formal titles ascribed to these types of degrees (e.g., ASN, ASD, etc.), for the purposes of this document, ADN will refer to any two-year undergraduate degree that provides curricula central to becoming licensed as a registered nurse.

**MANE.** Minnesota Alliance for Nursing Education (MANE) is an alliance of six community colleges and two universities within MinnState to increase access to the nursing
profession through a consistent admission policy amongst our partners and transfer pathway agreements between institutions.

**NCLEX.** The National Council Licensure Examination (NCLEX) is a nursing certification exam that is used nationwide, including Minnesota, and requires completion of an accredited nursing program prior to sitting for the test.

**TEAS.** The Test of Essential Academic Skills (TEAS) is a standardized test designed to assess student readiness for continued study in the health science fields, which includes nursing programs.
Chapter II: Review of the Literature

Introduction

“One hundred years of grading research have generally confirmed large variation among teachers in the validity and reliability of grades, both in the meaning of grades and in the accuracy of reporting” (Brookhart, et al., 2016, p. 835).

Despite acceptance and awareness that grades assigned to students, and by extension grade point average (GPA), lack the requisite qualities of accurate measurement a near-universal assessment system has been built upon this foundation which can serve as a key determinant of what doors will be open for students academically (Brookhart, et al., 2016). What began as a consistent unit of measure within one school has evolved into a ubiquitous number. A four-point scale that is called upon throughout an academic career in order to help establish self-worth, discern academic potential, and evaluate effectiveness of institutional initiatives. Through the evolution differing interpretations and understandings of what grades should and do represent have fractured only to be put back together again to provide a metric capable of being understood across institutions. Alternatives to GPA have ebbed and flowed throughout the years but the enduring staying power of GPA speaks to how interwoven it is in American education.

As is often accepted as established dogma, the flaws inherent in the calculation and use of GPA does not always get the attention that it deserves, to the peril of generations of students reduced to a single number when applying to colleges and individual programs within those colleges. By introducing a social metric like GPA into the landscape grades become extrinsic motivators that further separate education from learning and replace learning with the attainment of grades.
As the inequities and shortcomings built into the grading system are known it requires an ethical justification for why and how GPA should be used to guide admission policy. In educational environments where access is abundant the impact of these ethical considerations are less salient. However, in academic programs that have applicant pools that traditionally outnumber available seats the concerns mentioned above become ever more present. One such type of academic program that is consistently turning away applicants is Associates Degree in Nursing (ADN) programs. Scarcity of access to ADN programs, overseen by nursing faculty, within institutions that traditionally support open access presents a unique setting for exploring the broader topic of how GPA is understood by students, utilized by admission committees, and ethically justified.

**GPA as a Measure of Students**

Grade point average (GPA) is widely known and utilized as a source of data to help inform several items within education from individual student achievement to nationwide education policy (Beatty et al., 2015; Brookhart et al., 2016; Ravitch, 2016). What is not widely known or agreed upon is what led to the adoption of the traditional A-F/4.0 scale, what individual course grades and GPAs represent, the reliability and validity of GPA to meet the needs of standardized data, and the potential harm caused by labeling students with grades through use of a longitudinal metric like GPA in assessing student development.

During the 19th century, there was very little standardization of content and assessment. Oral reports to parents/students being the predominant way to represent student achievement were eventually replaced by written narratives and eventually distilled down to simply a grade letter (Brookhart, et al., 2016). Creating a standard way to measure students at the college level was a process that took decades (Durm, 1993). Marking students on a scale of 4 was first
documented in 1813 at Yale University, prior to their measurement moving to a 9.0 scale, and eventually reverting to the 4.0 scale in 1832. Harvard University adopted a scale of 20 in 1830, prior to going to a percentage scale from 1837 until 1884 when the modern letter grade was adopted. Mount Holyoke College in 1897 was the first institution to combine letter grades and percentages, which eventually led to attaching letter grades to the 4.0 GPA system that is at the bedrock of student assessment at most schools throughout the world (Durm, 1993). Although a scale had been established, what criteria were used to determine placement on the scale was not clearly stated. This is important in the current discussion because it demonstrates some ambiguity over the true intention of grades. Are grades meant to solely measure discipline competency, educational attainment relative to peers, institution compliance, attendance, or a combination of several components of learning?

The development of these grading metrics was guided by a need to develop a system that was transferable and understood by institutions to quantify student achievement in an ordinal way (Brookhart, et al., 2016). The grades assigned to students were originally meant to measure students in each course. The idea of using a longitudinal average of historical grades (i.e., GPA) to inform current aptitudes emerged after the fact and is much less documented (Durm, 1993). The original intent of why grades were introduced has historical importance as it exposes the lack of agreed-upon clarity of what a course grade is intended to represent, uncertainty that is compounded once rolled into a GPA. This insight is valuable in helping to understand potential problems with how grades are currently being used throughout various levels of education.

**Grades as Understood in K-12**

Guskey (2009) found elementary teachers view grades in a more progressive manner believing they serve as a way to start a conversation with students and parents, whereas
secondary teachers view grades as a compliance device to assist classroom control and management, believing that it will prepare students for work or higher study. How grading is understood in higher education is a continued abstraction from primary and secondary school use of grades due to enhanced academic freedom and external expectations for grade distributions.

**Grades as Understood in Post-Secondary Education**

In the United States, college grading “is typically seen as a matter of academic freedom and not a fit subject for external intervention” (Brookhart et al., 2016, p. 830) and results in much diversity in grading systems within a single campus and great diversity between institutions. The academic freedom allotted allows for innovative and individualized approaches to determining student achievement, which is problematic for GPA’s claim of achieving a standardized measure of a student within and beyond the campus being attended (Beatty et al., 2015).

Though college faculty point to their academic freedom for protection, they may be subjected to more external expectations due to the impact assigned grades can have on the student, teacher, and college. There is a belief within colleges that courses, and the grades doled out, are to be used to weed-out and rank students allowing the most meritorious students to continue their education through acceptance into higher-level programs (Beatty et al., 2015). College faculty may be moved to inflate grades due to the doors that can open for students with a good GPA; which include: acceptance to their academic program, not holding up a student, avoiding wartime drafts (as was the case in WWII and Vietnam), and the economic security college graduation can provide (Beatty et al., 2015; Rojstaczer & Healy, 2012). College faculty may be motivated to grade a certain way out of self-interest due to grade-leniency theory (the belief that assigning good grades will result in higher teacher evaluations which will advance the career of
the instructor) (Beatty et al., 2015, Love & Kotchen, 2010). Colleges may push for instructors to be more lenient in their grading due to the economic pressures to retain students and the increasing perception of a consumer approach to education (Rojstaczer & Healy, 2012). In total, contemporary use of grades have assumed three different student-facing purposes throughout education: primary (conversation starter) (Guskey, 2009), secondary (maintain compliance) (Blum, 2020; Guskey, 2009; Kohn, 2018), and postsecondary education (gatekeeping) (Beatty et al., 2015; Rojstaczer & Healy, 2012). The student-facing elements of grades reflect the impact they can have on learning at the microlevel, but grades are often used at the macrolevel to provide data for a variety of educationally related measures which inform policy.

**Using Grades as Data for Ranking Students**

Administrators need the data of student achievement, by way of individual course grades, GPAs, graduation rates, and other metrics, in order to guide system policy and priorities (Chen et al., 2017; Ravitch, 2016). A challenge for administrators is to find the best metric available to help guide these decisions. Though highly regarded, the weaknesses of grading practices and GPA have been understood for a while and inspired reform initiatives that percolated throughout the mid-20th century in search of finding better alternatives. Despite the efforts, high schools “tended to stay with norm-referenced grades to accommodate the need for ranking students for college admissions” (Brookhart, et al., 2016, p. 805). High schools came to prefer the perceived objectivity and standardization offered by grades and deemed other metrics (oral and narrative-based reports) ineffective, not due to their scholastic merits, but due to the cost and time required to produce the feedback (Farr, 2000). This homogeneous acceptance of student assessment at times prevented the need to truly reflect on the different educational philosophies and approaches of various educational environments in how the grades were procured. Grading is not a perfect
metric, but grading remained in place during the search for a better alternative measure of student achievement, which was found in standardized test scores.

**Alternatives to GPA: Standardized Tests and Interviews**

Standardized tests grew in prominence, and widespread adoption, at the state and national level during the 1980s as they were billed as a valid and quantitative way to compare students and their achievement levels consistently across institutions (Ravitch, 2016). During the late 1990s, and early 2000’s, major shifts occurred in education prompting the call for accountability in our classrooms which furthered quantitative data as the gold standard for guiding educational initiatives at the national level (Ravitch, 2016). No Child Left Behind created a matrix of rewards and punishments based on quantitative measures (standardized tests and GPA) that made it possible to simply point at data to indicate success or failure at a given institution (Ravitch, 2016). In the years that followed, many of the standardized tests were found to be weak measures in their ability to provide an equitable and accurate representation of student achievement (Bahr et al., 2019; Hall, et al., 2017; Koretz & Langi, 2018; Miller & Stassum, 2014; Stemler, 2012).

As standardized tests continue to reckon with decreased prominence, GPA remains in place and is still seen as a useful tool for those in the quantitative data movement as it reduces a profoundly qualitative metric, a human being, and represent it with a number that can be easily uploaded and interpreted across a multitude of spreadsheets (Bahr et al., 2019; Blum, 2020). As schools have all adopted the same 4.0 scale, GPA continues to offer a convenient way for researchers and admission committees to compare students from different institutions with a uniform measurement scale, which establishes a way for receiving institutions to understand where students are at academically to properly advise which courses to take and at what level (Ravitch, 2016).
Finding a way to properly assess student achievement has been a lengthy battle between standardized tests, personal interviews, and GPA (Bahr et al., 2019). Standardized tests in recent years have experienced a decrease in the reputation for providing accurate measurement of student achievement (Geiser & Santelices, 2007). Personal interviews, too, have long been accused of not being accurate measurements of student attributes (Bahr et al., 2019). What remains, GPA, apart from a few critics (Vulperhorst et al., 2018), has been able to escape the fray of persistent and sustained inquiry of the validity it provides as a metric, which becomes problematic.

**Weaknesses of GPA as a Measure**

Blum (2020) is critical of contemporary grading and assessment practices asserting that learning outcomes are merely a façade of fairness and objectivity and that, 

“grading promotes a deleterious focus on an appearance of objectivity (with its use of numbers) and an appearance of accuracy (with its fine distinctions), and contributes to a misplaced sense of concreteness” (p. 14).

Grades are determined in very idiosyncratic ways between institutions which undermine claims of validity and reliability (Schneider & Hutt, 2014). Research into the validity and reliability of grades goes back at least 130 years. A study that identified three possible sources that undermine grades: random chance, acceptance of student responses as a representation of proficiency without actually demonstrating proficiency (academic versus nonacademic factors influence on grade), and interrater reliability (Brookhart, et al., 2016).

**GPA Does Not Always Reflect Knowledge Which Undermines its Predictive Ability**

The use of college GPA as a measure to predict future student performance is a popular, yet at times unreliable, practice. Research into the efficacy of this approach helps determine if
GPA is a valid indicator of future success or if it is just random chance (Beatty et al., 2015; Lipnevich et al., 2020; Westrick, 2017). When analyzing massive samples from multiple institutions, using four-year GPA to predict future performance in graduate school or in the workplace is strong, but GPA’s predictive abilities diminish in reliability when only individual institutions are analyzed or drawing predictions from data with fewer semesters, with first-semester GPA being a much weaker metric of future success (Westrick, 2017). Beatty et al. (2015) conclude similar findings concerning four-year GPA predictions but believed first-year GPA to be a helpful measure when isolated to remaining in the same institution.

A limitation to the predictive value of the four-year GPA metric is the gated nature of the databases analyzed and that the students who did not make it to spring semester of year-four are not entirely represented (Beatty et al., 2015; Westrick, 2017). These exclusions cause the results to reflect only those who already succeeded in the quest to reify the success of GPA (Beatty et al., 2015; Westrick, 2017). Bailey, et al., (2016) echoed the sentiment that GPA may be a predictor of school success but may not correlate with knowledge attainment. They found raw undergrad four-year GPA systematically distorts student achievement across majors in a way that over represents success. In the context of law school, raw GPA was a better predictor of law school admission and grades within law school; however, was not nearly as valid a measure of law school admission test scores (Bailey, et al., 2016). The potential imprecision of using GPA as a metric of student achievement becomes more of a moving target when we explore the reliability of individual grades, which collectively comprise one’s GPA.

**GPA Masks Diversity of Grading Criteria**

Another byproduct of distilling student achievement to simple letter grades, and eventually to a single number (GPA), is the loss of any nuance of how individual grades are
produced (Solomon & Piggott, 2018). Although supporters of GPA will praise it for its standardization (Beatty et al., 2015; Lipnevich et al., 2020), within every single grade given there is variability over what factors of learning should be considered in the assignment of said grade. Stated differently, what constitutes a grade is largely without standardization, meaning “median grades awarded in introductory leveling courses at the same university can differ by more than a letter grade” (Solomon & Piggott, 2018, para. 8).

McMillan (2001) identifies four components of grades: achievement (e.g., performance on content related assessment), academic enabling traits (e.g., participation, effort, etc.), extra credit/borderline (e.g., adding points, opportunities, to boost students up a grade), and external comparisons (e.g., performance relative to peers). Lipnevich et al. (2020) conducted similar research with similar results, but identified three grading criteria: product (what McMillan (2001) classifies as achievement), process (academic enabling), and progress (extra credit/borderline). There is a tremendous amount of variability of how much weight each of these four main characteristics (say nothing of the other ways to formulate a grade) had in producing a final grade and varied greatly amongst different disciplines (Lipnevich et al., 2020; McMillan, 2001; Solomon & Piggott, 2018). The result is that grades received in each course are arrived at using diverse methodologies resulting in the possibility that a student who demonstrates strong grit, effort, and participation (enabling traits/process), but lacks foundational understanding of the course material (academic achievement/product) can be potentially rewarded or punished depending on the individualized grade formula concocted by their instructor. This is not to say that nonacademic measurement should be omitted from student assessment; however, the lack of clarity presents a problem when a letter grade does not let us know if it represents a 90%/10% distribution between academic and nonacademic measurement
or a 50%/50% distribution. Lipnevich et al. (2020) points out that there needs to be a conversation about what the purpose of grades are as there is no current agreement within the field of education.

**GPA Built with Grades that Lack Interrater Reliability**

Even if standardization over what benchmarks should be used within classes, and what they mean, could be determined there would remain an issue of interrater reliability of course content and course management policies, something that has been known for several decades (Brookhart, et al., 2016; Lipnevich et al., 2020; Millet, 2018). In exploring variability within a single discipline Brimi (2011) had the same essay evaluated independently by 73 different English teachers, which yielded each of the five letter grades and scores received had a range of 46 points. Some disciplines are easier to standardize than others; however, individual assessment methods can vary even within these more objective disciplines, which negatively impacts the validity of grades received (Beatty et al., 2015; Brimi, 2011). Classroom policies also weigh heavy on overall grades in a way that often are not guided by academic understanding of the material, but rather a reflection of student compliance with individualized rules in the classroom. Reeves (2004) argues that penalties for students (late work, unsubmitted/missing materials, absence, etc.) common in classrooms across America, are overly aggressive, not commensurate to the actual infraction, and harms the validity of the final grade by being more representative of compliance than actual student competency with course content.

Students are aware of the fluctuation of course policies and instructor approaches and are incentivized to avoid courses or instructors known to have tough course policies or tough graders and therefore seek out instructors and courses that will help buoy or preserve their GPA (Solomon & Piggott, 2018). Solomon & Piggott (2018) point out that because of the grading
norms student GPAs can suffer if they enroll in courses, oftentimes advanced levels or electives, where grades tend to be lower. Millet (2018) looked at over 50,000 course sections to show that lenient grading policies are associated with lower grading reliability. Although the grades are less reliable the siren song of lenient grading, and instructor reputation, is a draw for students. Due to the high value placed on GPA the incentive is present for students to chart an academic path that will yield the gatekeeping GPA they are after as individual course difficulty or curriculum is often overlooked once students are reduced to just a GPA for admission purposes (Solomon & Piggott, 2018).

GPA Becomes a Self-fulfilling Prophecy

The perceived utility of GPAs is not limited to informing student admission decisions but is used to provide students with an understanding of their achievement (which affects self-concept) and is used as an indicator to alert schools of a potential future dropout (Bowers et al., 2013; Steele, 1997). Bowers et al. (2013) found GPA is one of the best ways to identify students who will eventually drop out. Though this work shows that low GPA correlates with eventual dropout rates, it does not explore how students being labeled as struggling might actually accelerate their academic decline. Self-fulfilling prophecies in the classroom, when instructor perception has real-life consequences on student development/performance, have been documented for some time (Rosenthal & Jacobson, 1968; Steele, 1997). Rather than having researchers arbitrarily selecting the high potential students at the beginning of the school year in a research setting (as was the case in Rosenthal & Jacobson (1968)), GPA has the potential to fill the vacancy and impact every student due to the label ascribed to them. The internalized stereotypes associated with high and low GPA, and the impact it has on performance, indicates it is likely that as an academic career unfolds the rich (higher GPA) will continue to get richer and
the poor (low GPA) will continue to get poorer due to the internalized identities in the eyes of students (Steele, 1997) and instructors (Rosenthal & Jacobson, 1968). Even with the skewing of the assignment of grades due to self-fulfilling prophecies, GPA is still used throughout education as a trusted indicator of student achievement at the individual and institutional level.

**GPA is Not a Pipe**

*La Trahison of Images* (Magritte, 1929) makes the point that a symbol that represents something else (e.g., GPA) does not take on the qualities of the original item (e.g., student achievement/mastery/potential). The quantification of student achievement into a single digit is not capable of representing the complexity of the student which is needed for a just consideration in admission decisions. Although the original conception of GPA may have been a valid tool for guiding an understanding of student achievement, how the metric is wielded today is problematic.

Campbell (1979) posits "the more any quantitative social indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor." GPA fits the characterization of a social indicator, it has been used for social decision-making and has been exposed to these corrupting pressures for quite some time (Ravitch, 2016). GPA is quantitative, but only after the qualitative elements are put through a meat grinder; what comes out as sausage is not actually what went in. If a pig is inserted into a meat grinder, we do not pretend the resulting sausage is still a pig in all of the meaningful complex ways the creature once was. Student potential/achievement is put through the educational meat grinder, and GPA is the product, yet we still pretend it is representative of an actual student.
The reductive nature of GPA, in the eyes of Blum (2020) is evidence that grades don’t provide adequate information. “If the purpose of grades is to convey a student’s adequacy, excellence, compliance, effort, or gain in learning, then they fail” (Blum, 2020, p. 55). The condensing of grades into a GPA launders whatever nuance could be derived from viewing a full transcript (Solomon & Piggott, 2018). The result is that students who demonstrate improvement throughout their undergraduate semesters, are not considered for admission because the longitudinal nature of GPA masks the academic growth and transformation that has occurred. A potential solution to this is using limited-GPA, which restricts the average to the last 60 credit hours, reflecting a more recent understanding of the student’s achievements (Imose & Barber, 2015).

**GPA Maintains Inequitable Status Quo**

Due to the longitudinal nature of GPA, it can act as a barrier to overcoming known inequities in the educational system including those related to achievement gaps (Delgado & Stefanic, 2017). If the factors contributing to achievement gaps of scholastic achievement along racial lines were to be fixed tomorrow, it would take an entire generation of students to make their way through the rest of their academic journey before true equity is established. This is due to many admission policies being based on the historical performance in the classroom which is ensconced in GPA. This approach is antithetical to the belief in education that students are capable of growth (Kohn, 2018). Several studies have demonstrated that racist policies negatively affect students of color in myriad ways (Delgado & Stefanic, 2017). The end product of those racist policies is the GPA that follows students and puts them into applicant pools with other students (and their GPAs) who have not faced similar discrimination.
As originally created the idea of grades was supposed to mark the current aptitudes a student has demonstrated which helps guide placement into the next year’s lessons (Brookhart, et al., 2016; Durm, 1993). As there are significant flaws in the individual course grading process and calculation of GPA (Bahr et al, 2019; Beatty et al., 2015; Blum, 2020; Brimi, 2011; Brookhart, et al., 2016; Farr, 2000; Geiser & Santelices, 2007; Lipnevich et al., 2020; McMillan, 2001; Reeves, 2004; Smith & Smith, 2009; Solomon & Piggott, 2018) policies that are guided by GPA as a metric compound the problems of accurately summarizing student achievement, which can lead to reduced efficacy of those policies. Combined with an assortment of other data points GPA is often used in assisting in the admission process both for institutional admission and specific program admission while using a social metric that has been corrupted (Campbell, 1979; Imose & Barber, 2015; Ravitch, 2016).

**Reducing Students to Metrics for Admissions Purposes**

Admission policy that determines who is admitted and who is not admitted to specific educational institutions and programs serves many purposes. Admission criteria can be used to create a floor of competency expected for all students or, as applicants often outnumber available seats, serve to create a standard process for determining which qualified applicants will be granted admission. In setting this policy it introduces ethical considerations about what is just, something the current study hopes to examine. Should colleges use admission to establish values and ideals to evaluate student achievement (i.e., admission driven by deontology), use admission to advance institutional objectives related to program reputation, accreditation requirements, or equity initiatives (i.e., admission driven by consequentialism), or a mixture of the two? Whatever ethical justification is used, the process of measuring, sorting, and ranking applicants without having to personally interview each student, colleges often turn towards an amalgamation of
metrics related to students’ aptitude, ability, and achievement (Stemler, 2012). Once the collected data is entered into a decision matrix it provides an admittance or rejection decision while providing a veneer of objectivity for gatekeepers to hide behind. It is important for those in the quantitative/standardization movement to keep in mind that quantifying a metric and applying it equally to students does not make the exercise objective.

**Admission Criteria as a Floor**

One purpose that admission criteria can provide is to ensure that admitted students have the prerequisite academic knowledge and aptitudes needed to be a good fit and succeed in further learning. Determining who qualifies is at times easier said than done. The risk of over-placement (granting access beyond the student’s current capabilities resulting in them being in over their head) and under-placement (forcing students to take classes that will result in boredom and additional cost, a common occurrence for ESOL and nontraditional students) is present in admission even before there is scarcity for seats (Bahr P. R., et al., 2019). The variability and interrater reliability issues with GPA can make it difficult for admissions committees to confidently place students when cut scores are surmounted or missed by small margins (Vulperhorst, et al., 2018).

By establishing admission criteria policymakers are able to advance institutional goals. For those who put trust in GPA, a common perception is that restricting admission based on higher GPA (raising the floor) will result in higher quality candidates, and therefore more accomplished graduates. Van Overschelde & Lopez (2018) found this logic to be flawed as there is little evidence to support the utility of raising the requirements as they acted as a barrier for students who otherwise would have been successful had the increased GPA requirement not been present. GPA is not the only criteria used for qualifying purposes so similar concerns can be
raised for those metrics as well. As demonstrated, placing students properly when there is no scarcity for placement can be difficult, these challenges increase tremendously once scarcity is added into the mix.

*Admission Criteria as a Way to Turn Away Qualified Students*

When the number of applicants exceeds the number of available seats colleges need a way to determine who is granted access and who is turned away. In addition to using GPA, common selection criteria include multi-measure approaches, standardized tests, qualitative elements (expressed through personal essays and letters of recommendation), and characteristics that advance equity within the institution (Hall, 2017).

The shortcomings of using GPA as a way to separate qualified students experience the same types of problems experienced when using GPA as a floor. The use of GPA as a determining factor of admission is not only unhelpful for determining success among students but negatively impacts students of color and men in a disproportionate way in teacher preparation undergraduate programs (Van Overschelde & Lopez, 2018). Any distinction between two students due to a slim (or even moderate) difference in high school GPA would be a weak predictor because of the variability between high schools (Koretz & Langi, 2018).

The reliability issues of GPA have been shown to be softened through use of multi-measure approaches to admission. Multi-measure approaches reduce the amount of weight given to GPA (or test scores) as a singular determinant of student achievement/potential by considering holistic student metrics (like completion rates and academic improvement), which has been helpful to predict math and English placement (Bahr, et al., 2019; Imose & Barber, 2015). Multi-measure approaches notwithstanding, due to the inherent variability found in GPA often critics are quick to offer up the consistency that is provided with standardized tests.
Supporters of standardized tests highlight the equality that is provided to applicants in that each person has the opportunity to take the same test and be evaluated similarly. For admission purposes, standardized tests may be consistent but have an issue with accuracy and equity.

The Graduate Record Examination General Test (GRE), a common standardized test, has been shown to underestimate the ability to pass courses (Bahr P. R., et al., 2019). This indicates that being successful in school requires more than just academic knowledge. Weakness in the GRE is echoed by Hall, et al. (2017) in their research into how standardized tests had no predictive ability in the overall productivity of grad students, and Petersen, et al., (2018) found it to be a low predictor of STEM Ph.D. completion. The Graduate Management Admissions Test, a management-specific standardized test, was also determined to be a poor predictor of success (Pratt, 2015).

Though it is true that all students can take the same test it does not absolve the tests from inquiry into whether they are discriminatory. Miller & Stassum (2014) state that due to the construction of the test “in simple terms, the GRE is a better indicator of sex and skin colour than of ability and ultimate success” (p. 304). Like raising GPA requirements can create equity issues in failed attempts to raise student performance (Van Overschelde & Lopez, 2018), use of standardized test scores creates similar results, “Many graduate departments use a cut-off score to narrow applicant pools, which automatically limits minority numbers…If someone wanted to intentionally shut the door to minority students, the GRE is the filter they would use” (Powell, 2013, p. 472).

Requiring standardized tests for admission purposes introduces an additional monetary cost that can become a barrier to equity by way of the initial cost of the test or in one’s ability to
continue to spend money on retaking the test (Pratt, 2015). GPA and standardized test scores are relatively quick and easy metrics to use when comparing students against one another because of their quantitative features; the introduction of mixed measures and other qualitative elements provide a deeper understanding of the student but require a more nuanced appraisal of those who apply which is time and labor-intensive.

Qualitative student features, such as productivity, social and emotional intelligence, and grit, can be of tremendous value in being able to understand what a student applicant can offer (Miller & Stassum, 2014; Smith, 2017). This approach does not just measure past success but focuses on characteristics that will assist the student as they continue their academic journey. Qualitative ratings from recommendation letter writers were the highest predictors of productivity for biomed grad school students, outperforming GPA and GRE scores (Hall, et al., 2017). Although there is potential promise in this type of information about the student, how to most accurately measure it remains elusive (Powell, 2013).

Admission criteria can be used as a tool to help advance institutional missions, including that of racial equity and underrepresented populations within the college. Just as bias is being scrutinized within the GRE, and to a lesser extent GPA, exploration into bias from a racial equity lens is beginning to take place too (Jaschik, 2021).

Although this work is laudable it will likely take several years to find its way to become enshrined in policy to start affecting change (Jaschik, 2021). Much of the discussion above relies on shortcomings that are inherent to the measures themselves whereas Bowman & Bastedo (2018) point out that many admission decisions are influenced by those responsible for assisting in making the decisions, and that admission officers from historically underrepresented groups are more likely to admit those from underrepresented populations. This reality further
undermines the claim of total objectivity when it comes to the purported metrics in place for the purposes of admission as counsel received from advisors, and the influence they can have on admission decisions alters the final list of accepted students.

**The Admission Decision Veneer of Objectivity**

Once admission criteria are determined they are usually disclosed and shared by admission counselors to help advise potential applicants. The belief is that all applicants have equal opportunity for consideration based on a standardized and objective set of criteria. Although there is potential for admission committees to equally apply admission rubrics in an objective way, if one is utilizing a benchmark created based on subjective choices and biased criteria it will yield subjective results, similar to how standardized tests are administered in objective manners but are capable of yielding subjective results (Miller & Stassum, 2014; Powell, 2013). By having a standard admission process it can provide cover for those who make determinations of admission or rejection as they can appeal to “the process.” Doing so prevents the need to take individual responsibility for the decisions rendered. Most students will accept this explanation without question, others may take the policy and the decision to court (Millhiser, 2021).

Although most college programs will assert that admission is based on a form of meritocracy and scholastic achievement, the Varsity Blues scandal of 2019 exposed an American phenomenon that few academic institutions rely exclusively on educational talent for determining admission (Thelin, 2019). Apart from confirming what many held to be true about money and access in education, the scandal showed how some of the more subjective and qualitative elements of academic admission criteria, which are seen as vessels for promoting consequentialist admission policies that help to reduce inequity, were leveraged in a way to
provide access for those who are most privileged, at the expense of the intended beneficiaries of the policy (Thelin, 2019). This serves as an additional example of the corrupting influence of social metrics explained by Campbell (1979).

Whether it is a scholarship for an obscure sport or a sterling GPA, by connecting access and reduced tuition for these accomplishments, educational institutions alter the learning environment by dangling these carrots in the faces of students. Much like striving to become a D1 coxswain is cheapened when one does it only to receive a scholarship, learning and high achievement can become cheapened when the focus is on a scholarship and no longer centered on the acquisition of knowledge for knowledge’s sake.

**The Impact of Introducing Extrinsic Motivators into Learning**

Like the vast acceptance of GPA in contemporary admissions policies, the concept of behaviorism as an effective form of human motivation, specifically in the classroom and admissions office, has become equally ubiquitous. Kohn (2018) is critical when ubiquitous beliefs go unchallenged as “the time to worry is when [an] idea is so widely shared that we no longer even notice it, when it is so deeply rooted that it feels to us like plain common sense” (2018, p. 3).

*Behaviorism in the Classroom*

A popular understanding of the psychological theory of behaviorism is that “we try to solve problems by offering people a goody if they do what we want” (Kohn, 2018, p. 61). “No one challenges the fundamental carrot-and-stick approach to motivation” (Kohn, 2018, p. 12), even though there is a much more complicated understanding of this behaviorist approach and volumes of research contradict behaviorism’s efficacy in certain circumstances, including education (Blum, 2020). Kohn (2018) highlights research that came before him and has inspired
research that followed, examining the impact on learning (an intrinsic activity) by introducing the rewards and consequences that accompany the assignment of grades (extrinsic rewards/punishments) (Blum, 2020). Issues caused by integrating a misinformed behaviorist approach into the classroom include: the negative impact extrinsic motivation has on intrinsic motivation, promoting the minimax strategy, students chasing grades not knowledge, increasing cheating, creating a coercive learning environment, and teachers no longer viewing students as individual learners (Blum, 2020; Kohn, 2018).

Behaviorism relies heavily on the purposeful offering or withholding of external rewards to motivate desired behaviors (Blum, 2020; Kohn, 2018). Rewards, punishments, or compensation are considered extrinsic motivation as it comes from beyond the individual being motivated (Spielman, 2020). This is different from intrinsic motivation, which is the internal drive for autonomy, mastery, and purpose (Spielman, 2020). A student who completes their reading homework to practice and improve their reading skills would be considered intrinsically motivated. This is markedly different than a child who complies with the assignment for fear of punishment or hope of getting a good grade (externally motivated), though the end result in both cases is a completed assignment. Blum (2020) and Kohn (2018) point to the demonstrated body of research regarding the harmful effects external motivators can have on intrinsic motivation, and how prolonged exposure to extrinsic motivators change how both student and teacher approach the classroom.

Consequences of External Motivators in Education

One such change is that extrinsic motivation leads to the adoption of the “minimax strategy” (Kruglanski et al., 1977) in our classrooms, which posits that students will only put in the least amount of effort to achieve the grade (extrinsic reward) they are after (Blum, 2020).
When this occurs, learning is no longer about maximizing self-growth and potential but instead is about collecting letters on their journey through the school system and inspire questions such as “how well do I have to do on a test to get an A for the semester?” If the goal becomes how can students “play the game of school” a system has been created that incentivizes cheating, cramming, and other activities that are perceived to help them win their grades (Blum, 2020). Missing from this equation, of course, is the focus on learning and knowledge attainment. Smith & Smith (2009) researched traditional and nontraditional ways of assessing classes and found that the traditional 100 point system was the least motivating form of tested student measurement, oftern resulting in lowering student motivation, self-efficacy, and self-regulation.

The increased pressure put on students by way of competitive GPA-based admission practices is taking its toll. In 2016, college students reported persistent feelings of dread, shortness of breath, and fatigue as a quarter of students reported their academic performance is being negatively affected by anxiety (a rate that is 50 percent more than what was reported five years prior) (Flannery, 2018). Grades can be deceptive as they are often viewed as a reward for hard work which provides cover for the coercive ability of grades to punish and diminish intrinsic motivation.

**Punished by Educational Rewards**

Kohn (2018) introduces the concept of students being punished by rewards as they are often harmed by the introduction and dangling of rewards (grades) in educational settings. In exploring hundreds of studies on extrinsic motivation he lays out his five reasons why rewards (grades) do not succeed in motivating people (students):

1. Grades are coercive as not achieving a grade could be seen as a form of punishment
2. Grades create competition versus collaboration which harms relationships among students and between students and teachers

3. Grades ignore nuance and reduce learning to singular letters and numbers where achieving a grade becomes more important than an education

4. Grades reduce risk-taking and curiosity as there is a consequence for trying and failing which reduces efforts that may end in making mistakes which is often seen as an integral part of learning

5. Grades reduce interest in learning as coursework is completed for the purpose of receiving a grade in a coercive environment rather than for the purposes of self-development and intrinsically motivated reasons (Kohn, 2018)

Extrinsic motivators are not just ineffective in achieving authentic engagement in a given context but can erode whatever intrinsic motivation had been present (Kohn, 2018). The result is a case of diminishing returns requiring the presence (or increased presence) of whatever extrinsic motivator was used in the past to maintain control over students. Kohn (2018) put forth that when the ubiquity of using grades as motivators is accepted by students it destroys their interest in learning for the sake of learning and shifts the motivation in the classroom to play the game that has been created for them to participate which creates many issues.

Grades have the potential to be viewed as simply a form of feedback (Brookhart et al., 2016); however, when grades become extrinsic motivators, grades can be used to coerce students to complete tasks, as non-compliance will result in punishment via their grade (Blum, 2020; Kohn, 2018). The presence of grade structures that place higher weight on process/academic enabling (Lipnevich et al., 2020; McMillan, 2001) increases the potential for coercion. This creates situations where the authoritative power that educators yield can negatively impact the
student-teacher relationship (Blum, 2020). Because the assignment of a bad grade can be destructive, it motivates teachers to emphasize efficiency and defensibility in their approaches to grading rather than equity and treating students as individuals (Blum, 2020). Rather than examining the premise of whether or not grades should be assigned, focus often turns to how this system can be justified ethically.

**Fairness and the Ethical Justification of Grades**

From the instructor’s perspective a dogmatic, “plain common sense,” element of teaching arises when we think about the perceptual construct of grades in general and the purpose grades serve, something relatively few studies explore directly (Brookhart et al., 2016). Of the studies that have been conducted it is believed: teachers view grades as a reward, consider consequences of their impact on student success, and express awareness of the impact grades have on student self-concept (Brookhart et al., 2016; Sun & Cheng, 2013). Due to these multiple beliefs about the importance of grading, teachers perceive fairness to be an extremely important component of grades that are assigned. Although the importance exists, deep analysis of this intersection of philosophy and grading is limited.

Placing a value on fairness complicates how to interpret grades once removed from individual classrooms or institutions. The awareness that certain grading algorithms are not entirely fair and in need of case-by-case adjustment occurs to different degrees, and to achieve different purposes, based on the varied ethical codes of instructors. Either way, it reinforces that grades rely on other considerations than simply a knowledge-based grading algorithm, thereby further eroding the illusion of absolute objectivity from the grading equation (Brookhart et al., 2016; Sun & Cheng, 2013). The quest for fairness in education is not limited to just the letter grade for one course. Achieving fairness becomes more complex once individual grades combine
into a GPA and realizing the role GPA plays in guiding admission decisions. Achieving perceptions of fairness and ethics in terms of individual course management are challenging, which is similar to the challenges faced regarding ethical principles that can be used to inform admission decisions.

Danaher (2020) argues that moral considerations are imperative to grading as “grades play an important role in the allocation of distributed goods” (para. 10). Current deontological educational landscapes that utilize GPA as a metric accept the idea of a meritocracy, in which academic attainment should be rewarded, which is made possible by way of awarding or withholding of certain grades, despite the potential inequitable outcomes caused by the meritocracy. Other pockets within education believe that the meritocracy model should be challenged as it relies on false premises and creates inequitable outcomes. Their solution is that we should move towards a more equitable design which is more in alignment with consequentialism. This divide between the morality of grading and policy needs to be explored as the fair distribution of scarce rewards (e.g., admission into programs) is often based on what deontological/consequentialist framework is used by those who decide admission policy. Is it the role of the admissions committee to provide a consistent playing field by setting academic driven criteria where all compete in the meritocracy for access into programs in a libertarian (deontological) arena or are they to use their policy-setting to help resolve problems of equity within their program and institutions driven by egalitarian (consequentialist) principles?

Admission Criteria Based on Deontological Ethics

If one approaches the competition for limited seats from a deontological perspective it is the goal of the institution to establish clear criteria and allow the most qualified candidates earn their way in by way of a meritocracy. Admission committees sometimes incorporate only one
metric (e.g., GPA), whereas more thorough programs include more prescriptive ordinal metrics related to aptitude, ability, and achievement (Stemler, 2012). Separating students in this way is supported by those who feel it helps to strengthen the applicant pool and ensures that the professional integrity of the program is maintained (Bissett, 1995). This approach is believed to be more just in the sense that less worthy students are not able to achieve access to the program over other students who have demonstrated higher marks on clearly established and equally applied criteria such as standardized tests and GPA (flaws be damned). The higher performing students will presumably reinforce the reputation and graduation rates within the program as a result of their demonstrated academic success prior to admission. From an economic and societal standpoint by admitting those perceived to be most likely to succeed it reduces instructional cost and ensures that a seat is not wasted due to attrition so that the most graduating students possible can become employed and positively affect society (Bissett, 1995).

From an administrative standpoint, these types of policies often provide an easy response to those who did not gain admission by hiding behind the veneer of objectivity. Ordinal rankings based on GPA, standardized test, or other pseudo-quantitative metrics can serve as scapegoats (e.g., “the nursing department did not deny your application, your inferior GPA left us no other choice”) when admission committees need to protect themselves from aggrieved applicants and the potential lawsuits they may file when less prescriptive measures are used (Millhiser, 2021). Missing from these discussions are meaningful considerations of the nuance and imprecise nature of the metric being employed.

**Admission Criteria Based on Consequentialist Ethics**

Academic programs in favor of a consequentialist approach to admissions policy view their policy choices as a way to advance institutional missions related to access and equity by
leveling the playing field (Bissett, 1995; Stemler, 2012). Community colleges often have missions based in part on the idea of open access for all learners and therefore can live out their credo by implementing program admission policies reflecting that ethos (Bissett, 1995). Supporters of consequentialist admission policies would accuse the use of metrics in the deontological approach as “barriers to educational mobility… disguised as a minimum standard for program and professional integrity” (Bissett, 1995, p.38). The consequentialist admission approach values equal access to education and advocates point out that there is a lack of corroborative data that supports the predictive efficacy of nearly every screening measure in being able to predict successful completion of academic programs and therefore serves as an arbitrary way to handicap already disadvantaged student populations (Bissett, 1995).

When access to higher education is abundant the need for restrictive admission policies is not present. When there is consistent scarcity for access to certain programs the need to explore how and why admission policies are being used becomes more salient on individual campuses and within college systems. This scarcity can often be found in two-year undergraduate nursing programs nationwide (Bissett, 1995). Therefore, for the purposes of this study, the admission processes for two-year college nursing programs in MinnState will be explored.

Application and Admission Process in MinnState Two-Year College Nursing Programs

MinnState is comprised of “30 colleges and seven universities with 54 campuses throughout [Minnesota]” (Minnesota State, 2021). Within MinnState there are 21 different two-year technical and community college campuses that offer a two-year degree in nursing (Minnesota State, 2021).

Establishing Nursing Program Admission Policy
Although each of the campuses are part of the MinnState system they each can create admission processes and criteria for their individual programs. Admission policy and program curricula are set by faculty members that serve in a variety of different capacities depending on the size of the campus and program, in consultation with those who grant accreditation, advisory boards comprised of local representatives from the career field, guidance from the Minnesota Board of Nursing, and potential partnerships with other educational institutions.

Faculty are largely responsible for establishing and conducting program admission processes within MinnState two-year schools. The titles of those who chair program admission policy vary from campus to campus with titles such as Nursing Department Chair, Director of Nursing, or Program Director. The responsibilities of serving in these roles fluctuate based on the size of the program/department being overseen in accordance with their union contract (Minnesota State College Faculty, 2019). With input from department faculty, the chair of the admission committee holds meetings to determine what changes, if any, are warranted to update current policy.

Advisory boards serve an important purpose in the MinnState system in the creation of program policy and curriculum. Nursing advisory boards are composed of school and community stakeholders that include those working in the nursing field, employers, and current and former students. During annual advisory board meetings, members are able to share with program faculty their thoughts on the direction of the program, emerging trends and needs in regards to nursing, and other related items.

Nursing program policy and curriculum are influenced by mandates handed down from the Minnesota Board of Nursing (Minnesota Board of Nursing, 2021). As the overseeing professional body in the state, the Board of Nursing alerts campuses to any changes in what is
needed for license credentialing and changes in law related to nursing. Programs adopt advised changes in order to ensure their graduates meet the qualifications for licensure.

Partnerships amongst institutions are an additional source of influence over program policy and curriculum. These partnerships serve academic and economic purposes for participating programs. The academic purposes that can be served are the ability to transfer between institutions as well as providing academic pathways from licensed practical nurse programs, into the two-year ADN degree, and into a four-year Bachelor of Science in Nursing degree. This allows students once in the pipeline to achieve a variety of different nursing certifications while in pursuit of further education.

Although this autonomy exists, partnerships have emerged within the MinnState system. The Minnesota Alliance for Nursing Education (MANE) is an alliance of six community colleges and two university partners that have shared curriculum and admission criteria for the purpose of creating increased access to a baccalaureate degree in nursing (Minnesota Alliance of Nursing Education, 2021).

**Nursing Instructor Preparation**

K-12 educator preservice training spends a tremendous amount of time focusing on pedagogy and assessment practices to make sure that once in the classroom they can be as effective as possible. Even with the entirety of preservice training for education majors dedicated to being an effective educator, preparation programs still question the efficacy of their training (Scales, et al., 2018). Even with constant self-awareness of the strengths and weaknesses of our educational preparatory programs, grading practices used in our educational systems have not fully addressed the concern of putting faith in a largely uncalibrated instrument, the primary complaint lodged by Finkelstein in 1913 (Durm, 1993). This gives the appearance that sustained
efforts to determine if and why GPA is a valid academic measure are substituted for a dogmatic reification of the status quo which ultimately creates a favorable perception amongst teachers related to the construct of grading.

Specific to the two-year colleges in MinnState, in order to become credentialed as an instructor in career, technical, and professional fields candidates need to meet one of the following: a bachelor’s degree in the field, two years of occupational experience, licensure within the credential field, or meeting qualifications set by state or national program accreditation bodies (Minnesota State Colleges and Universities System, procedure 3.32.1, 2019). With this credential, instructors are certified to become educators in the system and teach classes in an adjunct or temporary role without the need of further education/training. What is missing from this credentialing process is the requirement of any formal certification/education related to pedagogical practice. If an instructor is to be hired into an unlimited (tenured) position they must meet the teaching and learning competency requirement of completing courses that cover the content areas of: course construction, teaching/instructional methods, student outcomes assessment/evaluation, and philosophy of community and technical college education (Minnesota State Colleges and Universities System, 2019). All the competency requirements can be met by completing a two-course (3 graduate-credits each) program offered by MinnState for probationary unlimited instructors, which needs to be completed within three years of being hired (the teaching and learning competency requirement can be waived if you have taught three years within secondary, postsecondary, industry, or trade apprenticeship environments) (Minnesota State Colleges and Universities System, 2019).

*Professional Development*
Beyond these credential requirements mandatory professional development, which is not entirely dedicated to teaching and learning strategies, is offered to instructors primarily by way of duty days, usually three days per academic year. This is the extent of the required pedagogical understanding of instructors at MinnState two-year campuses. Funds are made available for additional professional development, but utilizing the funds are optional and can be applied to attend conferences, workshops, take college courses and other activities off-campus, or for the provision of on-campus activities for staff development of the faculty (Minnesota State Colleges and Universities System, 2019). A path to quality, educationally driven professional development is possible, but requires instructors to seek it out themselves.

**Folklore Pedagogy**

It is not possible to state with certainty that pedagogical best practices are consistent throughout the system. This is due to limited pedagogical requirements for credentialing within MinnState two-year schools, mandatory duty days that are available are often filled with non-pedagogical components, and no requirements exist for completing pedagogy based professional development (as the faculty development funds provided are not required to be used and there are wide latitudes on how professional development can be conducted). The current policy surrounding these teacher preparation requirements (and professional development) provide an opportunity for instructors to attain positions where they can make impactful academic decisions within their programs armed only with a foundational understanding of assessment and admissions best practices. The consequence of this includes, but is not limited to, the potential for students to be affected by policy decisions made by those who are not fully prepared to guide policy in a way that is pedagogically defensible and equitable for students (a misstep which is still possible regardless of one’s pedagogical bona fides). These limitations are not limited just to
the MinnState system but appear to be part of a broader issue in higher education.

“Unfortunately, most teachers and professors today are not well trained, typically grade alone, and rarely seek help from colleagues to check the reliability of their grading” (Brookhart, et al., 2016, p. 836).

In the vacuum of intentional educational training emerges a concept Warner (2020) calls “teaching folklore” (p. 206). This folklore refers to how many classroom policies pertaining to attendance, classroom management, and grading practices are determined as a result of what has been handed down from instructor to instructor over the years and influenced by their own instructional experiences as a student. Where this becomes potentially problematic is in creating a new generation of instructors that do not necessarily benefit from the broader understanding of pedagogical knowledge that exists beyond their own collective experiences. As a result, inequities or harmful academic policies can remain present, unaddressed, and unchallenged.

Another lens to view the potential danger of instructors not being pedagogically autonomous is what DiMaggio & Powell (1983) call institutional isomorphism in which adoption of the status quo provides legitimacy rather than improving the institution. The three mechanisms of institutional isomorphism are present in educational institutions and academic programs where educators are not empowered to create their own pedagogies: coercive isomorphism (need to meet cultural expectations, e.g., avoiding reform for fear of not fitting in with other programs), mimetic processes (uncertainty promotes imitation versus innovation, e.g., modeling other institutions’ admission criteria), and normative pressures (established status quo norms reinforce traditions, e.g., keeping GPA because grades have always been used to rank students) (DiMaggio & Powell, 1983).

_Nurses First, Educators Second_
Technical and community colleges are historically known for approaching education in a very career-minded way (Bissett, 1995; Ravitch, 2016). As a result, instructors at these institutions are often those who have worked in the field and have found education as a secondary career path. The benefit of this approach is having instructors with first-hand experience and knowledge of the careers in which they are preparing future students for. Their theoretical mastery and career experience offer a multitude of benefits for what skills and knowledge sets are relevant to students and what must be attained for successful entry into the workforce.

Specific to nursing, although instructors may be extremely competent nurses, what is required for success in the medical setting does not always translate to success in the classroom. Programs offering specialized degrees related to the pedagogy of nursing (e.g., Master of Science in Nursing Education) exist and are sought by many as a way to inform their teaching practices, but again, is not a requirement in the MinnState system. Without these additional credentials, educational policy determinations are potentially at higher risk of being contracted out to the advice of supervisors, consultants, or the status quo (folklore) rather than being established by the faculty and committees charged with such duty.

Conclusion

Although perceptions of what grades are and what they represent fluctuate throughout the educational system, gaining a deeper understanding of how GPA is utilized in two-year nursing degree admission decisions can help inform broader implications of grade-based policy in other environments. As GPA is omnipresent it serves us to increase our awareness of how GPA is being used and understood, despite its flaws, so that we can better understand the efficacy of contemporary policy and what unintended consequences are being generated by its wake. These
insights can inform policy revisions to take on currently unaddressed equity issues within educational systems. Complete exploration into the pedagogical, psychological, and philosophical components of this research is best served by utilizing a methodology that can examine both quantitative and qualitative elements of the subject matter.
Chapter III: Methodology

The purpose of this study was to examine the impact GPA has on the admission process to two-year nursing programs in terms of student learning, how admission committees incorporate and justify using GPA as a measure, if adopted admission criteria align more closely with a consequentialist or deontological ethical framework, and whether the ethical framework provided aligns with the stated missions of an institution. An explanatory sequential mixed-methods design was used to address the research questions (see Table 1). The explanatory design structure offered the researcher an opportunity to gather quantitative data, which in turn informed the areas of inquiry sought during the collection of qualitative data resulting in an overall analysis that provided more clear qualitative support and explanation of the quantitative elements of the data (Creswell & Clark, 2011).

In this study, information about each institution and program that are represented in the research were collected using publicly available data. Participants were students who have been accepted to nursing programs and faculty who serve on program admission committees. Both student and faculty participants completed quantitative surveys prior to a select number of students and faculty completing qualitative interviews. The combination of both elements (quantitative and qualitative) leveraged the strengths of both approaches to provide a deeper understanding of the questions at hand. As a result of this design, data were collected in two separate phases.
Table 1

Steps of the Explanatory Sequential Mixed-Methods Study Design.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Phase 1</th>
<th>Phase 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Institution/Program Data</td>
<td>Program Information and Quantitative Data Collection</td>
<td>Analysis and Interpretation of Data to Inform Participant Questions</td>
</tr>
<tr>
<td>Student Participants</td>
<td>Quantitative Data Collection</td>
<td>Analysis of Quantitative Data, Use Results, Paired with Institutional Data, to Generate Targeted Qualitative Questions</td>
</tr>
<tr>
<td>Admission Committee Participants</td>
<td>Quantitative Data Collection</td>
<td>Analysis of Quantitative Data, Paired with Institutional Data, to Generate Targeted Qualitative Questions</td>
</tr>
</tbody>
</table>

Research Conceptual Model

Defining Characteristics

The explanatory mixed-method design of this study was situated to address the research questions due to its ability to provide qualitative data to help yield attribution for quantitative results. The design also provided the opportunity to use results from the quantitative data collection phase to “guide purposeful sampling of the qualitative phase” (Creswell & Clark, 2011, p. 82). There were three data sources: demographic information from the institutions included in the study and two distinct groups of participants, students and faculty. The data collected from these three areas addressed different elements of the research.

Rationale
The design of the explanatory model allows for gaining a clear understanding of the research environment through the collection of quantitative data in order to assist in the targeting of the qualitative elements of the study. The intended result was that data collected are focused in a way directly addressing concepts found within the research questions that can otherwise be elusive (student perceptions of the value of GPA, motivation, epistemic understandings associated with grades, and rationale for adopting/not adopting certain GPA based policies).

Beginning with a solid understanding of what landscape exists at each institution it provided insight to help frame and contextualize the data collected from student and faculty participants. The different demographics and policies of the programs potentially shape the student experience which helps to address the goals of this research project.

Student participants, who have been admitted into nursing programs, are a helpful sample as they have already completed the process of applying and being accepted. This is considered an ideal subset of the student population in the eyes of the researcher as successful acceptance into the program indicates a certain amount of socialization and buy-in to admission narratives as understood by students which is helpful for the purposes of this research. Pairing this data with demographic information learned from the institution provided more clarity to what was collected. The quantitative data collected from students provided an understanding of the student’s GPA, and general perceptions of items related to the application/admission process by way of a Likert scale survey. The self-reported quantitative data was paired with collected program data from the college the student attends and together helped inform the qualitative interview questions asked. The approach allowed an individualized and targeted conversation which yielded helpful insight.
Along with student participants, data was collected from faculty participants who have a role establishing program admission criteria and making admission decisions. Quantitative data collected from this population of participants was focused on demographic-based information pertaining to academic experience, satisfaction with current admission policy, and other related information represented primarily by a Likert scale survey. The individual faculty data was connected to the program data collected to shape the qualitative interview exploring epistemological rationale and ethical approaches. Due to the complexity of what the research questions are seeking to answer, a qualitative interview approach helped to prevent potential data interference caused by priming that may be present with other approaches to data collection (Lavrakas, 2008).

Though the qualitative elements could be collected in immediate succession of the quantitative survey, providing a gap between the two data collection phases ensured that the qualitative interviews were refined and purposeful in a way that followed the quantitative results (Creswell & Clark, 2011).

**Subjects**

Students (who are currently enrolled in a two-year undergraduate nursing program) and faculty (who are involved in program admission decisions and policymaking for two-year undergraduate nursing programs), from a variety of MinnState colleges, were invited to complete an electronic survey. Within the survey participants were invited to participate in a follow-up individual interview conducted via a password-protected videoconference. Attempts to include representatives from all 24 MinnState schools that offer two-year undergraduate nursing programs were made with aspirations of having representation from each campus.

**Data Collection Procedures**
Quantitative data collection was completed through the use of three surveys designed for the three categories of subjects: an institution/program survey, a student survey, and a faculty committee member survey. Following the completion and analysis of the quantitative data collection process, the researcher conducted qualitative interviews with students and faculty to draw out specific perceptions of participants in a way that yielded qualitative data in an effort to address the research questions.

**Institution Data Collection**

The Institution and Program Survey (see Appendix A) sought to collect the unique admission policy components, historical NCLEX first-time pass rate of students from the program (an important metric for accreditation), and stated missions of the nursing program and school for each of the schools that are represented in the study. Completion of the survey was conducted by the researcher by collecting much of the information from public webpages as each school is a public institution. For any information that was not readily accessible, an email was sent to representatives of the programs to inquire if such information could be made available.

**Student Data Collection**

An email to a faculty/administrative representative each of the MinnState two-year nursing programs requesting distribution of a participant solicitation letter to students who are currently enrolled. Interested students were instructed to follow a link in the letter to a secure website where they were made aware of the scope and requirements of their participation in the study, made aware that they are able to remove themselves from the study free from consequence at any time, and provide their consent to participate. Once consent was received they were led to complete the quantitative data element of the research on a secure website.
Quantitative Data. Students accessed and completed the Student Survey (see Appendix B) using a secure Qualtrics link. Students provided insight based on their experiences within their nursing program and the application process. Information was then gathered pertaining to what school program they are in and their GPA at the time of application. Students proceeded on to complete a seven-question Likert scale survey that measured whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with statements related to their experience as student applicants. The survey concluded by collecting contact information to be used for conducting the qualitative element. Upon completion of the survey, students were made aware of the next steps of their participation and how they would be contacted by the researcher.

Qualitative Data. Using the contact information provided in the quantitative survey the researcher emailed interested participants to schedule an interview to be conducted via a secure video conferencing website. Student participants completed a 10–15-minute semi-structured interview (see Appendix C) that followed up on their survey responses, explored their experiences during the application process, and discussed their perceptions of what role GPA has had on their academic career. Interviews were recorded to allow for transcription purposes to assist in their responses being coded and analyzed. Once the interview was completed participants were debriefed by the researcher.

Faculty Data Collection

Nursing program directors, and nursing faculty, involved in setting admission processes for MinnState two-year nursing programs were sent an email by the researcher inviting them to participate in this study. Interested directors and faculty followed a link in the email to a secure website where they were made aware of the scope and requirements of their participation in the study, made aware that they can remove themselves from the study free from consequence at any
time, and provided their consent to participate. They were then led to complete the quantitative data element of the research on a secure website.

**Quantitative Data.** Directors/faculty accessed and completed the Director/Faculty Survey (see Appendix D) using a secure Qualtrics link. Directors/faculty provided demographic insight based on their title/role in the nursing program, years of nonacademic work experience in the field of nursing, years as an educator, and educational degree/certifications. The survey continued by asking if they are responsible for deciding admission criteria prior to asking a Likert scale question measuring their level of satisfaction of admission decisions made at their institution. Lastly, they clarified how GPA is used within their institution to assist in admission decisions. Upon completion of the survey directors/faculty were made aware of the next steps of their participation and how they would be contacted by the researcher.

**Qualitative Data.** Using the contact information provided in the quantitative survey the researcher scheduled time for an interview to be conducted via a secure video conferencing website. Faculty participants completed a 20-30-minute semi-structured interview (see Appendix E) that followed up on their survey responses, explored what they feel are the goals of admission policy, reflected on their perception of GPA and its use, and discussed their ethical frameworks for determining fairness and admission policy. The interview was recorded to allow for it to be transcribed for the purpose of responses being coded and analyzed. Once the interview was completed participants were debriefed by the researcher.

**Data Handling**

Quantitative data collection and storage was completed in accordance with the expectations and guidelines put forth by the Institutional Review Board of Minnesota State University-Mankato. Files collected during the qualitative data collection, transcription, and
Data analysis stage were kept on an encrypted password-protected device and followed data handling practices put forth by the Institutional Review Board of Minnesota State University-Mankato.

**Data Analysis**

The explanatory sequential mixed-method design of the study allowed data analysis to take place in both phase 1 and phase 2 of the study as laid out in Table 1. In total, both stages of analysis combined to address each of the research questions. Phase 1 analysis began after collection of the Institution and Program Survey (see Appendix A), Student Survey (appendix B), and Director/Faculty Survey (see Appendix D). Phase 2 analysis began after the completion of the Student Qualitative Interviews (see Appendix C) and Director/Faculty Qualitative Interviews (see Appendix E).

**Phase 1 Analysis**

Phase 1 analysis was conducted once data had been collected for each of the three subject groups. Completion of this portion of the study was used to help to shape the collection and analysis of the qualitative data during phase 2.

**Institutional Data Analysis.** Data gathered from the Institution and Program Survey (see Appendix A) was used to achieve two outcomes. The first outcome was to generate descriptive statistics to better understand the represented programs within the study. The assortment of descriptive statistics generated include basic measures of central tendency and variability. By collecting institution and program details more was understood about the diversity that exists within MinnState nursing programs.

The second outcome was to use information from the survey to code and sort each institution to assist in the analysis process of the quantitative and qualitative data gathered from student and faculty participants. The inclusion of GPA in the admission decision process is key
to the sorting process to help address each of the research questions. Information gathered in the survey was helpful during the participant interviews in Phase 2 of data collection. The program mission statement, college mission statement, and MinnState mission statements were helpful for identifying ideals or outcomes expressed in the language and phrasing of the mission.

Student Data Analysis. Information gathered from the Student Survey (see Appendix B) was used to provide quantitative support, and help guide Phase 2 data collection, in addressing RQ1. Descriptive statistics were calculated to understand the participants in this study by using information provided on the survey. Using information gathered from the Institution and Program Survey student responses were grouped into those whose GPA was heavily considered (>25% a factor) for admission as well as those whose GPA was not heavily considered (<25% a factor). The seven Likert questions in the survey were coded into a value of 1-5 based on responses given. A Pearson’s r correlation matrix explored relationships amongst each of the seven questions to establish the relationship between the inclusion of GPA during admission and student experiences, as well as the general impact that grades have on the student experience. Individual participant responses on the survey, and broader insights provided by Phase 1 analysis, were then used to guide the qualitative student interviews.

Faculty Data Analysis. Information gathered from the Director/Faculty Survey (see Appendix D) provided a way to understand the demographics of the participants, screen participants, understand relative satisfaction with criteria and success of admission policies within the programs they oversee and clarify GPA use. Participant responses were grouped into those who heavily consider GPA for admission decisions as well as those who do not heavily consider GPA for their decisions to check for satisfaction of decisions made. Although this does not directly relate to a research question it provided helpful contextual data to assist in the
qualitative interviews to follow in Phase 2. Results to how GPA was used within their program were coded, then combined with information gathered from the Institution Survey to have a more nuanced understanding of the variations of GPA use in admission decisions throughout the represented programs.

**Phase 2 Analysis**

Informed and contextualized by data collected during Phase 1, Phase 2 analysis distilled the personal reported experience of participants, expressed during individual qualitative interviews, into discernible themes that can address the research questions of this study.

**Student Data Analysis.** Upon completion of student participant interviews, guided by the Student Qualitative Interview Questions (see Appendix C), dialogue was transcribed to facilitate the coding process. The responses given to the interview questions used an emergent approach to coding (Creswell, 2014) to allow for participant responses to be sorted into primary categories related to the impact of grades and admission policy on student learning prior to being accepted into the program.

**Faculty Data Analysis.** Upon completion of director/faculty participant interviews, guided by the Director/Faculty Qualitative Interview Questions (see Appendix E), dialogue was transcribed to facilitate the coding process. The responses to the interview questions utilized emergent codes (Creswell, 2014) to address two components of the research questions: one exploring epistemological rationale provided for supporting/not supporting their current approach to admissions policy, the other exploring whether the epistemological rationale supports the role of their admissions committee to be consequentialist or deontological in how they construct their admissions process.

**Interpretation of Data to Address Research Questions**
Completion of data analysis allowed the researcher to address each of the four research questions:

RQ1- In what ways does the use of GPA in informing two-year ADN program admission impact the learning process of program applicants?

RQ1 was addressed quantitatively by exploring relationships between survey responses from students uncovered by producing the Pearson’s r correlation matrix. The qualitative data that emerged through the coding process helped support the quantitative results with reflections of the lived experience of the participants to more clearly uncover what stress was brought about specifically by GPA.

RQ2- What epistemological reasons are provided by two-year ADN admission committees for utilizing GPA as an admission criterion?

RQ2 was addressed by categorizing epistemological rationale expressed during the qualitative interviews. Categories that emerged throughout the interview process were collated into broader themes in order to provide an understanding of what is largely driving support for GPA as an admission criterion.

RQ3- Do the ethical frameworks used by two-year ADN programs more closely align with a consequentialist or deontological approach to guide admission policy?

RQ3 was addressed by examining the stated policies of the program admission committee as well as the intent of faculty in terms of their perception of what they think their role is as an admission decider to see if the responses promote consistent application of standards (more deontological) or if the responses promote achieving some sort of broader goal (more consequentialist). Exploring this question was made possible through comparing program policies to the missions of the program using information collected within the Institution
Program Survey and using faculty interview responses to uncover themes expressed when describing their perceived role as an arbiter of applications.

RQ4- Do the ethical frameworks used to determine the inclusion of GPA as a measure in two-year ADN programs align with the stated missions/values of their institution? Results from RQ3, determined the ethical frameworks (consequentialist or deontological) employed within each program, were paired with and compared to the mission and value statements of their institution which was collected in the Institution and Program Survey.

Taken collectively, the answers to these four questions help provide a better understanding of the landscape that exists for students who are hoping to enter two-year nursing programs and those who are conducting work related to equity, institutional alignment, and strategic planning.
Chapter IV: Results and Findings

Consistent with the flexibility afforded by the explanatory sequential design (Creswell & Clark, 2011) of this research it allowed the researcher to gain insight from Phase 1 to inform and shape the data collected during Phase 2. Phase 1 results helped to provide a foundational understanding of the research landscape by way of qualitative and quantitative information gleaned from the Institution/Program Survey, Student Survey, and Faculty Survey. Phase 2 built upon these understandings by being able to conduct more targeted student and faculty interviews. The results and findings of the quantitative and qualitative data of both phases are presented below.

Phase 1 Results

Data analysis of this phase is centered on information collected in the three surveys distributed. Results from the Institution/Program Survey provide an understanding of the admission criteria of the two-year nursing programs in MinnState, NCLEX first-time pass rates, an examination of a potential correlation between those two factors, and an understanding of the program, institutional, and system mission statements. Results from the Student Survey provide: an assortment of descriptive statistics relating to a series of questions assessing student experiences related to admission and GPA related topics, an analysis of variance measuring whether a noticeable difference exists between the GPA of admitted students at schools that utilize GPA as a main metric versus schools that do not, and a Pearson’s r correlation matrix that unpacks the role that grades and GPA have on student behavior and perceptions. The final element of Phase 1 analysis includes results from the Faculty Survey. Two main purposes were served with the Faculty Survey. The first was to provide demographic information for the faculty
interviews. The second was to measure satisfaction for current admission policy and rationale for their satisfaction level. Several components of data from this phase were utilized to shape elements of Phase 2 data collection and analysis.

**Institution/Program Survey Results**

The Institution/Program Survey was designed to collect information, related to the research questions, from the institutions and programs included in this study. The completed surveys for 21 two-year nursing programs in the MinnState system have been collated into two comprehensive tables below. Table 2 includes information about each of the schools included: the name of the program, how GPA is used as a criterion of admission into the program, whether GPA represents over 25% of considered criteria, and the first-time NCLEX pass rate of tests taken between 2018-2021. An analysis of findings from this data is offered below.

**Table 2**

*Minnesota Two-Year Nursing Program GPA Use and NCLEX Pass Rate*

<table>
<thead>
<tr>
<th></th>
<th>Name of Program</th>
<th>GPA Use/Is GPA over 25%</th>
<th>First-Time NCLEX Pass % (2018-2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minnesota State Colleges and University System</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td><strong>College</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alexandria Technical &amp; Community College</td>
<td>Associate Degree of Nursing</td>
<td>Small part of a broad set of measures (ex: holistic-admission/pre reqs)</td>
<td>89.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Anoka-Ramsey Community College</td>
<td>Nursing MANE Associate of Science (AS) Degree</td>
<td>Small part of a broad set of measures (ex: holistic-admission)</td>
<td>81.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Central Lakes College</td>
<td>A.S. Degree (Traditional) program</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>88.7</td>
</tr>
<tr>
<td>College</td>
<td>Degree or Program</td>
<td>Admission Process Description</td>
<td>Score</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Century College</td>
<td>Associate of Science (AS) in Nursing</td>
<td>Small part of a broad set of measures (ex: holistic-admission)</td>
<td>85.79</td>
</tr>
<tr>
<td>Fond du Lac Tribal &amp; Community College</td>
<td>Traditional ADN program</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>63.68</td>
</tr>
<tr>
<td>Hibbing Community College</td>
<td>Nursing AS Degree</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>84.63</td>
</tr>
<tr>
<td>Inver Hills Community College</td>
<td>The Associate of Science (A.S.) in Nursing</td>
<td>Small part of a broad set of measures (ex: holistic-admission)</td>
<td>89.44</td>
</tr>
<tr>
<td>Lake Superior College</td>
<td>Professional Nursing Associate of Science (AS)</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>84.87</td>
</tr>
<tr>
<td>Minnesota State College Southeast</td>
<td>Associate of Science in Nursing Degree</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>89.44</td>
</tr>
<tr>
<td>Minnesota State Community and Technical College</td>
<td>Associate Degree Nursing</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>87.84</td>
</tr>
<tr>
<td>Minnesota West Community &amp; Technical College</td>
<td>Associate Degree in Science (AS) Nursing</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>69.45</td>
</tr>
<tr>
<td>Normandale Community College</td>
<td>Nursing (AS)</td>
<td>Small part of a broad set of measures (ex: holistic-admission)</td>
<td>88.42</td>
</tr>
<tr>
<td>North Hennepin Community College</td>
<td>Nursing (MANE) AS</td>
<td>Small part of a broad set of measures (ex: holistic-admission)</td>
<td>89.94</td>
</tr>
<tr>
<td>College</td>
<td>Program</td>
<td>Admission Method</td>
<td>GPA</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>----------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Northland Community &amp; Technical College</td>
<td>AD Mobility Nursing Program</td>
<td>Small part of a broad set of measures (ex: holistic-admission)</td>
<td>87.5</td>
</tr>
<tr>
<td>Northwest Technical College</td>
<td>Associate in Science in Nursing (AD)</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>86.26</td>
</tr>
<tr>
<td>Pine Technical &amp; Community College</td>
<td>Associate Degree (AD) Nursing</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>88.19</td>
</tr>
<tr>
<td>Ridgewater College</td>
<td>Associate Degree in Nursing</td>
<td>Small part of a broad set of measures (ex: holistic-admission)</td>
<td>82.94</td>
</tr>
<tr>
<td>Riverland Community College</td>
<td>Nursing (RN Track) Dual Admission</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>79.07</td>
</tr>
<tr>
<td>Rochester Community and Technical College</td>
<td>Associate Degree in Nursing Program</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>89.98</td>
</tr>
<tr>
<td>St. Cloud Technical &amp; Community College</td>
<td>Associate Degree in Nursing Mobility Program</td>
<td>Paired with one or two other quantitative metrics to rank (ex: GPA + TEAS)</td>
<td>82.41</td>
</tr>
<tr>
<td>South Central College</td>
<td>Associate of Science in Nursing (ASN) Degree</td>
<td>Paired with other quantitative metrics to rank (GPA, TEAS, Work Experience, Local Student)</td>
<td>77.84</td>
</tr>
</tbody>
</table>

**GPA as a Criterion.** In exploring how GPA is used as a criterion to inform admission decisions, each of the 21 programs were sorted into one of two classifications: programs that utilize GPA paired with one or two other quantitative metrics to rank applicants (ex: GPA + TEAS) or programs that utilize GPA as a small part of a broad set of measures (ex: holistic-admission). There were no programs that abstain from utilizing some form of GPA to guide
admission. Programs that utilize GPA paired with one or two other quantitative metrics made up 66.6% of included schools in the study, the remaining 33.3% of schools include GPA as a small part of a broad set of measures.

Although GPA may only be paired with one or two other quantitative metrics it was found that due to the weighting of the admission criteria in some programs, a determination was made to further clarify which programs used a process where GPA influenced over 25% of total considered criteria for admission decisions. Doing this resulted in GPA (or grades) making up over 25% of the criterion weight for admission in only 47.6% of programs; with 52.4% of programs using GPA to account for less than 25% of its admission criteria.

Other Criteria. The programs that elect to utilize criteria beyond GPA to help assist in admission decisions utilize diverse metrics and rubric systems to arrive at their decisions. These criteria include: standardized tests, prerequisite completion, institutional commitment, work/life experience, and procedural metrics.

The most visible of these holistic approaches to admission policy can be seen by the six schools in the study that are part of the Minnesota Alliance for Nursing Education (MANE). The MANE holistic admissions criteria approach allocates 20% of consideration to metrics (GPA and TEAS), 40% to experiences (personal narrative, service to others, and formal education completed), and 40% to attributes (informal educational endeavors, certifications, and demonstration of teamwork/collaboration) (Minnesota Alliance for Nursing Education, 2021).

Schools not included in MANE largely create their own rubrics for what measures will be utilized. Scores on standardized tests, such as the TEAS, NACE, or Kaplan, are used in varying degrees and are valued by admission committees for their ability to measure student skills at the date of application, though there is some distrust of the validity of the metric because of
academic integrity issues that have arisen in the post-Covid remote testing era. This distrust was expressed both in the Director/Faculty Survey and during the faculty interviews.

Completion of prerequisite credits and grades received, specifically within the sciences, are utilized to reward students who have completed more credits at the date of application. Some programs reward students for their “commitment to the institution” which is given to applicants who have completed their prerequisite work at the institution where they are applying. Other reasons admission committees give preference to those who have completed work at the institution is the comfort from knowing that the prerequisites sufficiently prepare students (allaying concerns of a potential lack of rigor in prerequisite courses taken at other institutions) and in support of the community college ethos of supporting those who are local rather than preference those transferring into the institution for the program.

Consideration is also paid by some programs to students who have demonstrated the ability to earn other degrees or have work experience prior to entering the program. Often the work experience does need to relate to something close to the nursing field, but with others, anything that demonstrates service to another is accepted. Sometimes to render a “fair decision,” procedural items such as date of application submission or date of completed prerequisite work, are recorded on admission criteria rubrics to help the committee when other metrics have resulted in a tie amongst applicants.

Criteria Rubrics. Nursing faculty are largely responsible for establishing and updating their own criteria and process for reviewing applicants to the program. The Director of Nursing, which is a faculty position, often oversees this process in consultation with their dean, advisory boards, and fellow faculty. Some schools report updating the criteria constantly, whereas others have used the same approach for as long as faculty can remember.
**NCLEX Data.** The National Council Licensure Examination (NCLEX) is a nursing certification exam that is used nationwide, including Minnesota, and requires completion of an accredited nursing program prior to sitting for the test (Jividen, 2021). As students need to pass the NCLEX in order to become certified, graduates are motivated to take the test which provides a consistent measure of each of the programs’ ability to educate nurses. The percentage of nursing program graduates who pass the NCLEX on the first attempt is a major metric for the accreditation of nursing programs within MinnState. Therefore, it is seen as a reliable metric for how effective nursing programs are in preparing their students for a career in nursing.

To help analyze whether inclusion of GPA in guiding admission decisions impacts successful passing of the NCLEX on the first attempt an ANOVA test was completed. The nine programs that utilize GPA for over 25% of admission criteria had an average first-time pass rate of 85.99% (SD = 3.7); the 11 programs that do not use GPA for over 25% of admission criteria had an average first-time pass rate of 82.22% (SD = 8.7). One program was excluded because data for all four years was unavailable. The effect of GPA policy on NCLEX first-time pass rates was not found to be significant, F(1,18) = 1.48, p=.239.

**Institution/Program Missions.** The second major purpose of the Institution/Program Survey was to collect the mission statement for MinnState, the mission statements of the institutions the nursing programs are part of, and the mission statements of the nursing programs. Collecting this information was used to assist in exploration into whether the mission statements are in alignment with the consequentialist or deontological approaches of admission policy, the focus of RQ4. The collected missions are presented in Table 3 and will be used to facilitate discussion in chapter 5.

**Table 3**

*MinnState System, College, and Two-Year Nursing Program Mission Statements*
<table>
<thead>
<tr>
<th>System</th>
<th>Mission Type</th>
<th>Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota State Colleges and University System</td>
<td>System Mission</td>
<td>We are a catalyst for positive change through partnership, collaboration, innovation, and leadership.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College</th>
<th>Mission Type</th>
<th>Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandria Technical &amp; Community College</td>
<td>College mission</td>
<td>Alexandria Technical &amp; Community College creates opportunity for individuals and businesses through education, innovation, and leadership. The college’s high-quality technical and transfer programs and services meet their needs, interests, and abilities and strengthen the economic, social, and cultural life of Minnesota’s communities.</td>
</tr>
<tr>
<td>Anoka-Ramsey Community College</td>
<td>Program mission</td>
<td>The mission of nursing faculty at Alexandria Technical &amp; Community College is to provide students with an exceptional education that will prepare them for entry-level nursing practice.</td>
</tr>
<tr>
<td>Anoka-Ramsey Community College</td>
<td>Program mission</td>
<td>Anoka-Ramsey Community College is an open-door, comprehensive higher education institution committed to excellence in teaching and learning. Anoka-Ramsey is committed to responding to the educational needs of its changing communities and to providing opportunities for enhancing knowledge, skills, and values in a supportive learning environment.</td>
</tr>
<tr>
<td>Central Lakes College</td>
<td>College mission</td>
<td>At Central Lakes College, we: provide life-long learning opportunities in Liberal Arts, Technical Education, and Customized Training programs; create opportunities for cultural enrichment, civic responsibility, and community engagement; and nurture the development and success of a diverse student body through a respectful and supportive environment. advance innovation. inspire learning and transforms lives.</td>
</tr>
<tr>
<td>Central Lakes College</td>
<td>Program mission</td>
<td>To build futures by educating students who have the potential for self-development to become practical and professional nurses that will administer safe, client-centered, and holistic nursing care in a variety of healthcare settings.</td>
</tr>
<tr>
<td>Century College</td>
<td>College mission</td>
<td>Century College inspires, prepares and empowers students to succeed in a changing world.</td>
</tr>
<tr>
<td>Century College</td>
<td>Program mission</td>
<td>The Century College Associate Degree Nursing Program is committed to inspiring life-long learning and empowering students to positively impact the evolving health care needs of the community through safe, purposeful, and evidence-based professional nursing practice.</td>
</tr>
<tr>
<td>Fond du Lac Tribal &amp; Community College</td>
<td>College mission</td>
<td>The mission of Fond du Lac Tribal and Community College is to provide higher education opportunities for its communities in a welcoming, culturally diverse environment.</td>
</tr>
<tr>
<td>Fond du Lac Tribal &amp; Community College</td>
<td>Program mission</td>
<td>The mission of Fond du Lac Tribal and Community College Nursing Program is to provide the education necessary for entry into nursing.</td>
</tr>
<tr>
<td>Hibbing Community College</td>
<td>College mission</td>
<td>Hibbing Community College provides life-changing education and opportunities in a dynamic learning environment.</td>
</tr>
<tr>
<td>Hibbing Community College</td>
<td>Program mission</td>
<td>Challenged to respond to a diverse and growing need for qualified nurses, Hibbing Community College Program in Nursing is dedicated to providing nursing students with entry level theory and clinical skills needed to understand and assume the responsibilities of a Registered Nurse in an individual, family, community, or acute, long-term, and/or rural community-based setting as well as fostering within each student a commitment to lifelong learning and professional growth.</td>
</tr>
<tr>
<td>Inver Hills Community College</td>
<td>College mission</td>
<td>Learn, discover, and build a better future: Inver Hills is dedicated to the power and promise of education.</td>
</tr>
<tr>
<td>------------------------------</td>
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<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>(Unavailable to researcher)</td>
</tr>
<tr>
<td>Lake Superior College</td>
<td>College mission</td>
<td>Lake Superior College serves the community and supports the economy of Northeast Minnesota and beyond by providing high-value accessible higher education and advanced training in a supportive environment.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>(Unavailable to researcher)</td>
</tr>
<tr>
<td>Minnesota State College Southeast</td>
<td>College mission</td>
<td>Minnesota State College Southeast prepares students for a lifetime of learning by providing education for employment, skill enhancement, retraining, and transfer, to meet the needs of students and the community.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>The Mission of the Nursing Department of Minnesota State College Southeast is to provide nursing education at both the practical and professional levels to meet the needs of students and the community.</td>
</tr>
<tr>
<td>Minnesota State Community and Technical College</td>
<td>College mission</td>
<td>Minnesota State Community and Technical College specializes in affordable and exceptional education, service, and workforce training. We welcome all students and engage them in shaping their futures and their communities.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>Preparing practical and associate degree nursing students for licensure by providing dynamic learning, while fostering scholarship and excellence in nursing to contribute to the health of the community and create a positive impact to healthcare.</td>
</tr>
<tr>
<td>Minnesota West Community &amp; Technical College</td>
<td>College mission</td>
<td>Minnesota West prepares learners for a lifetime of success.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>The Minnesota West Associate Degree in Science (AS) program is dedicated to providing nursing education using a variety of affordable, accessible, delivery methods to a diverse population with the goal of preparing graduates who practice safe, entry level professional nursing.</td>
</tr>
<tr>
<td>Normandale Community College</td>
<td>College mission</td>
<td>Normandale Community College advances individuals' intellectual, career, and personal development by providing outstanding teaching and support.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>(Unavailable to researcher)</td>
</tr>
<tr>
<td>North Hennepin Community College</td>
<td>College mission</td>
<td>North Hennepin Community College creates opportunities for students to reach their academic goals, succeed in their chosen professions, and make a difference in the world.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>(Unavailable to researcher)</td>
</tr>
<tr>
<td>Northland Community &amp; Technical College</td>
<td>College mission</td>
<td>Northland is an innovative leader in higher education, preparing all learners with work and life skills that advance personal well-being and regional prosperity.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>The mission of the NCTC Nursing Program is to serve learners, society, and particularly the region through a collaborative approach in the educational preparation of nursing personnel.</td>
</tr>
<tr>
<td>Northwest Technical College</td>
<td>College mission</td>
<td>Northwest Technical College integrates the value of work with the educational experience to develop resourceful lifelong learners with knowledge, skills, and attitudes to secure rewarding careers and satisfying lives in an increasingly technologically focused, globally interdependent, multicultural society.</td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td>The mission of the Nursing Program is to educate diverse students to become quality entry-level healthcare team members who provide compassionate, culturally sensitive, holistic care in a variety of settings. During this process, students undergo a transformation where a spirit of inquiry, collaboration, resourcefulness, and professional identity are nurtured.</td>
</tr>
<tr>
<td>Pine Technical &amp; Community College</td>
<td>College mission</td>
<td>Known for innovation and contributions to strengthen communities, we make college possible for those starting out or starting over. Whether a student seeks a career program, new skills or general education transferable to another college or university, Pine Technical &amp; Community College is an excellent choice.</td>
</tr>
<tr>
<td>Institution</td>
<td>College mission</td>
<td>Program mission</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pine Technical College</td>
<td>Pine Technical College Nursing Department is committed to providing an opportunity for higher</td>
<td></td>
</tr>
<tr>
<td></td>
<td>education in an affordable student-focused environment. The Nursing Department offers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>comprehensive educational opportunities, including general and transfer education, technical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>program education and lifelong learning. The Nursing Department is committed to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>advancement of teaching methodologies and technology, student development, and community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>service. The Nursing Department believes in the practical value of higher education as a means</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of economic and personal advancement in society. The Nursing Department respects and cares for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>students as individuals and as members of diverse groups, supporting their aspirations for a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>better life.</td>
<td></td>
</tr>
<tr>
<td>Ridgewater College</td>
<td>Ridgewater empowers diverse learners to reach their full potential and enrich their lives through</td>
<td></td>
</tr>
<tr>
<td></td>
<td>personalized and relevant education in an accessible, supportive, and inclusive environment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Unavailable to researcher)</td>
<td></td>
</tr>
<tr>
<td>Riverland Community</td>
<td>We will offer the best opportunity for every enrolled student to attain academic and career goals</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>in an ever-changing world. The Riverland Nursing (RN Track) Dual Admission Program will prepare</td>
<td></td>
</tr>
<tr>
<td></td>
<td>students with the knowledge, skills, and values necessary to provide safe, effective care within</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the scope of the professional nurse, within a supportive, empowering, intellectually challenging,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and diverse environment.</td>
<td></td>
</tr>
<tr>
<td>Rochester Community</td>
<td>Rochester Community and Technical College provides accessible, affordable, quality learning</td>
<td></td>
</tr>
<tr>
<td>and Technical College</td>
<td>opportunities to serve a diverse and growing community.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Unavailable to researcher)</td>
<td></td>
</tr>
<tr>
<td>St. Cloud Technical &amp;</td>
<td>We provide the education, training, and support necessary for equitable participation in our</td>
<td></td>
</tr>
<tr>
<td>Community College</td>
<td>college mission</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The St. Cloud Technical &amp; Community College’s (SCTCC) Associate Degree in Nursing (ADN)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mobility Program provides accessible nursing education to prepare safe, caring, and competent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>entry-level professional nurses that provide care to diverse populations in rural and urban</td>
<td></td>
</tr>
<tr>
<td></td>
<td>communities.</td>
<td></td>
</tr>
<tr>
<td>South Central College</td>
<td>South Central College provides an accessible and inclusive learning environment that cultivates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>College mission</td>
<td></td>
</tr>
<tr>
<td></td>
<td>student success and advances regional economic development.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program mission</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The SCC Nursing Programs support an environment for learning which prepares competent,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>compassionate entry-level healthcare professionals. The SCC Nursing Programs have common</td>
<td></td>
</tr>
<tr>
<td></td>
<td>beliefs and values concerning human beings, health, nursing, community, and nursing education.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>These beliefs have a high priority for the faculty and will, therefore, have a strong influence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>on the Nursing Program and how it is implemented.</td>
<td></td>
</tr>
</tbody>
</table>

**Student Survey Results**

An electronic version of the Student Survey was emailed to representatives from each of the 21 schools to be distributed to and completed by current students of the program. 75 completed surveys were received. Data were processed by gathering descriptive statistics of
survey responses to Likert scale questions, an ANOVA measuring the impact of GPA use as a metric of admission on GPA of those admitted, and a Pearson’s r correlation matrix to unpack the role that grades have on student behavior and perceptions. Apart from yielding standalone insight provided by the answers received, data was also able to shape the targeted interviews during Phase 2 of data collection.

**Descriptive Statistics.** Students who completed the Student Survey provided their GPA at the time of admission into their nursing program, and, using a Likert scale (1-strongly disagree; 2-disagree; 3-neither agree or disagree; 4-agree; 5-strongly agree), provided responses related to their agreement or disagreement of seven statements.

Statement 1: During the nursing program application process it was clear to me how I would be evaluated as an applicant.

Statement 2: The process of gaining admission (completing prerequisites and application) into the nursing program was stressful.

Statement 3: Grade point average (GPA) is an important measure of my learning.

Statement 4: Prior to being admitted to your program, a final grade of a C in one of your program prerequisite courses would have delayed or prevented you from achieving your academic goals.

Statement 5: Consideration of the need to get a good grade has impacted what course or instructor I have taken.

Statement 6: I have found grades to be an accurate measure of student learning.

Statement 7 if: It is more important to get a good grade than it is to fully understand course material.

The average GPA for survey respondents was 3.52 (n=68, SD= 0.42). Students on average agreed that the process for how they would be evaluated as an applicant was clear (M= 3.97, n=75, SD= 1.40). Students on average agreed that the process of gaining admission to their program was stressful (M= 3.63, n=75, SD= 1.14). Students were split about GPA being an
important measure of learning (M= 3.33, n=75, SD= 1.22), whether or not a C would delay their academic goals (M= 3.49, n=75, SD= 1.27), if consideration of grades impacted course selection (M= 3.44, n=75, SD= 1.27), and GPA being an accurate measure of learning (M= 2.99, n=75, SD= 1.23) as they were neither in agreement or disagreement. Students on average disagreed that it is more important to get a good grade than to fully learn course material (M= 2.04, n=75, SD= 1.69). These results are captured in Table 4.

Table 4  
Student Survey Descriptive Statistics  

<table>
<thead>
<tr>
<th></th>
<th>GPA</th>
<th>Clear Process</th>
<th>Stressful Process</th>
<th>GPA is Important</th>
<th>C Would Hurt</th>
<th>Instructor Choice</th>
<th>GPA Accurate</th>
<th>Grade &gt; Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>68</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.418</td>
<td>1.395</td>
<td>1.136</td>
<td>1.223</td>
<td>1.267</td>
<td>1.265</td>
<td>1.225</td>
<td>1.168</td>
</tr>
</tbody>
</table>

GPA of Admitted Students. To measure if utilizing GPA for more than 25%, or less than 25%, of one’s admission criteria results in any increase of the average GPA of admitted students, a one-way analysis of variance was conducted. Utilizing admission criteria data collected in the Institution/Program Survey, student surveys were coded as either being from a school that used high-reliance (>25%) versus low-reliance (<25%) of GPA during admission. The effect of high-reliance (>25%) versus low-reliance (<25%) use of GPA during admission on the average GPA of admitted students was not found to be significant, F(1,66) = .042, p=.84. As a result, this measure failed to attribute any meaningful difference in GPA level at admission between those selected using high or low levels of reliance on GPA as a metric.

Pearson’s Correlation Coefficient Matrix. Using the eight quantitative measures from the Student Survey a Pearson’s r matrix was conducted to explore the various elements related to grades and the impact it has on student perception and behavior. Significant findings include:
There was a moderate correlation between perceived stress and selecting a course/instructor based on a desire to get a good grade, $r(73) = .445$, $p<.001$.

There was a moderate correlation between belief that GPA is important and that GPA is an accurate measure of learning, $r(73) = .445$, $p<.001$.

There was a weak negative correlation found between one’s GPA when applying and selecting a course/instructor based on a desire to get a good grade, $r(66) = -.399$, $p<.001$.

There was a weak negative correlation between believing GPA to be an accurate measure of learning and whether or not one believed the application process to be stressful, $r(73) = -.353$, $p=.002$.

There was a weak correlation between belief that a C would hurt one’s academic progress and selecting a course/instructor based on desire to get a good grade, $r(73) = .284$, $p=.013$.

Lastly, there was a weak correlation between belief that a grade is more important than learning and selecting a course/instructor based on a desire to get a good grade, $r(73) = .244$, $p=.035$.

These findings as well as the rest of the matrix can be seen in table 5.

**Table 5**

*Correlations Between Student Survey Responses*

<table>
<thead>
<tr>
<th>Variable</th>
<th>GPA</th>
<th>Clear Process</th>
<th>Stressful Process</th>
<th>GPA is Important</th>
<th>C Would Hurt</th>
<th>Instructor Choice</th>
<th>GPA Accurate</th>
<th>Grade &gt; Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GPA</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Clear Process</td>
<td>0.233</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Stressful Process</td>
<td>-0.221</td>
<td>-0.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. GPA is Important</td>
<td>0.158</td>
<td>0.013</td>
<td>-0.182</td>
<td></td>
<td>-0.116</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. C Would Hurt</td>
<td>-0.179</td>
<td>-0.207</td>
<td>0.177</td>
<td>-0.116</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Instructor Choice</td>
<td>-0.399***</td>
<td>-0.162</td>
<td>0.445***</td>
<td>-0.079</td>
<td>0.284*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. GPA Accurate</td>
<td>-0.033</td>
<td>0.055</td>
<td>-0.353**</td>
<td>0.445***</td>
<td>-0.083</td>
<td>-0.118</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Faculty Survey Results

An electronic version of the Faculty Survey was emailed to representatives from each of the 21 schools to be distributed to current faculty within the program. Completed surveys were received from 21 faculty members representing 9 different schools. Demographic information regarding current role, nursing credentials and experience, educational credentials and experience, years of service were collected to assist the interview conducted in Phase 2. Additionally, respondents were asked about their overall satisfaction with current admission practice within their program and rationale for their perceptions.

Satisfaction with Current Admission Practice. Faculty on average neither agree nor disagree that they were satisfied with their current admission criteria, process, and results (M=3.38, n=21, SD=0.97). Respondents were invited to provide insight into the factors that influenced their response to their current satisfaction which is reflected in table 6.

Table 6

Factors Affecting Faculty Satisfaction with Program Admission

<table>
<thead>
<tr>
<th>Satisfied</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>-The GPA and TEAS scores have been getting us qualified applicants, less attrition, and NCLEX pass rates in the 90%</td>
<td></td>
</tr>
<tr>
<td>-We are in the first semester of a holistic admissions process</td>
<td></td>
</tr>
<tr>
<td>Neither Satisfied or Dissatisfied</td>
<td></td>
</tr>
<tr>
<td>-TEAS score needs to be higher, more prerequisites and therefore more robust GPA, consideration for diversity; consideration for completion of corequisites</td>
<td></td>
</tr>
<tr>
<td>-Over time I would like to explore transitioning to a more holistic admission</td>
<td></td>
</tr>
<tr>
<td>-I like the rubric we are using currently however with all the academic integrity issues; the TEAS is not as effective of an indicator as we need it to be.</td>
<td></td>
</tr>
</tbody>
</table>
-I like that the admission is objective but the TEAS test can be taken remotely not in person which can lead to cheating. We have some high TEAS but low performance in the classroom.

-Diversity

-Rigor of the courses (and having only full time available) seems to come as a shock to students after they begin. I wish they had more prep for what to expect.

**Dissatisfied**

- The TEAS score... questionable reflection of student capability, GPA
- Utilize TEAS score for admission, it is predicative but not inclusive of success in the program
- Non-Nursing Staff work in admissions, Faculty have limited access to work on and develop admissions criteria.

-Low cultural and racial diversity

-Process is changing to "holistic admission", not sure what new criteria will bring.

- Some students do not want to do the work, listen to faculty, bully faculty to get an A. Not show up to class or do the assignments.

-Many of the students seem unprepared for the rigors of the nursing program. They lack a basic Nursing Assistant qualification and no exposure to medical terminology. This puts them at a deficit coming into the program that is hard to overcome in 3 semesters.

**Phase 1 Summary**

Data collected and analyzed from Phase 1 provided insightful quantitative feedback about the participants of the study and the populations they represent. The analysis of the quantitative data assisted in the shaping of the qualitative interviews that follow. The result provided an opportunity for the researcher to draw out qualitative elements of the salient research topics to complement the quantitative findings with qualitative context.

**Phase 2 Results**

Collecting qualitative data was the primary focus of Phase 2 data collection. Individual semi-structured interviews conducted with nursing students and faculty provided the researcher with a more informed understanding of the attribution, rationale, and motivation behind the perceptions of the participants expressed during Phase 1. Key findings from the interviews are presented.

**Student Interview Findings**
Semi-structured interviews were conducted individually with three current nursing students that were selected after expressing interest within the Student Survey completed in Phase 1. Utilizing information gathered from the descriptive statistics and correlation matrix, questions were developed to guide the interview in a way that targeted emerging themes related to the student experience of applying to a nursing program.

Communicating How Applicants Are Evaluated. Response to the questions, “during the nursing program application process was it clear to you how you would be evaluated as an applicant?” and “did you find the process of gaining admission into the nursing program to be stressful?,” was largely dependent on having access to knowledgeable advisors and those knowledgeable of how to navigate college.

- Student 1: “I mean [my advisor] just listed everything out that I needed to do, made it real easy…It was a lot [to keep straight], so that really was overwhelming. In that short time to do it, but [my advisor] answered questions super quick so that part she helped a lot with. She was amazing.”

- Student 2: “It was all [a mess], not knowing where to go, not knowing what I needed to accomplish to even get to this point, and then on the selection process it's not cut and dry, the information wasn't, and it seemed to change. It was extremely confusing the whole ordeal I had to navigate all by myself. I don't come from a family that has a college background, so I didn't have anyone kind of guiding me or pushing me in the right direction or anything like that.”

- Student 3: “So, there's stress in terms of I need to make sure I jumped through all the hoops and then kind of the other stress of you know self-confidence, of do I have what it takes? Do I have a competitive enough application to be accepted?”
Perceptions of Importance of GPA As a Measure. A particularly enlightening response from a participant came in the following exchange,

- Researcher: “Do you view GPA as an important measure of your learning?”
- Student 2: “At first, I really thought it did. I was really on top of that, and this is how this works. Absolutely. Then about maybe five years into school, and changing programs I realized, all you have to do is jump through the hoops. Jump through the hoops to get the things done. It doesn't matter if you learn it or not. You just learn how to do the algorithm of the class and you're done, and you can pull an A, and not learn anything”
- Researcher: “Do you see that a lot with fellow students or have you gotten to a point where everybody has kind of wised up to the need to learn and focus on how to become best nurses?”
- Student 2: “Yeah, I still see it. Those students went on, and they have not passed their NCLEX yet, and they're still trying, and they should have been actively a nurse over a year ago. So, I do, I see that quite a bit. It's just learning how to take the test.”
- Researcher: “Which is unfortunate to patients, you know, these students might eventually go on to pass the NCLEX and then they're on a floor somewhere.”
- Student 2: “Right, it's just scary as hell.”

The Perceived Impact of a “Bad” Grade. The negative perceived impact of a course grade of a C was unequivocal amongst interview participants.

- Researcher: “If you were to get a final grade of a C in one of your courses does that completely derail your academic goals, is that kind of a fair assessment?”
- Student 1: “At one point I was told that when I spoke with the advisor. Yes”
- Student 2: [Enthusiastically] “Yeah! Yeah, it is.”
Student 3: “I think it'd be really devastating. I feel like it would ruin your chances, it might even ruin your confidence, that maybe you shouldn't be doing that program.”

**Grades Impacting Teacher Selection.** Although each of the students reported being motivated to take certain teachers over others because they perceived they would receive a better grade, they attributed the decision to the reputation of the instructor being a better teacher rather than a “less rigorous” teacher.

Student 1: “It had nothing to do with how the grades [were determined]. It was strictly the fact that he could guide you through in an easy-to-understand way and make you successful.”

**Grades Do Not Always Measure Learning.** Grades were reported by the students to not reliably measure learning.

Researcher: “Do you think that grades do a good job of measuring your learning?”

Student 1: “Oh sure, I think some classes more than others. You know I feel like maybe in a science class the grade shows that, yes, you learned, because then you're able to pass the exam. I feel like a composition class just shows you did all the assignments.”

Student 2: “No, because everybody's such different learners. Many different types of learners. I'm not a good test taker, but hands on stuff, I'm amazing. And then there are other people that can memorize everything they hear. Yet they can’t apply it in the real world. No, I don't think it does.”

Student 3: “Um, honestly, I think it goes both ways because there's really no way of judging it, because you're never going to know. So I get why they have to pick one [grade] or the other. But, yeah it's not fair to somebody, even in the working world. Being an LPN you can definitely see some that have amazing grades, and they got this job...
because they have all that, but yet they don't have any idea what they're doing, but some do. It's just, yeah, it's got to be difficult [to assign grades], either way.”

Learning Takes a Backseat to Grades on Occasion. The need to perform academically at times was reported to take away from the opportunity to focus on learning.

- Researcher: “Do you think it is more important to get a good grade or to fully understand course material?”
- Student 1: “You sit there, and after every test you calculate what more you need to be able to pass. Like, that's all you focus on anymore. What do I gotta do to actually get those points? It's just extremely stressful and downing. It puts you in a whole different world, like you're not even really that excited to learn anymore, because you're more worried about your grade.”

GPA Represents Work Not Knowledge. Perception surrounding what GPA represents found agreement that grades are more representative of work and effort than knowledge and learning.

- Researcher: “What do you think one’s GPA represents?”
- Student 1: “For instance, I feel like the nursing program is set up, yes, you have to get 80% on your tests and your exams, fine, you can do that. But if you don't put in the work, like you get a bunch of zeros on your homework, well you're not going to pass. You could get 100% on your exams you're still not gonna pass. You have to put in the work, so I feel like a GPA that's high shows that you put in the work, it doesn't necessarily mean you're smart.”
- Student 2: “I think it represents that the student is there. They are participating and they're learning how to take the test and pass that class. I do think in some classes, yes, it
is an accurate representation of what they have learned, because the classes are set up that way, but those are few and far between...I think it shows the amount of work that you put into it and I think it's a pride thing. If you really want a good GPA you’re going to work your butt off to get it.”

- Student 3: “Honestly, how much free time you have and how well, you can just sit there and retain everything, I guess, like just for the test taking part. And yeah, a lot of it is how hard you work, because some of them do work their butt off to get that and others, just, they have great memorization skills.”

**Students are Mindful of Shortcomings of the Admission Process.** When asked for their thoughts on how students are evaluated as an applicant to gain admission to the program, students offered the following:

- Student 1: “It shouldn't be based on what the instructors currently do. If the instructors say, ‘oh, these people have a 4.0 we're going to take them, but these people are 3.0s we don't want them.’ That's not fair. I don't think that's how they do it. I think that they do it based on, you have to get a certain grade, but it doesn't matter once you’re in. I bugged my advisor about this a lot”

- Student 2: “I don't know, I wish it could get kind of more personal. Like, even if we could submit stuff from our previous employers, like letters of recommendation or whatever. I don't have a good GPA, but I do have work, amazing work experience. I can see all that stuff easily, but at the same time, they don’t have time, to go through all that with every single person would be a lot. I almost wish I could see what the candidates look like that they didn't take, because I don't know, like I mean it's got to work at some
level, but no I don't think it's fair. But at the same time, what else would you be able to do that wouldn't take forever to filter through everybody?”

**Faculty Interview Findings**

Semi-structured interviews were conducted individually with four current nursing faculty after they expressed interest in participating. Interview questions were crafted utilizing information gathered from the descriptive statistics of the Faculty Survey to target emerging themes and in a way that also helped address the research questions of the current study.

**Policy to Predict Success and Achieve Objectivity.** Responses explaining the goals of the admission criteria used by programs centered around the need to determine which students have the best chance of success while doing so in an objective way.

- Researcher: “When revising and establishing program admission criteria, what goals are you trying to achieve in the admission decisions it yields?”

- Faculty 1: “The reason that we have [our process] and what our goal is: Its objective measurement so there's not the subjective. If they have too low of a TEAS [score] then they're not going to perform. It is going to be more of a waste of money for them, helping in that process to ensure that they're ready. It saves them money or makes sure they don’t get kicked out, or not kicked out, but you know fail out. I think it is fair to say that we do use the metrics of [NCLEX] pass rates and the intention of getting high pass rates as our driving force and how we think about admission policies.”

- Faculty 2: “What we hope to achieve is just that objective information, we hope to show that they are at the level that they need to be in order to read and understand the questions that are being asked, since the NCLEX questions are quite difficult, there's dosage calc involved, so hopefully giving us a baseline of where they're at to give us an idea, and
maybe their level of success in the program…we feel like it's disingenuous to admit people into a program who have a statistical risk of not being able to pass their boards just based on the metrics of their admission.”

- Faculty 3: “I knew that I wanted to make sure that we were being more equitable to our candidates. So at that time we moved to a rubric and we're continuing to use that rubric to make sure that we are supporting admission of diverse students, not just students that can get a high score in a TEAS exam… so it's a rubric system that is completely objective.”

- Faculty 4: “Well, for nursing metrics, success is passing on the NCLEX… passing the NCLEX on the first attempt is really the mathematical goal of how we make decisions related to admission. For us, as an institution, one of the things that we are considering is realigning some of our admission policies to reduce the number of students that we accept who don't meet even a higher standard of being able to pass those boards on the first attempt.”

**Pass Rate Equals Accreditation, and therefore Program Success.** Faculty express the pressure of meeting the accreditation required 80% threshold of NCLEX scores and reflect on what has contributed to their program meeting that goal.

- Researcher: “Has your program been successful? How do you know that your program has been successful? How do you measure success in your program?”

- Faculty 1: “I think so, the one hard part is. And it may just be a guess, I have no hard concrete data on it, but those that score higher in GPA and higher in TEAS lack some of the critical thinking pieces. They're very book smart, but trying to then apply, and really practice, that is different. They expect it to be exactly like the book and so making those adjustments is tough. They've also never struggled and so some of them have a hard time.
I don't know how else to [set criteria] in order to avoid this. Because everything's based on how well students succeed, but I don't really know how to do it to weed out some of those who maybe aren't necessarily ready.”

- Faculty 2: “We do feel that [using a rubric] made a difference on the type of cohorts that we admitted to the program because we were able to do it, based on standardized [rubric] points. We look a lot at retention and of course NCLEX pass rates. I think that it all goes back to our admission is successful if we can keep our retention rates and our goal of above 80% [NCLEX pass rate]. We had a little bit of trouble with retention, and we thought, how can we determine that our students are really prepared for our program? Diversity is important too, but then we also need to look at the end goal of what percentage of those diverse students are successful in the program.”

- Faculty 3: “Well, we have to be successful. For ACCEN and the board of nursing, we have to have 80% first time pass rates on NCLEX by graduation so that's our hard level of success. To show the changes that we have incorporated into our program we can’t look at just NCLEX alone right now. We have a lot of students still sitting out there making their way through our program which is going to falsely lower our NCLEX pass rates. The other problem with NCLEX is the students that we serve at a community college versus the students that are served at the universities. I taught at [a four-year state university], I know the caliber of students out of there. I taught at [a private four-year university], I know the caliber of students that are there. That's not our students, okay? Our students? We have a lot of ESL students, we have huge diversity, we have students who are working, our students are parents, our students have so many social challenges, and other things going on”
Satisfaction with Current Approach Is Elusive. Aware of the performance of their current practice, and the alternatives that are out there, satisfaction can be found in certain aspects. However, similar to the data from Faculty Survey responses, there are concerns about certain elements of how their criteria are implemented.

- Researcher: “Based on other alternatives that are out there, why do you feel that your admission decision process is the best way to rank and select students admitted to the program?”

- Faculty 1: “We used to do a little bit more of informal of an admission process where students would write essays and those types of things. We would look at things a little bit more informally and it really got difficult for us to respond back to students to say, ‘well, this is why your application wasn't accepted.’ It was so subjective. Then we were challenged by our leadership to look at it and say ‘how can you make this a little bit more objective and more fair?’ So, the reason I think that we kept what we changed it to is to keep it more objective to be inclusive. When you have objective data like that it's in the numbers. There's no room for ‘well you just didn't like the way I answered this question or you know my English isn't very good.’ We have a lot of diversity on our campus. If you have more subjective things, that opens you up to more emails of ‘why didn't I get it this way, why did I get it this way,’ or ‘you just didn't like this part, or you figured out that I'm English as a second language learner, and so you graded my papers harder on my submission.’ So, keeping it objective in our community it is just concrete. You can just say, ‘no, everybody's held to the same thing.’ There's no room for a different thought process to be able to answer the questions in a different order or grade the papers or questions in different ways. Time [is another issue]. We have programs that start now in
evening, and in the fall. Getting together and reading 100 plus application essays and
grading all those, on top of the 15 credits that we are responsible for teaching, and all the
extra stuff that comes in with community college stuff. We don't have as many faculty. We
don't have as many support services, but a lot of universities have multiple people
that work in a department and we're a small department. So, to get everything with
managing clinical trials, and grading papers, and writing tests, and creating content for
classes, who's going to read and have the time for everybody to read 100 plus
applications? It's not feasible.”

• Faculty 2: “Faculty do not trust the existing metrics. The tool that the administrators say
is the right tool, we the nursing faculty disagree. The metrics of just the TEAS score and
GPA of just the [prerequisite] classes done is not producing the type of candidates that
we want. I like metrics to the extent that the metrics are set up properly. TEAS, GPA,
prerequisite courses, all of those have value, but the way that they're being utilized is not
benefiting our applicant pool. But I do think that there is some value in work experience
and life experience and those sorts of things that we give zero credit to.”

Varied Interpretation of GPA Use and Efficacy. Support for GPA was present when
isolated, but when considering the broader contexts in which GPA was being utilized support
waned.

• Researcher: “Why do you feel that the way that GPA is incorporated into your criteria is
an effective or ineffective way to guide decisions?”

• Faculty 1: “Adding the GPA allows for the whole bigger picture, more so than just the
one-time test score. Over the course of a semester, they may have some ups and some
downs, which could affect their course grade.”
• Faculty 2: “We emphasize grades way too much. Because admin at MinnState schools focus on the people of Minnesota who are the average Joe to get a career that can change their life, their family, and make good money. When we are looking for nurses, we are not even looking for top quality candidates who already have an education or who have work-life experience. Like, we don't even measure job experience, just grades and tests. I've had students who have never had a job, never had a job. And they score great on the GPA and the TEAS. But it's like [they] don't even know how to show up for class on time. How are [they] going to be a nurse? My public depends on me. I have a responsibility to the public, first and foremost as a nurse licensed in my state to do better.”

• Faculty 3: “We don't look at cumulative GPA [it’s factored into a tier system]. Say we have a student who's returning, and they've gone to a couple of schools, or they [went] to school five years ago when they didn't care about GPA the way they probably do now. We think that it helps by doing it that way, because we think it gives us a truer picture. Because we're using the most recent GPA.”

There’s a Lack of Agreement of What a GPA Represents. Extrapolating what the student’s GPA at the point of admission represents elicits differing opinions about the utility of the metric.

• Researcher: “For admission purposes, what do you think GPA represents?”

• Faculty 1: “If you have that GPA, you've done the work, so you've learned the information that you needed to learn from that course. Typically, you've had to put in the work and study the material, so it shows that you would be invested in the program,
because we're also graded on retention rates and so you if you it looks like you care more about the work and your success.”

• Faculty 2: “I do not believe that the value of the GPA should be given as much weight as it does. I do think if you have completed a let's say a corequisite, that's not a prerequisite, that's worth something as you have already worked farther ahead and would be in a better setting to receive admission, but that's not how we operate. We use straight GPA which is not consistently leading to results.”

• Faculty 3: “I personally don't think anything better about 4.0 student than I do with 3.5 student, and that is based on my history as a manager in the field. Ultimately, what are we preparing them for? To be a competent nurse.”

**GPA Appreciated When Used as a Floor.** Though precision of GPA is questioned, and value of GPA is seen when utilized to create a basic set of standards for students to have prior to admission.

• Researcher: “Do you think that using GPA is an effective way to evaluate student applicants versus other metrics?”

• Faculty 1: “Yes, if they can’t maintain a GPA they're not going to succeed because they probably weren't putting in the effort that needed to be put in to be successful.”

• Faculty 2: “We used to require a higher GPA. That disappeared with administration wanting, you know, equal access to everyone. Not everybody can pass the boards, [believing any one can is] hogwash. [Low performance] is the result.”

• Faculty 3: “It would be great to admit nothing but 4.0 students; however, we can't because we know that we're serving a group of students that deserves to be served. Right? But, if they are not able to earn at least an average of a 2.7, honestly more like a 3.0 in
those science courses, they're not going to be successful with the rigor of the program. That is why the GPA is important, it is because they have to show that they have that ability, to have that science brain, to actually think through those things. Would I like to only have 3.0 students here, yes, but that's not the population I'm here to serve. So, we have to find a way to make it work.”

**Fairness to whom.** Examining the motivating factor behind admission policies yields competing motivations for whom fairness is to be provided.

- Researcher: “Do you think your program’s admission policies yield fair decisions, why or why not?”
- Faculty 1: “I think so just because of the objectivity of it…I think it definitely is objective and so just ranking them on that list [with GPA and their TEAS] we're able to get what we need. I think it's working out well for what we use it for.”
- Faculty 2: “No, it’s unfair. I think our initial policy and our timeline prevents working adults from considering our program. How these mundane policies that are influenced by somebody who's not a nurse, and doesn't understand that our end goal in reality has to be to keep our accreditation. The Board of Nursing says we have to have a pass rate of greater than 80% [on the NCLEX] and if all of our students are not statistically going to be the best pool for passing that, then we need to change our admission policies. If we lose our accreditation our program is going to close, and all of the adjuncts and UFT who teach biology are going to lose their jobs. Everyone loses their job. The big picture of trying to increase our pass rates seems selfish, but I care about everybody having a job and good nurses. So, I have to use that pass rate as a driving decision force for how we look at the future of our program.”
Summary

The data collection that was made possible through the elements of Phase 1 and Phase 2 resulted in a nuanced understanding of elements and intersections of the programs, students, and faculty represented in the study. Taken as a collective, the data provides numerous qualitative and quantitative footholds to address the four research questions of the present study, understand limitations, and look towards future research opportunities.
Chapter V: Discussion

The purpose of this study has been to understand the ways in which GPA affects the way students approach their learning, the way GPA shapes educators’ viewpoint of applicants arriving on their doorstep, the ethical frameworks that support using GPA for admission purposes, and how these ethical frameworks align with broader institutional and systemic missions. The data collected for this study was able to yield insight into much of the proposed scope of this study. Limitations exist within this research which will result in areas of inquiry remaining unresolved for the time being. Visual slides that summarize the research questions and what was discovered can be found in Appendix F. Combining lessons learned from this study and the limitations present highlights how future research can fill the gap to advance our understanding of the field.

RQ1

*In what ways does the use of GPA in informing two-year ADN program admission impact the learning process of program applicants?*

Data from the Student Survey yielded quantitative insight into what the reported and perceived impact of grades were on applicants. Of the questions asked, on average, students supported the idea that the process was clear (M= 3.97, n=75, SD= 1.40), albeit stressful (M= 3.63, n=75, SD= 1.14).

The presence of significant stress in the classroom indicated by Flannery (2018) is concerning by itself but to see the changes in student behavior as a result of this stress is concerning. Students who were most likely to report feeling stressed through the process of completing prerequisites and applying to the program were moderately correlated to be the ones who made intentional selections of who their instructor was based on a desire to get a good
grade, $r(73) = .445, p<.001$. This finding is in line with the belief that when consequences exist for poor marks (such as being denied admission), students are more likely to “play the game of school” by doing what they can to maximize the likelihood of success in ways not directly associated with the learning process (Blum, 2020; Kohn, 2018). The idea that those at risk are more likely to play the game of school by course/instructor shopping is additionally supported by the findings that seeking out a specific course/instructor is more likely to be a behavior of those with a lower GPA ($r(66) = -.399, p<.001$) and those that believe a C would hurt their academic progress ($r(73) = .284, p=.013$). These behaviors are also in line with observations from Solomon & Piggott (2018) about students who feel insecure academically seeking instructors and courses that will pad their GPA.

The student interviews provided additional insight into the impact of a poor grade and perceptions related to what is being measured in the grades that they received. Students reported that when seeking out specific courses/instructors they were in search of quality teaching rather than easier coursework and less rigor. Whatever their motivation is, the act is an additional consideration reported and undertaken by those in the correlated groups mentioned above. The pressure of the need to succeed is heightened when the belief that a C would “be devastating” and the damage of a C your poor grade is shared by advisors to students.

Although students find themselves in environments where high grades and GPA are praised there is open acknowledgment of skepticism from students regarding what course grades are actually representing. Students found GPA more accurately reflected free time and effort rather than skill and knowledge. Additionally, the reported observations from students regarding their opinions about how grades the lack of validity and consistency in measuring learning aligns
with much of the literature on the topic (Beatty et al., 2015; Brookhart, et al., 2016; Lipnevich et al., 2020; McMillan, 2001; Solomon & Piggott, 2018).

Despite communicated awareness of feeling the current application of grades weren’t necessarily the best measurement of their learning students understood that they have to play the game regardless:

“You sit there, and after every test you calculate what more you need to be able to pass. Like, that's all you focus on anymore. What do I gotta do to actually get those points? It's just extremely stressful and downing. It puts you in a whole different world, like you're not even really that excited to learn anymore, because you're more worried about your grade.”

**RQ1 Conclusion**

The findings of this study suggest that the presence of grades and GPA in being used as a gatekeeper (as well as a metric within the program) leads to students “playing the game of school” (Blum, 2020) in several ways. Despite their belief that grades are not measuring learning in consistent and accurate ways, there is acknowledgment that the train continues to move forward and students must do what they can to ensure that they are still on board although the consequences are stress and frustration. Campbell’s law (1979) suggests that “the more any quantitative social indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor.” It appears that students would agree that grades have met this threshold as grades were established for the purpose of measuring student learning, but grades have come to drive how students select classes, shape how students approach the classroom, and undercut their ability to learn.
RQ2

What epistemological reasons are provided by two-year ADN admission committees for utilizing GPA as an admission criterion?

The setting of admission policy, and what influence GPA plays, is shaped by many competing factors. Considerations of program viability, not setting students up for failure, and producing successful students are major drivers contributing to the rationale for how admission criteria are determined. Faculty reported belief that GPA offers elements that makes it ideal for assisting in the differentiation of applicants.

GPA Promotes Objectivity

The perceived ability for GPA to provide an objective measure of student learning is often a reason that was given for why it is included as a criterion. A major theme during the faculty interviews was the need to promote objectivity through the inclusion of admission criteria that would serve that purpose.

“The reason that we have [our process] and what our goal is: Its objective measurement so there's not the subjective”

“…it’s a rubric system that is completely objective”

“What we hope to achieve is just that objective information…”

The quest for objectivity also is valued by faculty in its ability to give applicants that are not admitted clear guidance as to why they were not selected. By appealing to the established criteria that was shared prior to selection, committees can state that the process was fair as all applicants were judged the same way. This is preferred to metrics that are not as clearly defined and harder to articulate differentiation amongst applicants.
“More subjective things…opens you up to more emails of ‘why didn't I get it this way, why did I get it this way’, or ‘you just didn't like this part, or you figured out that I'm English as a second language learner, and so you graded my papers harder on my submission.”

**GPA is a Predictor of Success**

GPA is valued by admission committees as it is perceived to represent historical performance in prerequisite courses and a representation of learning that has been completed. Being able to predict success is tremendously important for nursing programs as they are looking for students who are going to be able to handle the coursework and eventually pass the certification exam at the end of the program.

“A GPA [shows], you've done the work,…learned the information,… you would be invested in the program,…you care more about the work that you do, and your success.”

To achieve higher NCLEX pass rates programs reported elevating their GPA cut score due to the perceived correlation between GPA and the caliber of student desired to succeed even if it means being able to admit fewer students.

“We used to require a higher GPA. That disappeared with administration wanting, you know, equal access to everyone, not everybody can pass the boards, that's hogwash. [Low performance] is the result”

“If they can’t maintain a GPA they're not going to succeed because they probably weren't putting in the effort that needed to be put in to be successful.”

“If they are not able to earn at least an average of a 2.7, honestly more like a 3.0 in those science courses, they're not going to be successful with the rigor of the program.
That is why the GPA is important, it is because they have to show that they have that ability.”

**GPA is Quick**

Utilizing GPA to measure students is incredibly quick and allows the faculty, who report full workloads already, the ability to quickly sort through the dozens of applications received each admission cycle.

“To get everything with managing clinical trials, and grading papers, and writing tests, and creating content for classes, who's going to read and have the time to everybody read 100 plus applications? It’s not feasible.”

**Weakness of Other Metrics**

Lastly, GPA is valued as it offers an alternative free from the weaknesses of other metrics. Because of GPA’s longitudinal nature it isn’t subject to the potential manipulations of the one-time standardized test approach by engaging in academic dishonesty or demonstrating an ability to cram-and-forget versus actual prolonged learning that is perceived to be measured by GPA.

**RQ2 Conclusion**

The purpose of RQ2 was to identify what reasons are offered by admission committees for utilizing GPA as an admission criterion. The primary epistemological reasons given for why GPA deserves a spot when critiquing applicants are the ability for GPAs to promote objectivity, predict success, be processed quickly, and do not have the perceived weaknesses of other metrics.

The incorporation of GPA as a criterion of admission is in part guided by the perception of it helping to advance this mission of objectivity. GPA is perceived to be fairly applied to all
applicants, despite much literature stating otherwise (Beatty et al., 2015; Brimi, 2011; Lipnevich et al., 2020; McMillan, 2001; Solomon & Piggott, 2018). Despite every student having a GPA, there is subjectivity in terms of what courses are taken by students applying to programs that consider cumulative GPA, as well as subjective differences between instructors of the same specific prerequisite courses when applying to programs that only consider the GPA of a narrower list of courses.

More broadly, there is at times confusion that although a quantitative rubric structure has been established it in no way absolves the committee from the subjectivity of the decisions being made. The inclusion or omission of individual metrics, and how they are weighted, alter how applicants are ranked. Choosing to weigh a standardized test score equal to GPA versus making the test score worth twice as much as GPA when considering applicants has considerable impact on who the admitted class will be. The careful and deliberate decision of what admission criteria is included is a subjective decision when considering the myriad ways students can bring value to their applications. Although quantification can create ordinal ways to rank students the process launders the subjectivity in ways that often go overlooked. It is important to keep in mind quantifying a metric and applying it equally to students does not make the exercise objective.

The perceptions expressed in the data collected in this study related to the predictive value of prerequisite GPA do not align with what educational researchers have found (Bahr P. R., Fagioli, Hetts, & Hayward, 2019). Westrick (2017) has highlighted the poor predictive value of using past performance to predict future success and Vulperhorst J., Lutz, Kleijn, & Tartwijk (2018) take it a step further by indicating that the practice can do harm to students. It is possible that there is some idiosyncrasy within nursing that allows them to buck the trend, but based on the lack of satisfaction expressed in the faculty surveys and interviews of their own admission
practices, the weak predictive ability of GPA in nursing applicants might be more similar to the other disciplines in the studies mentioned above than the faculty may acknowledge.

The difference of admitted student GPA in programs that had high-reliance on GPA versus the average student GPA in programs that had low-reliance on GPA was found to be not significant (F(1,66) = .042, p=.84), nor was significance found comparing first-time NCLEX pass rates between programs using high or low reliance on GPA for admission purposes (F(1,18) = 1.48, p=.239). If a meaningful difference in GPA of students admitted or improved NCLEX pass rate is not generated by relying heavily on GPA, is there potential value in opting for the option that doesn’t create the negative consequences mentioned in RQ1 due to the heightened GPA expectations?

A primary shortcoming that was expressed about using more holistic admission practices is a very justifiable concern about the amount of time and resources it would take to be able to sort through all the applications, especially when those responsibilities are placed on the back of faculty with full workloads. Admission decisions impact the trajectory of the applicants’ lives and determine a potential two-year commitment to those who were admitted. If program faculty are feeling that workload is a barrier for more effective admission policy, administrators should work to ensure that programs have the resources necessary in order to make the best decisions for the students and the institution. For all of the talk regarding the importance of objectivity, making an admission decision influenced in any way based on expediency seems tremendously inappropriate.

RQ3
Do the ethical frameworks used by two-year ADN programs that incorporate GPA as a measure more closely align with a consequentialist or deontological approach to guide admission policy?

To understand the ethical frameworks employed by programs for the purposes of distinguishing between a consequentialist or deontological approach it requires knowledge of the outcomes that are desired by the program and values that should be upheld in the pursuit of those outcomes.

**Preferred Outcomes**

The largest visible goal each program has is to meet the 80% first-time pass rate on the NCLEX to maintain its accreditation. It becomes a paradox of motivation between if our schools are solely motivated to achieve 80% because they are concerned about their own viability as a program or is it a form of accountability that ensures that schools are serving the needs of the students. Admission policies that incorporate criteria that acts as a shifting scale form of meritocracy to determine applicants (e.g., “your high-performance earned you this spot over the less-high-performing candidates”), versus fixed credentials that need to be met to be considered qualified (e.g., “you met each expectation and earned a spot in the applicant pool”), are actively preferencing students over another based on the perception of them being stronger candidates which serves the purpose of increasing the likelihood of successful passing of NCLEX on the first attempt. It could be considered self-serving in the sense that programs are being protective to ensure that they do not lose accreditation; however, in response to that criticism programs would point out that they also do not want to mislead the students that apply whom they feel are not capable of being successful in the program. By not misleading them it benefits the student from accumulating debt, sinking time into working towards a degree only to fail, and that by
taking a chance an available seat was used up that could have gone to a more qualified, and therefore more likely to be successful, candidate.

Reducing attrition and increasing retention are other reported outcomes of nursing programs. Losing students halfway through the program has several consequences. It costs the school money in terms of lost revenue, students are not earning a degree or being able to access the field of nursing, and seats go unfilled throughout the duration of the cohort.

Some programs are quite vocal about their desire to serve students wherever they are at in their academic journey. This approach prioritizes the value of supporting all students who seek to study nursing regardless of their current aptitudes at the point of admission. Achieving this requires admission criteria that oftentimes deemphasize traditional competitive metrics and instead to find ways to promote equity in their admission practices.

Promoting diversity is a common value admitting committees are trying to achieve through their practice. Due to the value-added of diverse candidates and cohorts, various features can be used to promote and value the differing perspectives that diverse students can add to a cohort and its development

Promoting the value of fairness and trying to achieve objectivity are major drivers of how admission policy is crafted. By being able to align their process with a standalone system built on the integrity of an “objective measure” it protects the committees from having to answer tough questions about rationale for why their admitted students were admitted over the applicants who were passed over. Part of enshrining fairness into the application process involves ensuring academic integrity through steps taken to minimize and reduce cheating amongst applicants. Using specific metrics, admission committees can deflect any criticism by
saying that everybody knew the rules of the game and the criteria matrix made the decision, not
the committee itself.

*Elements of Consequentialism and Deontology*

Despite knowing the outcomes and potential motivations of the faculty committees it is
hard to definitively attribute one ethical framework over the other for the reason of the decision.
As a result, an application of how the elements of the decision could be explained using
consequentialism and deontology frameworks is discussed. Though a final determination is not
made there is value in understanding how both can be true at the same time.

**Elements of Consequentialism.** If it perceived by the admission committee that the
goal of the program is to promote a certain initiative, and therefore base criterion on what they
think will yield and achieve their goals, these actions are very consequentialist. By utilizing
criteria that select students most capable of passing the NCLEX, and therefore likely to be
retained, committees want their selection choices to result in them meeting these goals. When
admission committees consider the need to serve all students and diversity within their programs,
and it results in them adjusting the selection process to promote these dual concepts,
consequentialism has been promoted.

**Elements of Deontology.** Because of the mandated NCLEX pass rate being a motivator
for admission committees, pure deontological approaches to admission practice are very hard to
find. There are elements of admission policies that can be defended and supported from a
deontological perspective. Concepts related to fairness, objectivity, and equally-applied
standards each engender a deontological principle that guides the creation of the matrices and
playing field used by each applicant. It is the researcher’s opinion that although these
deontological principles are in play with the creation of self-labeled “objective standards” just
because one takes a metric and applies it consistently, in a universal fashion, it does not absolve
the subjectivity/lack of fairness/etc. that accompanies the decision to select and include those
metrics. It would be akin to saying that the use of poll taxes during the Jim Crow era were
objective as every citizen had the chance to pay the same amount as everyone else for the right to
vote.

**Conclusion/Limitation.** The examination of this research question had been predicated
on the idea that each institution could essentially choose their own way of preparing nurses.
Because the accreditation of programs looms so large, programs are essentially forced to place
tremendous value on being able to beat the imposed 80% metric. As a result, when it comes to
educating and assessing nurses the values and motives of the institutions and programs must
either be disregarded or adjusted to be in alignment with the accreditation requirement. This
influence essentially turns their admission policies into consequentialist endeavors to retain their
accreditation.

Campbell’s Law (1979) again helps provide an understanding of the potential negative
impact such a restrictive metric places on the autonomy of the nursing programs. Where there
may have at one time been more diversity in terms of the guiding principles of the individual
programs, as they are all subject to the same metric there is a potential deviation from whatever
philosophical approaches that may have otherwise been present to meet the expectations placed
upon the program.

**RQ4**

*Do the ethical frameworks used to determine the inclusion of GPA as a measure in two-
year ADN programs align with the stated missions/values of their institution?*

*MinnState Mission*
Because of the vast scope of initiatives under the purview of MinnState it would be expected that the mission statement be worded in a somewhat elusive way that yields utility for the various ways it needs to be applied. The nonspecific language of what being a “catalyst for positive change” represents allows their mission to be applied to a whole suite of endeavors undertaken by the system, but mission success requires the consequentialist achievement of becoming this catalyst and affecting change. The second half of the mission “through partnership, collaboration, innovation, and leadership” highlights the mores and ideals established by the system that are to be followed in the achievement of the change they seek which provides some deontological guidance of system action.

The flexibility of the MinnState mission statement allows for alignment to take place with the consequentialist approaches to guiding nursing program admission practices.

Institutional Missions.

The college mission statements face a challenge similar to the system mission statement in the sense that they represent a breadth of educational targets and shareholders and seek to include elements that aren’t necessarily aspirational, but serve as affirmations of realities they wish to acknowledge

Divining alignment of program policy with mission statements can be difficult to discern at times due to the lack of precision within the phrasing of the statement. Statements that express focused and clear outcomes of the system, college, or program do not always offer clear guidance of how the mission is to be achieved. Whereas statements that contain language expressing ideals, aspirations, and expected mores for the system, college, or program itself (in a way that deemphasizes the outcome) provides the opportunity to see if the mission should be achieved following a specific ethical approach.
Conclusion/Limitation

Thematically throughout the institutional missions are elements of promoting accessibility, diversity, and all learners. These consequentialist institutional missions have the potential to align with the consequentialist nursing programs seeking accreditation via high NCLEX scores if handled very intentionally; however, these missions are difficult to achieve when the primary driving force behind admission selection is utilizing exclusively academic benchmarks applied in a competitive fashion. This could potentially lead to incongruent motivations within an institution where the institution is promoting equal access to all learners only to run headlong into policies that have codified access based on a pseudo-deontological understanding of objectivity that limits access and acts as a barrier to these initiatives. Within institutions experiencing this, conversations weighing the need to ascend to the status quo of accreditation metrics in order to move the needle on other initiatives would be of value.

Limitations

It is important to contextualize the conclusions established within this study with the possible limitations, known and unknown. The sample size and reticence within the sample population, idiosyncrasies within nursing education, difficulties of discerning ethical intent, and the ubiquitous nature of how grades are understood represent limitations to the current study.

The scope of this project, although large enough to find significance in some areas, would benefit tremendously from increased participation within the study from the sample population. Attempts to attract participants from a field whose students and faculty are literally on the front lines of the Covid-19 pandemic proved difficult. Complications that the pandemic have wrought on faculty, specifically faculty that are responsible for establishing clinical sites hesitant to take on students amidst the maelstrom of the pandemic, exceeded the reasonable amount of what we
should expect of our nursing educators who were offered little support at times. The researcher is grateful for the faculty willing to take on the additional burden of participating in this study. Similarly, being a student during a pandemic is not an easy feat and taking time to participate in a study probably does not rank high on a list of their priorities.

The goal of this study was to examine how GPA is used as a construct in helping to guide admission policy, the impact it has on students, and what rationale is provided by policymakers to justify its use. The components of this study could be applied to any academic discipline or program that utilizes GPA to guide admission. Nursing was selected as a result of it being more competitive in nature based on the scarcity of available seats relative to those who are interested in the programs. Due to the universal accreditation standard of trying to attain an 80% NCLEX pass rate much of the study’s inquiry into the ethical motivations of the individual program’s approach to setting policy was impacted. Additionally, because of the represented programs all being part of the MinnState program the sample may be more homogeneous than the researcher would like.

Lastly, grades and how they are understood by students and faculty are tremendously ingrained in our collective understanding of how we believe education works. As grades are all most students, and faculty, have ever known it is very hard to separate the concepts of learning and grades from one another. Because socialization that As are good and Fs are bad is instilled throughout the entirety of the American academic experience perceptions can be hard to unpack.

**Recommendations for Further Study**

Research into how the use of grades affect educational systems and those within it should continue. Inquiry into the topic of the impact of grades has only begun to scratch the surface of all of the tendrils that pervade the way that students and systems are measured. This study
attempted to tie several of those concepts together and achieved progress in some areas but fell short in others. I would encourage research similar to the present study but focused on a different discipline with less homogeneous oversight. This would allow the researcher to be able to unpack how different approaches yield different outcomes, as well more clear insight into the competing ethical motivations for what programs are trying to achieve, and whether or not GPA has a role in those endeavors.
References


Minnesota Board of Nursing. (2021, April 15). *Requirements for Approval of a Nursing Program*. Retrieved from Minnesota Board of Nursing: https://mn.gov/boards/nursing/education/requirements-approval-nursing-programs/


**Appendix A**

**Institution and Program Survey**

Name of college:
Name of A.D.N Program:
Available seats (avg. of past 3 years):
Number of applications (avg. of past 3 years):
Avg. GPA of admitted students:
How is GPA used in application process?
Pre-Req GPA cut score:
Pre-Req retake limit:
Other admission factors/influence:
Graduation/success rate:
Program mission statement (if any):
College mission statement:
MinnState mission statement:
Appendix B

Student Survey

Name:
Email Address:
School:
Program:
GPA at time of program application process:

Likert: To what extent do you agree or disagree with the following statements:

Question 1: During the nursing program application process it was clear to me how I would be evaluated as an applicant.
If needed, explain:

Question 2: The process of gaining admission (completing prerequisites and application) into the nursing program was stressful.
If needed, explain:

Question 3: Grade point average (GPA) is an important measure of my learning.
If needed, explain:

Question 4: Prior to being admitted to your program, a final grade of a C in one of your program prerequisite courses would have delayed or prevented you from achieving your academic goals.
If needed, explain:

Question 5: Consideration of the need to get a good grade has impacted what course or instructor I take.
If needed, explain:

Question 6: I have found grades to be an accurate measure of student learning.
If needed, explain:

Question 7 if: It is more important to get a good grade than it is to fully understand course material.
If needed, explain:
Appendix C

Student Qualitative Interview Questions

1. [Follow-up on information gleaned from initial survey responses]

2. How do you measure your success or failure as a student when taking a course?

3. What do you think one’s GPA represents?

4. What are your thoughts on how students are evaluated as an applicant to gain admission to the program?
   a. What impact, if any, did those perceptions have on your approach to your learning?
Appendix D

Director/Faculty Survey

Name:

Email Address:

School:

Job Title:

Years of industry (nonacademic) experience:

Years as an educator:

Educational Degrees/Professional Certifications:

Question 1: Are you responsible for deciding admission criteria for your nursing programs? Yes or No

Likert:

Question 2: How satisfied are you with how current admission criteria guides admission decisions?

Open-ended follow-up:

Question 2.1: What factors (positive or negative) influence your response?

Open-ended:

Question 3: How is GPA used, if at all, to assist in the admission decision process for your programs?
Appendix E

Director/Faculty Qualitative Interview Questions

1. [Follow-up on information gleaned from initial survey responses]

2. When revising and establishing program admission criteria what goals are you trying to achieve in the admission decisions it yields?

3. Has your program been successful, how do you know? How do you measure success in your program?

4. Based on other alternatives that are out there, why do you feel that your admission decision process is the best way to rank and select students admitted to the program?

5. Your program uses GPA during the admission decision process [in this way], why do you feel this is an effective or ineffective way to guide decisions?

6. For admission purposes, what do you think a GPA represents?

7. Generally, do you think using pre-req GPA is an effective way to evaluate student applicants vs. other metrics?

8. Do you think your programs admission policies yield fair decisions, why or why not?
Appendix F
Research Question Discussion Summary Slides

Addressing Research Questions

RQ 1: In what ways does the use of GPA in informing two-year ADN program admission impact the learning process of program applicants?

- Student Survey, Student Interview, Institution Survey

RQ 2: What epistemological reasons are provided by two-year ADN admission committees for utilizing GPA as an admission criterion?

- Faculty Survey, Faculty Interview, Institution Survey

RQ 3: Do the ethical frameworks used by two-year ADN programs that incorporate GPA as a measure more closely align with a consequentialist or deontological approach to guide admission policy?

- Faculty Interview, Institution Survey

RQ 4: Do the ethical frameworks used to determine the inclusion of GPA as a measure in two-year ADN programs align with the stated missions/values of their institution?

- Results of RQ3, Institution Survey

RQ 1: In what ways does the use of GPA in informing two-year ADN program admission impact the learning process of program applicants?

- Stress led to playing the game of school (Blum, 2020; Campbell, 1979; Kohn, 2018):
  - increased teacher shopping, r(73) = .445, p<.001
    - more likely to be a behavior of those with a lower GPA, r(66) = -.399, p<.001
    - believe a C would hurt their academic progress, r(73) = .284, p=.013

- Believe GPA measures effort over skill/knowledge

  “You sit there, and after every test you calculate what more you need to be able to pass. Like, that’s all you focus on anymore. What do I gotta do to actually get those points? It's just extremely stressful and downing. It puts you in a whole different world, like you’re not even really that excited to learn anymore, because you’re more worried about your grade.”
RQ 2: What epistemological reasons are provided by two-year ADN admission committees for utilizing GPA as an admission criterion?

- **Faculty Motivation:**
  - Program Viability/Pass NCLEX
  - Avoid Over-Placement
  - Workload Management
  - Fairness/“Objectivity”
  - Accessibility/Diversity

- **Perceptions of Faculty Regarding what GPA Offers:**
  - **GPA Promotes Objectivity**
    - Limit subjectivity
    - Protection from those denied
  - **GPA is a Predictor of Success**
    - Shows it can be done
    - Perceived correlation with success
  - **GPA is Quick**
    - Decision matrix makes choice automatic
  - **Lacks Weakness of Other Metrics**
    - Can’t cheat, longitudinal

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RQ 2: What epistemological reasons are provided by two-year ADN admission committees for utilizing GPA as an admission criterion?

- **GPA Promotes Objectivity**
  - Not supported by literature (Beatty et al., 2015; Brimi, 2011; Lipnevich et al., 2020; McMillan, 2001; Solomon & Piggott, 2018)
  - “Quantifying a metric and applying it equally to students does not make the exercise objective”
  - Committee *is* responsible for decisions

- **GPA is a Predictor of Success**
  - Predictive value of prerequisite GPA not supported by educational researchers (Bahr P. R., Fagiolli, Hetts, & Hayward, 2019; Vuperhorst J., Lutz, Kleijn, & Tartwijk, 2018; Westrick, 2017)
  - Despite policy differences: GPA of admitted students was found to be not significant, F(1,66) = .042, p=.84; nor was NCLEX pass rates, F(1,18) = 1.48, p=.239.

- **GPA is Quick**
  - Workload concern should not be justification for presence of poor practice

- **Lacks Weakness of Other Metrics**
  - GPA able to be manipulated; longitudinal counter to transformative education philosophy
RQ.3: Do the ethical frameworks used by two-year ADN programs that incorporate GPA as a measure more closely align with a consequentialist or deontological approach to guide admission policy?

- **Preferred Outcomes**
  - NCLEX +80%
    - Merit
    - Prevent over-placement
      - Lower attrition
  - Accessibility
  - Diversity
  - Fairness/“Objectivity”

- **Elements of Consequentialism**
  - Using policy to advance initiative/outcome
  - Quite visible

- **Elements of Deontology**
  - Using policy to promote ethical absolutes
  - Appealed to, but not truly present

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**Conclusion/Limitation**

- Homogeneity of programs due to Board of Nursing NCLEX +80% Pass Rate Requirement
- Metric results in conformed approach to nursing education (Campbell, 1979)
- Consequentialist by Default