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Diagramming Academic Equity: Exploring Educator Perceptions of Using Student Data to Institute Equitable Academic Programming in Public Secondary Schools

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DIAGRAMMING ACADEMIC EQUITY: EXPLORING EDUCATOR PERCEPTIONS OF USING STUDENT DATA TO INSTITUTE EQUITABLE ACADEMIC PROGRAMMING IN PUBLIC SECONDARY SCHOOLS

by

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A Dissertation Submitted to the Graduate Faculty of

Minnesota State University – Moorhead in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Education

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May 2020

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DIAGRAMMING ACADEMIC EQUITY: EXPLORING EDUCATOR PERCEPTIONS

RESPECTIVE TO INSTITUTING EQUITABLE ACAEMIC PROGRAMMING IN PUBLIC

SECONDARY SCHOOLS

By

Matthew J. Dass

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Abstract

By viewing Adams' Equity Theory through an educational equity lens, the author intends to demonstrate which data educators feel are most important when designing education plans that offer all public secondary students equitable access to school curricula and resources. Creating equitable educational plans for all students is vital to ensuring students are granted access to the curricular resources necessary to both achieve their respective academic potential, and stimulate engagement through integrating individual student interests into academic planning. Consequently, this study seeks to establish specifically which data points educators feel are most important when instituting equitable education programming for students, and also to better understand why educators rely upon the identified data points. Using Equity Theory to anchor this study, the author intends to explore the balance between the data input, and the programming output, educators must strike in order to ensure equitable academic opportunities for all students. More data does not necessarily equal stronger student programming; this study will demonstrate the lengths to which educators will go to responsibly utilize student achievement data in order to institute equitable academic programming, yet avoid data inundation by setting boundaries between useful, and inadequate input data. The result of these boundaries will manifest themselves as the actualization of equitable academic programs to be instituted for each student on an individual level. In order to facilitate this study, the author utilizes a constructivist lens centered on qualitative methodology and psychological phenomenology. This methodology both enables the author to more acutely identify educator perceptions, as well as demonstrate links between phenomena found in the study.

Chapter 1

Introduction

High school represents a time of great opportunity for American public school students. Chief among these opportunities is the access high school students – generally in grades 9-12 – gain to a robust range of curricular offerings designed to develop individualized skills and talents in many different subject areas. The ability to choose between course offerings represents a shift in academic programming philosophy, as students are able to engage in courses that more closely align to their interests and abilities, as opposed to more universal educational programming most students experience during their formative years. Whereas students begin their public education learning very similar material, at a similar pace, and in the same physical environment, expanded high school course catalogues offer students the opportunity to differentiate their learning in ways that better target individual student strengths and interests. Helping students take full advantage of these new opportunities is where educators must serve as liaisons for students, and ensure that equitable access to the bevy of courses at their fingertips.

Taking into consideration both student interests and student achievement data empowers educators to place students in academically appropriate, and intellectually stimulating, courses. This practice is essential to ensuring *all* students are granted access to equitable educational experiences. Fowler and Brown (2018) postulate "Utilizing data effectively has been a hallmark in the reform movement as educators access the wealth of data in order to make informed decisions about how to best educate and support students" (p. 19). However, educators must use discretion when selecting which data to use in order to offer a clear guide to instituting equitable academic programming for the students in their care. Consequently, and in order to comprehensively consider equitable academic planning, educators must take into consideration

both quantitative, and qualitative data. Kowalski and Lasley (2009) state:

> Good teachers have always used data to make decisions. In the past, that meant
>
> relying on subjective assessments (soft data) about student performance and
>
> careful examination of student performance on a variety of formative and
>
> summative tests. Good teachers in the future will do the same thing: they will use
>
> both informal personal observations of student performance and formal
>
> assessments (teacher-made standardized tests) to make instructional judgments.
>
> (p. 257)

Furthermore, Eagle, Dowd-Eagle, Snyder, and Holtzman (2015) argue the need for educators to acknowledge both academic data, and teacher interviews in order to comprehensively understand the individual supports each child needs to experience academic success. Similarly, Evans, Thornton, and Usinger (2012) support the importance of using both quantitative and qualitative student data in order to produce positive learning outcomes for the student. However, relying upon data to drive student academic programming remains a temptation for educators to use data as the sole partner in the planning process. This temptation must be reconciled, as using data to ensure individualized, equitable academic programming is put in place for students must be a team effort, and collaboratively constructed within the educational setting in order to maximize the benefit for the student. Evans, Thornton, and Usinger (2012) posit:

> As principals help teachers take ownership for not only analyzing data but also for
>
> designing and identifying data sources specific to their own students, relationships
>
> to data-based decisions, and its power to improve learning out-comes can
>
> transform teaching and learning (Wellman & Lipton, 2004)

Similarly, Shernoff et al. (2016) argue students are more likely to demonstrate higher levels of

engagement when enrolled in classes that feature challenging learning environments. Mu et al. (2013) (as cited in Fowler and Brown, 2018) emphasizes this point in reinforcing the importance of maintaining the same level of expectation for each student, regardless of privilege or deficit, in order to ensure school climate is primed for the establishment of equitable learning opportunities. This argument suggests a relationship must be established with the student in order to chart an academic experience that is both ability-appropriate, and aligned with student interests. For example, while all students are generally held to the requirement of completing math, English, social studies, and science coursework throughout their high school careers, elective courses offer students precisely the types of opportunities necessary to stimulate interest in academic programming. Where individualized, equitable academic programming can help match students with courses attuned to their respective ability levels, elective courses can satisfy the wants and needs of students looking to develop skills in areas of specific interest. Thus, creating a need for the student to be a partner in the academic planning process. Consequently, and in consideration of the broad range of both student abilities and needs present in most student bodies, educators must find ways to disaggregate the abundance of student data at their fingertips in order to focus on the data that will prove most effective in constructing equitable academic programming from which all students can benefit.

Ensuring equitable educational opportunities for students places great responsibility on educators, and demonstrates the need for a balance to be struck between being intentional about the types of data used to isolate student academic strengths and interests, and the subsequent immaterial rewards of creating equitable academic programming for all students (Steere & Cavaiuolo, 2002). In order to create conditions by which public secondary schools can offer all students equitable academic programming, educators can utilize Stacey Adams' Equity Theory

to illustrate the delicate balance educators must achieve between utilizing data to properly assess student needs, and producing equitable academic programming for all students. Through employing Equity Theory to the task of creating data-driven, equitable academic programming, educators gain a context through which they can decide which data, and the extent to which they use such data, to assess student academic needs, and consequently utilize the selected data to create an immaterial output of equitable academic plans for all students. In this way, educators can better regulate a balance between the requisite inputs, and outputs, necessary to offer all students equitable educational programming.

This study maintains the position that both quantitative and qualitative data must be used in order to ensure public high school students are offered equitable opportunities to engage in academic programming that both matches student aptitude, and generates intellectual stimulation on an individual level. While educators have access to copious amounts of student data, discretion must be used when deciding upon the types of student data to integrate into academic plans (Kowalski & Lasley, 2010). Consequently, this study seeks to gain educator perceptions of the most pivotal data sources to use when creating equitable learning opportunities for all students. In addition, and through the lens of Adams' Equity Theory, this study also seeks to demonstrate the threshold at which educators must limit the data inputs to create student education plans, and highlight the particular immaterial outputs, or intrinsic benefits, of creating equitable academic programs for students. By dissecting these dynamics, educators will gain access to highly generalizable perspectives from their colleagues in public education. Consequently, and upon observing the conclusions of this study, educators can take steps to better institute an equitable approach to serving all students, regardless of need or ability.

Problem Statement

Kirsch and Braun (2016) argue, "Schools are our society's central institution serving students from all backgrounds and—in theory— supplying them with the knowledge and skills they need to have a fair shot at success in adulthood" (p.301). This concise, yet comprehensive statement underscores the responsibility of public educators to equitably support all students, irrespective of individual need or ability. However, this statement also suggests the reality of sustained inequities existing within the public education system. While healthy body of research exists to demonstrate the ways in which many social inequities make their way into the schoolhouse and cause academic opportunity gaps between students, few studies highlight means by which educators can effectively mitigate academic opportunity gaps between students. Educators have little control over external conditions that cause discrepancies in student skills and abilities; however, it is incumbent upon professional educators to neutralize external impediments to student learning by instituting individualized, equitable academic programming to fit the needs of all students. Consequently, and in order to effectively program for the breadth of skills and abilities within a particular class of students, educators must proactively employ the tools and resources at their disposal to serve their students. Utilizing both student achievement data, and student interest data to drive academic programming is the most effective way in which educators can ensure students receive individualized educational programming that equitably mirrors both personal ability and individual interests (Lane, Oakes, Menzies, Oyer, & Jenkins, 2013). However, educators are often drawn strictly towards quantitative student achievement data to inform student programming, as it is both easily accessible, and individually correlated to students (Wayman, Midgey, & Stringfield, 2006).

Some of the most common ways in which educators use data to supplement academic

programming centers on data-driven decision-making models (D3M), whereby quantitative student achievement data is utilized to isolate, and remediate, particular academic deficiencies. Two of the most prevalent D3M models used by educators to drive academic programming are Response to Intervention (RTI) and Multi-Tiered Systems of Support (MTSS) (Schifter, Natarajan, Ketelhut, & Kirchgessnar, 2014). Both D3M models maintain a very tight focus on quantitative data points designed to empower educators to quickly identify learning student deficiencies, and design interventions aimed at facilitating growth in both academic aptitude and complementary skills (Lane, Oakes, Menzies, Oyer, & Jenkins, 2013). While the RTI and MTSS models are an effective component to establishing equitable academic programming for students, the models require a great deal of time, progress-monitoring, and specific training in order for educators to effectively, and consistently, use the information in a manner that will ensure equitable learning opportunities for students (Schifter, Natarajan, Ketelhut, & Kirchgessnar, 2014). Consequently, educators are left wondering how to adequately offer academic programming that both isolates student needs, but also considers interests and educator feedback. Thus, ensuring an equitable level of service and attention to *all* students with a focus on providing equitable learning opportunities, rather than on changing particular behaviors or developing skills.

While analyzing quantitative data is certainly critical to understanding student learning needs, and must be part of the planning process when creating student academic plans, the most important component missing from quantitative programming models such as the RTI and MTSS models is the inclusion of qualitative data – in particular, student interest information and educator feedback gathered from the students seen on a daily basis. While both RTI and MTSS models are predicated on utilizing quantitative data sets, it is important to note these data sets are

dated the minute a report is run, as quantitative student achievement data is prone to change. Consequently, and in this scenario, educators are left to create academic programming strictly from established data sets, which, given the timeline, may be dated or inadequate based on current student needs. Furthermore, academic programming models that utilize only quantitative data removes the student from the programming discussion, thus, jeopardizing student buy-in and follow-through with any such plan – a critical component to ensuring students practice fidelity in following academic plans. Gentry and Springer (2002) argue the need for educators to consider student feedback and perceptions when creating student education plans, as the involvement in the student as a stakeholder of his, or her, education is paramount to the student following through on such a plan. Consequently, a balance must be struck between using both quantitative and qualitative data in order to ensure students maintain access to appropriate, and equitable, academic programming.

The scant research exploring ways in which both quantitative and qualitative data can be intentionally used alongside one another to create equitable educational programming for all students offers an opportunity for to explore the phenomena of the ways in which educators use both data types to create equitable academic plans for students. However, educators face a great deal of pressure to isolate the most important student achievement data, student feedback, and educator perceptions when seeking to create equitable student academic programs for students. Kowalski and Lasley (2002) argue that situations where student educational experiences are poorly matched with demonstrated abilities and interests can be avoided when educators use student achievement data, and more specifically, the *right* student achievement data, to offer students high quality, equitable academic experiences. The operative phrase, here, is the "right data." How are educators to decide which data to utilize in order to create equitable academic

programming for students on an individual level? In addition, where are educators to draw the line between responsible data utilization, and oversaturating the educational programming process with too many data points? A balance must be struck between the input of student data, and the output of equitable educational opportunities, in order to institute comprehensive, equitable academic plans for students on an individual level. Consequently, this study aims to employ Adams' Equity Theory to serve as a context through which educators can strike a balance between employing D3M to institute equitable academic planning for students on an individual level, and the production of a tangible, equitable educational plan for all students.

Theoretical Basis for Research

Stacey Adams' Equity Theory provides the foundational context for this study. Established in 1963, Adams' Equity Theory was originally intended to serve the business community, creating a type of check and balance system between the input of employee efforts, and the output of perceived rewards garnered by the employee as the outcome of the task. Thus, Equity Theory is predicated on ensuring an equitable distribution of employee performance and dedication to the tasks charged to them (Adams, 1963). Furthermore, Equity Theory is based heavily on employee perception – both within an interpersonal context, and a production standpoint. Fowler and Brown (2018) demonstrate the four primary areas in which Equity Theory can be applied in the workplace:

> (a) people perceive and evaluate their relationships with others based on a comparison of their input into the relationship and outcomes from the relationship as compared to another's inputs and outcomes;
>
> (b) if the ratio from the input/outcomes and comparison relationships is not equal according the perception of the individual, they will determine it to be an inequitable relationship;
>
> (c) the more inequity one feels, the more distress one feels as well; and
>
> (d) the more distress, the more they will work to restore equity.

Consequently, employees must take corrective action, or sever the relationship altogether in order to restore balance and decrease distress in cases where an equity imbalance manifest (Fowler & Brown, 2018). Similarly, and in the educational setting, educators must consider the effort and data points used to equitably institute academic programming for all students, versus the construction of tangible, equitable academic programs available to all students.

Taken broadly, Equity Theory aims to ensure the effort and energy an individual expends when completing a task matches the product – whether tangible or immaterial – of the effort and energy expenditure. While Equity Theory was originally designed to ensure an equitable distribution of effort and outcome within the context of employee job responsibilities, the theory is elastic enough to be considered in parallel contexts. For the purpose of this study, Equity Theory is applied within an educational context as educators work to create equitable academic programming for all students. Within this context, input is represented by both the qualitative and quantitative data educators isolate as being the most important to consider when creating equitable academic programming for students, while the output manifests as the actualization of an equitable education plan. While the core input and output components of Equity Theory are certainly present within the theoretical context used for this study, the true essence of the study seeks to define specific input data most useful when creating the structured output of equitable education plans for all public secondary students.

Research Questions

1. What data do educators perceive to hold the most value when creating individualized, equitable academic programming for all students?

2. Why do educators perceive particular student data sources are more valuable than others when creating equitable academic

programming?

3. How do educators define a threshold for the quantity of data to be utilized, and limited, in order to develop equitable academic programming for students?

Study Purpose

The purpose of this study is to better understand what student data points public secondary school educators feel are necessary to consider in order to create equitable learning opportunities for all public secondary school students, irrespective of ability level or social disadvantage. A rich body of research exists to demonstrate value in utilizing data to facilitate academic growth and opportunity – fewer studies explore the ways in which data can be used to ensure equitable academic programming within the public schoolhouse. While many studies explore the effect of utilizing particular student data points to isolate and remediate student learning deficiencies, this study seeks to alter the lens through which data can be used as a tool to support students. Rather than seeking to directly link data-driven student programming to student achievement, this study focuses on discovering ways in which data can be used to create equitable learning opportunities for all students that takes into account student aptitude, student feedback, and educator perceptions. This study is conducted within the context of Adams' Equity Model, which seeks to establish a balance between the input of data necessary to consider equitable academic programming for students, and the output of a tangible, equitable academic plan students can utilize to maximize their respective learning potential.

Assumptions

- The participants will provide honest responses when answering both initial, and follow-up interview questions. The interviews conducted in this study are paramount

to maintaining strong internal-, and external validity.

- Educators involved in the study currently use some form of student data to ascertain student ability levels, and identify student academic needs. The central aspect of this study is to discern educator perceptions as to the most important data sources necessary to offer all students equitable academic programming commensurate with their academic needs and personal interests. If an educator involved in this study does not currently utilize data to impact programming, internal and external validity may be impacted based on participant inexperience.

- A very robust body of research exists to demonstrate the plethora of social inequities that affect public secondary students both in the community, and in school. This study assumes validity and credibility in this body of research, and takes a solution-focused position centering on what is within the control of the educator to mitigate the broad range of inequities students bring with them to school each day.

- This study assumes educators have access to a broad range of both quantitative and qualitative student data. In order to gain educator perceptions respective to the most valuable data to utilize when seeking to establish equitable educational plans for students, educators must first have access to data sources.

Limitations

This study focuses on identifying what public secondary school educators feel are the most important data sources to reference when seeking to institute equitable academic programming for public secondary students. While references are made to acknowledge a broad range of social inequities serving as roadblocks for many students, specific inequities are not operationally identified. In addition, the inequities that limit access to student

academic opportunities are assumed valid by the established body of research. These inequities are not specifically defined or confirmed, as the focus of this study seeks to explore ways in which to mitigate all academic inequities through better understanding the data sources educators feel most useful in order to institute equitable academic programming. In addition, this study does not take into account the wide range of personal life disruptions with which public secondary students may need to contend. Issues like food insecurity, mental illness, and homelessness are but a few issues that may work against the philosophy of data being used to eradicate inequities within the schoolhouse. Personal troubles may negatively impact student buy-in, school attendance, or in-school behaviors – all conditions that work against even the most structured, individualized academic plan.

Delimitations

Delimitations are restrictions that will be imposed prior to the beginning of the study. Some of the delimitations for this study are:

1. The study will be delimited to Minnesota public secondary schools with student bodies between 500, and 1,000 students

2. The study will focus only on public secondary school educators employed in the role of: a) Teacher, b) School Counselor, C) Principal

Key Terms

This study features the use of terms that dictate specific definitions, given the context within which they are used. The following represents a list of operational definitions for key terms used in this study:

- Equitable Academic Programming: The academic opportunities available to students in order to ensure reliable access to academic coursework and curricula that meets the learning needs, and skill development, of all students.

- Student Data: Quantitative or qualitative data educators use in order to determine the academic programming needs, interests, or skills germane to individual students.

- Input: Student data sources utilized by educators in order to create individualized, equitable academic programming for students.

- Outcome: The tangible demonstration of an individualized, equitable academic program for individual students.

- Data-Driven Decision-Making: Academic programming decisions made by educators and student stakeholders that are predicated on utilizing student data to justify, and validate, student programming decision.

- Response to Intervention: A Data-Driven Decision-Making model designed empower educators to set, monitor, and adapt to student learning needs

- Quantitative Data: Measures of values or counts expressed as numbers.

- Qualitative Data: Measures of types represented by a name, perception, or theme.

Summary

Chapter one introduces the reader to the concept of considering public secondary school educator perceptions of student data to be considered when creating equitable learning opportunities for all public secondary school students. It is hypothesized that students gain reliable access to equitable academic opportunities when public secondary school educators utilize both quantitative and qualitative student data to create student academic programming. While it is well-established that using D3M in school settings can help isolate student learning needs, there exists a need to better understand the perceptions of the what data educators feel is most paramount to instituting equitable academic programming for all students. In addition, student feedback on academic programming is pivotal to maximize student buy-in to academic

plans, properly address student learning needs, and acknowledge individual student interests. Consequently, this chapter broaches the topic of utilizing both quantitative and qualitative student data in order to institute equitable academic programming for all students.

This study argues that educator perceptions must be considered in order to offer students equitable learning opportunities that provide students access to both the skills and educational opportunities necessary to lead a fulfilling life. This study is predicated on a phenomenological qualitative research design in which public secondary school teachers, principals, and school counselors are interviewed to share perceptions on data sources they perceive as the most important when constructing equitable academic programming for public secondary students. Adams' Equity Theory is used to anchor this study, and provide a context through which conclusions can be drawn. Furthermore, this study examines the educator's role in utilizing Adams' Equity Theory to weigh the input of both quantitative and qualitative student data against the output of establishing equitable academic programming for all students. By using Adams' Equity Theory to ground this study, the author's intent is to gather thorough interview responses to establish conclusions based on participant responses. This study's conclusions are meant to offer valuable, highly generalizable information to public secondary educators seeking to institute equitable academic programming for all students.

Chapter 2

Literature Review

This literature review centers on an examining the ways in which educators can neutralize social inequities affecting public high school students by utilizing student data, structured academic planning tools, and theoretical frameworks to institute equitable academic programming designed to meet the needs of all students. In addition, this review will further explore the relationship between the inputs and outputs educators must balance when creating equitable academic plans for students. Given the abundance of academic data at the fingertips of public school educators, it is important to discern which data needs to be given primary consideration in order to ensure students have the tools necessary to reach their full academic potential. Finally, this literature review will explore methods by which educators can utilize both quantitative and qualitative student data to create equitable student programming. While many prescribed programs and methods of utilizing quantitative student data to dictate academic programming exist, they are prone to utilizing antiquated data sets, often require training to use effectively, and can easily overwhelm educators based on the sheer volume of available data. Conversely, when educators use a comprehensive set of data – including both quantitative and qualitative data sets – to produce academic plans, educators become empowered to institute equitable academic programming for students that both mitigates academic inequities, and maximizes individual student potential.

This review will first explore the need for equity to be at the forefront when considering academic planning for public secondary students, as well as how legislation has created an environment conducive to integrating academic equity into schools. By demonstrating the need for equitable academic opportunities to be offered to all students, and by exploring the ways in

which legislation has changed the landscape of equity within education, the author sets the stage for exploring ways in which educators can take steps to mitigate academic inequities and achievement gaps. Ways in which data can be used to mitigate academic programming inequities will be explored through dissecting both established approaches, and exploring more comprehensive, organic means by which data can be used to place students in academically equitable educational programming. Finally, this review will feature an exploration into the ways in which Adams' Equity Theory can be applied to produce and facilitate equitable academic programming. As educators seek to offer students equitable academic opportunities, they must decide where the balance exists between the input of educator perceptions, student achievement data, and student feedback, against the output of a tangible, equitable academic plan that sees students gain access to the academic opportunities necessary to find success respective to individualized aptitudes and personal interests.

This literature review will feature peer-reviewed literature, as well as articles, books, and tertiary sources like electronically produced government information, all of which directly relate to the topics at hand. Access to these resources will be gathered will support from Minnesota State University – Moorhead's subscriptions to academic publication sources, as well as through public access to journal articles, books, and official websites. Every attempt has been made to ensure consideration of a timely body of research, however, many landmark studies, publications, and legislation supporting the theoretical framework of this study must be considered throughout the course of this literature review.

Review

Public education constitutes a unique flavor of public service. Every day, parents entrust educators with the responsibility of ensuring the safety of their children, as well as with offering

each child the opportunities and resources necessary to meet the individualized learning needs. These responsibilities offer the opportunity for educators to serve as a foundation upon which society can be built and maintained. However, care must be taken to ensure student learning needs are both identified, and addressed, on an individual level. Given the broad range of student aptitudes and academic abilities, educators must take care to ensure each student is grated access to the tools necessary to satisfy demonstrated academic needs. Consequently, and in order to meet the educational needs of all children, educators must differentiate their instructional approaches, and find unique ways in which to equitably offer students experiences and learning opportunities necessary to be successful both in school, and in life after school – a value many democratic societies in the world regard as a basic right (Perry, 2007). However, achieving equitable academic opportunities for students can prove elusive. As such, educators must recognize, and properly utilize, resources that will result in equitable academic programming for public school students.

In the centuries since its inception, public education has experienced many changes and adaptations in order to ensure both resources and academic programming are equitably distributed. Some of the most drastic measures taken to ensure equity in academic programming hinge on landmark court cases and legislation designed to govern the ways in which schools both acknowledge, and eradicate systemic inequities. The purpose behind these cases and legislation was both to ensure academic equity for all students, and to remove differing interpretations among educators as to what equitable academic opportunities should look like. McLaughlin (2010) postulates, "…educators' earliest interpretations of academic equity had three foci; (a) providing a free education up to the point chat a child entered the workforce; (b) providing a common curriculum for all children regardless of background; and (c) providing that children of

diverse backgrounds attend the same school within a specific locality (p.266). Of note is that

many of the most influential measures taken to ensure equity in public schools occurred in the

last half of the 20th Century, and helped educators more universally recognize, and clarify,

educator assumptions on what public education students deserve within the context of equitable

academic opportunities (Cizek, 1999). The following landmark court cases are among those most

responsible for ensuring equitable learning opportunities for all public education students

(Education Policy: A Timeline, 2018):

- 1954 – Brown v. Board of Education: Found the racial segregation of public education
  students to be unconstitutional.

- 1964 – Title VI of the Civil Rights Act: prohibited discrimination in schools based on
  race, color, or national origin.

- 1965 – Title I of ESEA created a funding source to assist local schools educating
  socioeconomically disadvantaged children

Each of these cases worked to create a more physically, racially, and gender inclusive public

school environment. Nevertheless, while school environments became more inclusive, equitable

access to academic programming lagged behind environmental equity advancements.

Designed to remedy inequitable access to academic opportunities, the Free and

Appropriate Public Education (FAPE), guaranteed by the Rehabilitation Act of 1973, featured

legislation designed to ensure equitable academic programming, and treatment of all students

attending the federally funded public school system (Free Appropriate Public Education under

Section 504, 2010). Furthermore, FAPE dictated all educational programming within public

schools be designed to meet the individualized needs of every student, regardless of ability or

academic aptitude. Without legislation like FAPE protecting students with disabilities or unique

needs, educators cannot feasibly account for the rapidly growing array of student needs that hold

implications on the institution of equitable academic programming students need to be successful

each day (Robinson, 2018). Furthermore, students living in conditions negatively affected by

social inequities are often relegated to academic programming featuring fewer options, which

often tracks them towards academic and professional areas in which they may have little interest

(Ayalon, Grodsky, Gamoran, & Yogev, 2008).

Ensuring students have equitable access to academic programming is not a new concept

within the arena of public education; attempts at mitigating interpretive understandings of what

academic equity looks like have been addressed throughout the centuries-long tenure of public

education (McLaughlin, 2010). In order to mitigate this dynamic, individualized student

programming must offer students structured, equitable access to the individualized supports

necessary to support goal-oriented, student-centered school programming (Snow, 2008). The

FAPE legislation is recognized as an important step forward in instituting equitable learning

opportunities into the public education system, as it laid the groundwork for all students to

engage in an individualized educational experience designed to help maximize their respective

academic potential. However, and though FAPE dictates every student have access to an

educational plan designed to meet his, or her, respective needs as a student, the legislation stops

short of defining specific ways in which educators must determine individualized student needs,

and act upon those needs to deliver the supports and opportunities each child needs to be

successful in school (Huefner, 2008). For example, a public high school student may be placed

into curricular offerings that satisfactorily meet graduation requirements, but the suitability of the

plan when compared to the student's academic aptitude, and personal interests, may be

completely inadequate for that particular student. Furthermore, while much legislation has

worked to institute more equitable academic opportunities for public school students, legal mandates can overlap contradict one another, confusing educators and forcing the kinds of interpretive student servicing these very laws seek to clarify.

While much legislation has been passed to ensure all public school students have the right to equitable learning environments and academic opportunities, these mandates can at times prove contradictory. For example, the 2001 No Child Left Behind (NCLB) legislation dictated that every that every student, regardless of ability, or disability, demonstrate proficiency in math and reading in order for schools to meet federal Annual Yearly Progress requirements (Heise, 2017; Huefner, 2008). Though provisions of the Tenth Amendment to the United States Constitution bequeathed matters of public education to the states (Cizek, 1999), The NCLB legislation communicated the urgency of closing public education achievement gaps, and represented a rare intrusion by the federal government into the realm of public education. Furthermore, and while instituted with the intent of narrowing pervasive achievement gaps centered on student gender, race, and socio-economic status, NCLB worked against many students insofar as it set unrealistic achievement goals based on *equality*, rather than *equity* (Robinson, 2018). When student achievement goals are not met, the consequences are often punitive in nature and may threaten to reduce school revenues or displace school leadership (Au, 2013). The irony of this dynamic serves as a cautionary tale – while the legislative intent of NCLB was to increase equitable learning opportunities for marginalized students through holding educators accountable for student proficiency achievement, NCLB marginalized many student groups who, for a variety of reasons, simply could not meet proficiency standards. Thus, NCLB worked against many of the previous legal measures designed to make schools environments places where students can experience equitable academic expectations, and

opportunities tailored to their specific needs and abilities.

Conversely, the Every Student Succeeds Act (ESSA), passed in 2015, changed many of the equality-based measures instituted by the NCLB legislation. Of primary consideration is that ESSA repealed the federal accountability measures that mandated all public school students meet proficiency standards in both math and reading (Sampson & Horsford, 2017). Instead, ESSA legislation turned the power to regulate proficiency requirements over to each respective state, thus, signaling a shift away from equality-based student achievement proficiency expectations for all students, and restoring the ability for states to more equitable decide how students are held accountable to state academic proficiency standards (Heise, 2017). However, like many legislative measures that came before ESSA, the legislation stops short of guaranteeing equitable academic opportunities for all students. Many education advocates and community members remain concerned with the inequitable distribution of quality educators, and existing funding disparities between schools (Saultz, White, Mceachin, Fusarelli & Bonnie C. Fusarelli, 2017). Furthermore, Robinson (2018) postulates ESSA does not go far enough to ensure "fair funding, equitable distribution of effective teachers, high quality preK-12 opportunities to learn, and economic and racial integration" (p. 924). Sampson and Horsford argue that educators must employ a wide range of stakeholders – including community members – to ensure equity remains a key consideration while equitably servicing students under ESSA.

Despite states having greater control over what constitutes equitable distribution of resources, and although more autonomy exists at the state level to define and act to remediate academic inequity, the operative definition of academic equity once again has become interpretive under ESSA – a stigma lawmakers have been attempting to remediate for centuries. Underwood, Zapata-Rivera, and VanWinkle (2010) remark:

As we have seen, policymakers have important responsibilities related to school

performance. Student achievement data can be used in many ways to inform the decisions

related to these responsibilities. However, policymakers currently receive achievement

reports that are not designed to inform those decisions; even when they are, they are

difficult and time consuming to read and interpret. When they do use assessment data,

they generally "mine" the results, which is more in line with the symbolic uses of

evidence described earlier in order to justify predetermined decisions (p. 10).

Furthermore, and while legislators have long attempted to set boundaries and guidelines to

ensure public education offers students equitable learning opportunities, educational equity

remains a fluid dynamic, adjusting to the needs of individual student bodies and peripheral

mandates affecting the nature of how educators service students (Robinson, 2018). While some

major problems with the public education system have certainly been quelled by progressive

legislation aimed at maximizing equity within the physical environment of the schoolhouse,

academic programming gaps still exist, and tension between legislative mandates persist.

Legislation will never serve as the end-all solution for ensuring equity in public schools. Though,

when legislative mandates are clearly communicated, they can provide a framework for

educators to accurately interpret equity standards so as to offer students universal services put in

place to ensure each individual reaches his, or her, respective potential. Legislation alone cannot

ensure equity within the public school system.

Consequently, many educators are left to wonder how to adequately offer academic

programming that both isolates student needs, but also considers personal interests and educator

feedback. Thus, ensuring an equitable level of service and attention to *all* students with a focus

on providing equitable learning opportunities. What educators must realize is that in order to

institute consistent measures of control over school-specific educational equity, they must

consistently, and accurately, interpret legislative frameworks designed to prime public education

to institute educational equity, then use the tools at their disposal to both ensure student needs are

identified, and that students are provided educational opportunities that meet those needs. The

greatest tool educators have at their disposal is the bevy of available qualitative and quantitative

student data (Kowalski and Lasley, 2002). By using data to help discern and ultimately provide

service for individual student needs, educators can reliably offer students the types of

individualized, equitable academic opportunities initially intended by the founders of public

education so many centuries ago (Kowalski & Lasley, 2009).

The Case for Data

Using student data to help inform equitable academic programming is not a new concept,

as teachers have been trained in the use of data decision rules since grades and report cards were

first used. In that time, however, the act of utilizing data to inform instructional decisions has

become an expectation within modern-day public education (Schifter, Natarajan, Ketelhut, &

Kirchgessnar, 2014). Not only has using student data to inform academic programming helped

schools comply with accountability measures levied by federal and state legislation, it has

worked to pinpoint student needs and areas for improvement within school programming

(Schmoker, 2000). Furthermore, by using student data to drive academic programming,

educators can make more informed decisions about how to best educate and support students

(Fowler & Brown, 2018). To that end, researchers have shown increasing interest in teacher use

of various data to inform their instructional decisions (Mandinach & Jackson, 2012). While

educators are generally knowledgeable about monitoring student academic performance, they

have become more strategic with the ways in which they use student data to inform decisions

around equitable academic programming (Kowalski and Lasley, 2002; Layne, Oakes, Menzies, Oyer, and Jenkins, 2013). Nonetheless, and while educators have become increasingly savvy with using student data to drive instruction and the ways in which they program for students, the effort must be universally recognized, and comprehensively shared by all educators with which students interact (Wayman, Midgley, & Stringfield, 2006).

Using data to inform student programming decisions can have a markedly positive impact on the ways in which educators work together to best serve student populations. Massell (2001) postulates that increased communication between educators using data to target growth opportunities for marginalized populations of students positively impacts both the institution, and the student experience. Similarly, Armstrong and Anthes (2001) found that by utilizing student achievement data to better identify student needs, teachers often were able to more accurately pinpoint student programming needs, and maintain high expectations for students demonstrated to be "at risk." Utilizing student data when outlining academic programming has also been shown to strengthen student stakeholder groups, as increases in the frequency of positive conversations colleagues, parents, and students have with educators about academic programming have been observed (Wayman & Stringfield, 2006).

As a result of utilizing student data to create equitable academic plans for students, educators have been able to reliably identify student academic needs, and focus their time and energy commensurate with where students demonstrate said need. While valuable in practice, the trend of using structured systems designed to focus the nature in which student data is used to inform academic programming remains relatively new; scant literature is available to inform how educators use data to inform instruction and programming as recently as the mid-2000s (Mandinach, Rivas, Light, Heinze & Honey, 2006). However, consensus remains that protocols

around data use must be closely aligned between district settings in order to ensure educators can use student data to positively impact academic programming for all students. In other words, a systemic vision must exist in order for educators to effectively utilize student data to institute equitable academic programming (Datnow, et al., 2007).

Data-Driven Decision-Making

The practice of relying upon student data to drive instructional, and academic programming decisions is no longer a choice for educators; rather, it is a necessity (Earl & Katz, 2002). Educators must resolve themselves to instituting a structured method by which a comprehensive suite of student data is used to drive academic programming. Utilizing quantitative student achievement data, as well as qualitative data such as student feedback and educator observations, offers educators a wide range of data points from which to choose when creating equitable academic programming designed to meet the individualized needs of all students (Viera & Freer, 2015). In order to ensure students have access to equitable academic programming, schools must feature strong and deliberate data structures, as well as give particular attention to both students' academic, and social, learning needs in order to facilitate higher academic performance (Rutledge, Cohen-Vogel, Osborne-Lampkin, and Roberts, 2015, p.1062). Slater and Horstman (2002) echo this argument by stating that there exists a need to institute consistent measures of equitable academic programming for all students – including ensuring all students have access to high quality grade-level instruction (Oakley, 2018).

Tying all the actions educators can take to help ensure students receive the specific supports necessary to find academic success is the concept of adopting a consistent system by which educators can reliable deliver students equitable academic programming is through employing data-driven decision-making (D3M). D3M represents the type of philosophy

necessary to meet the broad range of student learning needs.

> "Data-driven decision-making (D3M) is a philosophy by which educators can
> closely match student academic needs with the most appropriate, equitable course
> offering available. D3M is the systematic collection, analysis, and application of
> many forms of data from myriad sources in order to enhance student performance
> while addressing student learning needs (Marsh, Pane, & Hamilton, 2006)."

Consequently, it makes good sense for educators to commit to following D3M in order to ensure an intentional, prescribed approach to facilitating equitable academic programming for all students. Rutledge, Cohen-Vogel, Osborne-Lampkin, and Roberts (2015) posit schools featuring strong and deliberate structures, programming, and attention to both students' academic and social learning needs, result in students exhibiting higher academic performance. Furthermore, using D3M models to ensure equitable academic opportunities for all students empowers educators to maintain a tight focus on data points that clearly identify both student strengths, and opportunities for growth (Lane, Oakes, Menzies, Oyer, & Jenkins, 2013).

Ultimately, D3M offers educators a reliable structure by which they can both equitably measure student academic needs against standardized proficiency standards, and adequately reconcile appropriately rigorous student coursework with individual student interests and skills. Worth noting, is that many specific approaches to using student data under the D3M umbrella feature the exclusive use of quantitative student achievement data. This data is typically used very intentionally to isolate student strengths and areas for growth, as well as to create individualized academic programming designed to equitably serve the needs of each student (Dunn, Airola, Lo, and Garrison, 2013). Thomas and Dykes (2011) argue educators must use a planned, coordinated effort when selecting the types of student data around which to design

individualized, equitable academic programming. By instituting structured, student-centered

D3M programming, educators hold the opportunity to equitably address the academic needs of

all students. However, such a structure must be very prescribed, replicable within school

districts, and data-centric to work as intended.

Response to Intervention (RTI) is the most prevalent D3M model used by educators to

drive academic programming, and has been implemented in several states as part of a

coordinated effort aimed at providing proactive educational practices that are responsive to

individual student needs (Sansosti, Noltemeyer, and Goss, 2010; Schifter, Natarajan, Ketelhut, &

Kirchgessnar, 2014). The use of data to make decisions is both central and basic in the response

to intervention (RTI) approach" (Jimerson, Burns, and VanDerHyden, 2016, p.9). Situations

where student education experiences are poorly matched with demonstrated abilities and

interests can be avoided when educators use student achievement data, and more specifically, the

right student achievement data, to offer students high quality, equitable academic experiences

(Kowalski & Lasley, 2009). Disparities in student programming most often occur between high

achieving students – students who meet or exceed state academic competency requirements –

and low achieving students – students who either partially meet, or do not meet state academic

competency requirements. Thus, a need to institute consistent measures to institute equitable

academic programming for all students is confirmed (Slater & Horstman, 2002). Thomas and

Dykes (2011) further support the latitude educators have to use data for the purpose of

pinpointing student needs by arguing, "RTI is a multi-tiered, proactive approach to educational

intervention that provides services at increasing levels of intensity to match the services a student

receives with his or her level of need" (p.2). In addition, and in keeping with the data-driven

nature of the RTI model, the multi-tiered levels of support referenced by Thomas and Dykes

illustrate the added freedom educators are able to offer students when utilizing a structured, data-driven program to institute equitable academic programming opportunities for students. The tiered logic of RTI provides an efficient and effective way to provide universal assessment screening, leading to an efficient and effective method of assessing growth, progress, and need (Cheney, Flower, & Templeton 2008).

Furthermore, RTI generally maintains a very tight focus on quantitative data points. Though arguably myopic, as qualitative data is often discounted, quantitative data empower educators to quickly identify student learning opportunities, and design interventions aimed at facilitating academic growth (Lane, Oakes, Menzies, Oyer, & Jenkins, 2013). One of the paramount benefits of RTI is that the structure is designed to intervene with student struggles early on in order to help all students learn (Allington, 2009; Cummings, Atkins, Allison, & Cole, 2008; Fairbanks, Sugai, Guardino, & Lathrop, 2007). Consequently, RTI represents a framework developed as a potential remedy to the academic inequities driving poor student achievement, as well as achievement gaps between groups of students (Swindlehurst, Shepherd, Salembier, and Hurley, 2015). In addition, RTI was designed to empower schools to facilitate early detection, prevention, and support measures for students who were struggling in school, avoiding unnecessary referrals to special education and closing achievement gaps (Gersten et al., 2009).

However, RTI is at its most useful when utilized on an individualized basis. Jimerson, Burns, and VanDerHeyden (2016) encourage educators to utilize individualized student data to drive academic programming decisions, rather than composite data of students demonstrating like abilities, or difficulties. This makes good sense, as in order to commit to a truly equitable academic programming plan, educators must look at student data on a case-by-case basis, rather than as a composite. In sum, utilizing an RTI framework while relying on D3M ensures students

the opportunity to engage in equitable, academically appropriate programming, while also

promoting collaboration and driving higher achievement among students with highly

differentiated needs (Ham, Chard, & Kame'enui, 2011).

Conversely, and as effective as D3M and RTI structures can be at establishing equitable

academic programming for public school students, confusion surrounding both the

implementation, and maintenance of such structures persist. Thus, demonstrating the need for the

deliberate structures, programming, and attention to both student academic, and social learning

(Rutledge, et al., 2015). Further, while it remains a necessity to institute consistent measures by

which comprehensive, systems-based academic programming for all students is ensured,

Jimerson, Burns, and VanDerHeyden (2016) argue that the process is not without its challenges:

> The very nature of RTI involves a host of significant decisions, including identifying
> students who are at risk of continuing academic difficulty and who will benefit from
> intervention, the types of interventions that will best serve students, whether students are
> benefitting from intervention, whether students should be moved to a more intensified
> level of intervention, and so on. (p.15)

The concerns raised by the authors are on point, as educators seeking to utilize RTI to

integrate students into equitable academic programming need to understand how to

determine whether or not a student needs a specific academic intervention, or a more

intensive adjustment, in order to more equitably satisfy their educational needs.

Determining specific academic programming needs for each student is an arduous task,

and one that cannot be done using student achievement data alone. Educators must both

use all types of student data at their disposal, and team with all stakeholders in order to

ensure students are placed in a position to maximize their respective potential.

Integrating Qualitative Data

While quantitative data has long been the darling of the D3M movement in education,

qualitative data such as meaningful 1-1 conversations with students, teacher observations, and

student opinions regarding their own education must also be considered in order to establish

individualized, appropriate, and equitable education programming for each child (Thayer, Cook,

Fiat, Bartlett-Chase, & Kember, 2018). In addition, Gentry, Rizza, and Owen (2002) argue that

teacher self-reports and observational records, as well as student-teacher perception comparisons

also serve as valuable data points necessary to consider when seeking to institute comprehensive,

equitable academic programming for all students. Fowler and Brown (2010) argue:

> Quality decisions that will have lasting impact on student success will include
> policy, programming, and pedagogical changes based on data to achieve
> perceived and actual equity on both parties. Otherwise, "interventions to eliminate
> achievement gaps cannot fully succeed as long as social stratification caused by
> gender and racial discrimination is not addressed" (Bécares & Priest, 2015, as
> cited in Fowler and Brown, 2010). (p. 13)

Without a proper check and balance of both hard, quantitative data points, and context-

rich qualitative data, the social inequities affecting many students within a given student body

will likely begin to manifest as achievement gaps between groups of students. As a consequence,

and in this scenario, school-based academic programming will find itself at risk of drifting closer

to the equality approach experienced during the days of NCLB, rather than equity-centered

programming that can deliver each student the tools necessary to experience success in school. In

order to maintain a paradigm in which academic programming remains centered on equity,

Hootstein (1994, as referenced in Gentry and Springer, 2002) suggests focusing programming on

student needs, interests, and experiences, while at the same time encouraging exploration in

learning opportunities germane to individual student interests. Using qualitative student

information as a complement to quantitative student achievement data offers educators the types

of data necessary to ensure students are granted access to the types of academic opportunities

that match both their aptitudes, and personal interests.

Eagle, Dowd-Eagle, Snyder, and Holtzman (2015) argue the need for educators to

acknowledge both academic data and teacher interviews in order to understand the individual

supports each child needs to experience academic success. Similarly, Evans, Thornton, and

Usinger (2012) support the importance of using both quantitative and qualitative student data in

order to produce positive learning outcomes for the student. Thomas and Dykes (2011) argue

that in addition to considering quantitative student achievement data, educators should also:

> …Channel and build upon student interests, skills and interest assessments, both formal
> and informal, should assess interests and preferences across time, include a variety of
> individuals in the assessment process, and interpret assessment of preferences and
> interests as embedded in the history and culture that is unique to each student" (p.3).

Rather than resolving oneself to a particular data point, combining quantitative and qualitative

data types when instituting equitable academic programming for students offers educators a

comprehensive, integrated, model of tiered prevention vessel by which educators can respond to

the academic, behavioral, and social development of students (Lane et al., 2012).

Furthermore, educators must intentionally seek out students as partners when

endeavoring to utilize qualitative data points, as they often manifest as interactive events

between educators and students. In a two-year longitudinal study that profiled high school

tracking decisions, Oakes and Guiton (1995) found that:

> In keeping with a human capital perspective, each school had elaborate procedures for
> ascertaining students' past achievement, teachers' judgments of their abilities and
> motivation, and students' preferences. These procedures were designed to ensure that
> placements were merit based and that students had some choice. It's not surprising, then,
> that faculties saw the opportunity structure as open, fair, and merit based. Teachers,
> counselors, and administrators tended to justify existing differences in student placement
> as resulting from a fair competition for the available slots in the college-prep track and
> from self-select. (p.28)

While analyzing quantitative data is certainly critical to understanding student learning needs,

and must be part of the planning process when creating student academic plans, the most

important component missing from quantitative programming models such as the RTI is the inclusion of qualitative data – in particular, student and feedback respective to the most appropriate, intellectually stimulating academic experience for each student. While RTI is predicated on utilizing quantitative data sets, it is important to note these data sets constitute historical data the minute the data is produced; quantitative student achievement data is highly prone to change, as students may experience great growth, or regression, in a very short amount of time.

Another noted concern with omitting qualitative data from student programming equations is the timeliness and accessibility of data sets. Using data to drive school improvement is no longer a choice. Primary reasons preventing the educators from reliably utilizing data to drive equitable academic programming, and subsequent school improvement, include the timeliness in availability of data, the accessibility of data, and educator understanding of how to use the data to improve instruction and academic programming (Earl and Katz, 2002). Of these considerations, many factors preventing educators from reliably utilizing data to drive equitable academic programming remain outside of educator control. For example, the results of state- and national-level assessments typically become available only after the relevant students have moved on to the next grade or school—making the data less than useful for the classroom teacher, as cohorts of students are not being monitored for growth. In addition, differing student management systems within school districts and buildings mean educators have access to very different student data sets. While concerns persist, focus must remain on remediating these frustrations and focusing on that which is within the control of the educator.

By following a model in which only quantitative student achievement data is used to dictate programming, educators are left to create academic programming strictly from

established data sets, which, given the timeline, may be out-of-date or inadequate based on changing student needs. Furthermore, academic programming models that utilize only quantitative data removes the student from the programming discussion, thus, jeopardizing student buy-in and follow-through with any such plan – a critical component to ensuring students practice fidelity in following academic plans. Gentry and Springer (2002) argue the need for educators to consider student feedback and perceptions when creating student education plans, as the involvement in the student as a stakeholder of his, or her, education is paramount to the student following through on such a plan. Additionally, the authors argue that students enjoy educational experiences when they are acknowledged as a key component in academic programming decisions that hold a direct impact on their own lives. Dewey (1903) agued for students to advocate for individualized learning opportunities when he stated the "Lack of the free and equitable intercourse which springs from a variety of shared interests makes intellectual stimulation unbalanced" (p.89). Dewey's postulation demonstrates that including students in the academic programming planning process is a timeless practice, as educators and researchers, alike, have discussed the idea for decades.

    In many cases, and as research demonstrates, students feel the need to be acknowledged in decisions concerning their own academic experience in order to buy-in, and engage in programming decisions. Educators will often need to solicit the types of qualitative data necessary to inform academic programming decisions; in order to clarify wishes, desires, and goals, students must possess self-determination skills exhibited in such activities as choice making, problem solving, goal setting, risk taking, self-advocacy, and self-awareness (Steere & Cavaiuolo, 2002). Consequently, it is clear a balance must be struck between using both quantitative and qualitative data in order to ensure students maintain access to appropriate, and

equitable, academic programming.

Students necessarily need to be a partner in academic programming decisions, as they provide valuable input and offer perspective for educators seeking to do what is in the best interest of student learning. Jimerson, Burns, and VanDerHeyden (2016) reference a point made by Behn (2009) when he states,

> …By using the familiar example of a glass of water filled to its midlevel, the optimist describes the glass as half full, while the pessimist claims it is half empty. Both are using the same data point, but each interprets it differently. When we collect data on student performance, the situation is precisely the same. Student scores are meaningless until we apply our perspective to those scores. (p.14)

Similarly, without utilizing a system by which data can be reliably referenced, balancing a quantitative and qualitative data approach when establishing student academic programming, and involving students in the academic planning process, educators will never be able to consistently offer the type of equitable academic programming students need to be successful – both during high school, and after. In sum, employing a comprehensive D3M approach to establishing academic programming can ensure students are reliably offered appropriate learning opportunities. Comprehensive, integrated, models of tiered programming support offer educators a vessel by which they can equitably respond to the academic, behavioral, and social development needs of all students (Lane et al., 2012). Given the demonstrated decades of evidence over which researchers have demonstrated student involvement in establishing individualized learning opportunities, and the breadth of evidence-based support, it is plain to see research generally supports the notion that students must be involved in mapping out their own educational programming.

However, while integrating qualitative data into a very quantitative-rich RTI student programming model may sound simple in principle, is in fact difficult in practice. While RTI is

an effective D3M system by which educators can establish equitable academic programming for

students, the model requires a great deal of time, progress-monitoring, and specific training in

order for educators to effectively, and consistently, use the information to ensure equitable

learning opportunities for students (Schifter, Natarajan, Ketelhut, & Kirchgessnar, 2014).

Underwood, Zapata, and VanWinkle (2010) argue that data access is becoming more and more

time-consuming for student programming stakeholders – professionals who want to simply get

relevant reports with the push of a button. In a random sample survey to public secondary school

building leaders, Sansosti, Noltemeyer, and Goss (2010) found:

> … scheduling and structural factors are major obstacles to the application of RTI within
> secondary settings. For example, results of this investigation indicated that participants
> perceived "time for teachers to attend problem-solving meetings," "time for teachers to
> conduct interventions," and "block scheduling" as very important to the implementation
> of RTI, but unavailable. (p.289)

Similarly, Evans, Thornton, and Usinger (2012) argue that in order for educators to effectively

use data tools, or follow a D3M model, they must understand how to both access and interpret

student data – tasks that require staff training and continued professional development.

Furthermore, the authors posit school districts may take different approaches to establishing

D3M data systems, yet, data management concerns remain the same:

> Some are selecting and purchasing data management systems, and some are building
> "homegrown" solutions and data systems. They often lack staff members who are
> knowledgeable in these areas (including software engineering, interface design, report
> design, and statistics), so there is a lot of recreating the wheel, as well as training to get
> people up to speed, for district stakeholders as well as principals and teachers.
> (Underwood, Zapata-Rivera, and VanWinkle, 2010, p.6)

Consequently, it is often expected that building leaders will share the data with teachers,

students, and parents. However, many barriers remain between generating, and delivering

student data reports to be used in the interest of equitable academic programming for students.

Aside from the oft-present knowledge gap in educators' abilities to utilize available data

sets, Jenkins, Zumeta, Dupree, and Johnson (2005) posits, "one seemingly simple question is how frequently student performance must be measured to provide a sufficiently reliable and valid database for testing individual intervention effects" (p.12). Stringfield, Reynolds, and Schaffer (2001) noted that many schools have found the use of data for school improvement to entail a great deal of labor and are often stored in ways that impede flexible analyses; the lack of accessibility and system reliability places undue pressure and burden on those charged with interpreting, and making academic programming decisions around, student data. Furthermore, Jenkins, Graff, and Miglioretti (2009) argue the consideration of the intervals between assessing student programming needs includes both practical and technical considerations. Since the system is to be logistically feasible, keeping the number of measurements to the minimum necessary to provide reliable and valid data is practically important. Viera and Freer (2015) concur, stating "This systematic approach could require several weeks to months to implement, as well as to evaluate the impact of each progressive step and intervention strategy."

Similarly, Sansosti, Telzrow, and Noltemeyer (2010) add to the rhetoric centering on concerns with RTI implementation processes when they postulate that limited interventions and a lack of both evidence-, and data-based, systems are significant barriers to the RTI implementation process. However, the alternatives to designating a data specialist within a school or district, and dedicating the time and resources to professional development include, primarily, a very analog system of reviewing student data in which educators inspect "…every data element individually for each student, but for schools with hundreds or thousands of students, understanding and interpreting trends becomes impossible" (Bowers, 2010, p.2). Jimerson, Burns, and VanDerHyden (2016) remark on the hazards of generalizing student data in larger groups, rather than observing student needs on an independent level, which allows

students to engage in academic programming suited to their needs:

> With the widespread emphasis on selecting evidence-based interventions in RTI, it is sometimes easy to forget that the evidence of effectiveness rests on outcomes for groups rather than individuals. Beyond that, in virtually all experimental comparisons, there is overlap between the distributions for treatment and comparison groups. In a practical sense, this means that some students receiving the more effective, evidence-based intervention actually had the same, or poorer, outcomes as students in the less effective intervention. What this means for implementing RTI interventions is that, depending on the effectiveness of the existing program, one can have confidence that the evidence-based intervention is likely to boost the progress, in general, for a group of students, but it cannot be said that will Data-Based Decision-Making be the case for every student in the group. One needs to be mindful, then, that as an evidence-based intervention is implemented that one cannot predict for whom the intervention will work, and for whom it will not. Assuming that the purpose of RTI. (p.10)

The plethora of available student data points in the modern era of education can become overwhelming to educators looking to institute equitable academic programming for students. Schools are inundated with data points, test scores, teacher assigned grades, formative and summative assessments, attendance, and disciplinary records make up only the most obvious data sources available to educators (Bernhardt, 2004; Creighton, 2001). Bowers (2010) argues:

> At no other time have educators, parents, students and policymakers had so much assessment information with which to make sense of educational reform; at the same time, these groups also receive little guidance regarding what the information means, its quality or what to do with it. Measurement specialists should not be surprised, if, in the face of assessment overload, educators rely increasingly on intuition or arbitrarily pick and choose from discrepant assessment results when they make important educational decisions.

Consequently, educators are faced with a massive challenge when attempting to offer all students equitable academic programming based on their unique aptitudes and interests. The aforementioned challenges underscore the importance of schools adopting strong, deliberate structures and programming designed to best address student academic and social learning needs for the purpose of empowering students to reach their respective potentials (Rutledge, Cohen-Vogel, Osborne-Lampkin, and Roberts, 2015). Schifter, Natarajan, Ketelhut, & Kirchgessnar

(2014) acknowledge the gnarled relationship between legislative measures, and D3M, designed

to ensure academic equity for all public school students in stating:

> Teachers bring with them a wealth of knowledge of their students through observation data, teacher-made test data, project outcomes, and other products of learning to inform their practice. The task, then, becomes fitting the pieces of the puzzle together to understand how to inform practice going forward (Schifter, Natarajan, Ketelhut, & Kirchgessnar, 2014). (p.428)

This puzzle is one of many pieces, and boasts an image that is equal parts interpretive and

concrete. Definition and context is needed to help make sense of the relationship between

existing student data points, and the perceptions of educators respective to the value of

each data point when programming for students on an individualized basis.

In addition to a thorough review of the legislative policies governing academic

equity, and the ways in which educators can utilize D3M models to institute equitable

academic programs, it is important to establish an understanding of how educators decide

upon which data to utilize when creating academic programming, and which they decide

to omit from the process. While this dynamic drives at the core purpose of this study, the

dynamic must also be observed through the lens of a theoretical framework in order to

maintain its conceptual structure. Educators may choose to Stacey Adams' Equity Theory

to illustrate the delicate balance that must be achieved between utilizing data to properly

assess student programming needs, and producing equitable academic programming for

all students. This relationship hinges largely on an input/output dynamic by which

educators must decide how much data – whether quantitative or qualitative – goes into

academic programming for each student, and what data is omitted.

Equity Theory

Despite legislative efforts to remediate academic inequities, and structured D3M

protocols available to educators, achievement and opportunity gaps between students persist (Swindlehurst, Shepherd, Salembier, and Hurley, 2015). As research has demonstrated, much corrective action around instituting equitable academic opportunities for all students centers on balance – balance between interpretations of legislative mandates, balance between data used to drive academic programming, and balance between the data inputs, versus the programming outputs educators must use to equitably program for all students. John Stacy Adams' Equity Theory (1962) represents a framework by which educators can more precisely define what the balance between the student data necessary to design equitable academic planning, and the tangible product of an equitable academic plan for each public school student.

"Equity, balance, or reciprocity exists when outcome-input ratios for the individual and the reference source are equal, and the motivating force of equity can arise when there is a departure either way from the steady state" (Adams, 1963 as cited in Miner, 2015, p.136). By utilizing equity theory as a type of check-and-balance system for ensuring educators use a reasonable amount of student data to constitute an adequate input, they stand a much better chance at limiting, or completely mitigating, cognitive dissonance around task outcomes (Adams, 1963). Applied to the field of education, this outcome is represented as equitable academic opportunities available to all students.

In addition to observing the ways in which workers balance task inputs with outcomes, Equity Theory addresses the implications of disproportionality between inputs and outcomes. Disproportionality can manifest as workers maximizing input efforts for relatively minor outcomes, but also as overcompensation for only a modest input. In a foundational series of case studies, Adams and Rosenbaum (1962) tested both dynamics on study participants. The

researchers probed into the effect of worker perception on the input/outcome dynamic.

Participants were paid $3.50 per hour and split into two control groups – a control group made to

believe their job efforts were completely reasonable given the wage, while the experimental

group was made to feel as though their experience and capabilities were inadequate for the job.

As theorized, feelings of guilt manifested in the control group, while the control group realized a

balance between input and outcome. This experiment demonstrates the importance of

maintaining an equitable balance between worker input and output; corrective action must be

taken in order to reconstitute the balance and maximize worker attitudes and sense of worth.

Furthermore, Adams and Rosembaum's findings have been generally supported in the research

community – especially in the infancy of the theory, when challenges were greatest. Four

studies, in particular worked to validate the researchers' findings, as the four studies

"…Conducted by Adams and Rosenbaum, 1962; Arrowood, 1961; Goodman and Friedman,

1969; Pritchard et al, 1970) have generally supported this hypothesis" (Goodman and Friedman,

1971, p.271). Of note, however, is that primary criticisms of studies supporting Equity Theory

are concerns centering the devaluing of worker self-worth, rather than maintaining a consistent

focus on disparities between the specific tasks at hand. Furthermore, studies misaligned with

Adams and Rosenbaum generally found results demonstrating little difference between

productivity. Goodman and Friedman (1971) detail these results in stating

> Kalt (1969) provided nominal support for the hypothesis, but the induction in this study
> was not particularly effective. Studies by Valenzi and Andrews (1969), Evan and
> Simmons (1969), and Anderson and Shelly (1970) indicated no differences in
> productivity between over and equitably paid groups. Three studies (Friedman and
> Goodman, 1967; Lawler, 1968b; Wiener, 1970) have obtained findings which support
> and some which reject the hypothesis.

However, arguments against Equity Theory are not without their own criticisms. Many studies

arguing against the dynamics driving Equity Theory struggled to replicate the conditions by

which Equity Theory was created (Goodman and Friedman, 1971). For example, many studies struggled to convince workers they were overpaid, thus, failing to create conditions by which workers may feel a disparity in input versus outcome – a key component that drives at the very nature of the Theory. Thus, some studies reporting results counter to the established underpinnings of Equity Theory have demonstrated unreliability in their replication, thus, driving questionable validity in their findings. Consequently, and despite some empirical challenges, Equity Theory is represented as a generally reliable model around which to base research.

Applied to the equitable academic programming dynamic, educators must ensure that both the amount, and quality, of data inputs are commensurate with the outcome of adequate, equitable academic programming for all students. As noted, this can be achieved through reliably interpreting state and federal legislation aimed at instituting equity into schools, relying upon D3M models to identify valuable points of student achievement and feedback data, and ensuring a balanced input/outcome dynamic governed by Adams' Equity Theory. As a result of viewing academic equity in public education through the lens of Adams' Equity Theory, educators can better recognize a balance must exist between the requisite inputs, and outputs, necessary to offer all students equitable educational programming.

Fowler and Brown (2018) further explore the educational application of Equity Theory in stating:

> Equity theory is one framework that may conceptualize some of the underlying causes of the achievement gap. That is, these issues may not be clearly addressed when educators focus on data indicators that address academic performance solely. Rather, academic performance is the outcome of the student's ability to achieve equity restoration as a result of the perceived injustice of inputs and outcomes. (p.19)

As mentioned, maintaining a balance between the input of both student achievement data

and qualitative data, versus the outcome for the student are paramount considerations when applying Equity Theory to the realm of public education. However, there remains ambiguity respective to the *right* amount of student achievement data, as well as the *proper* data points educators are to use as inputs when creating equitable academic programs. Wayman, Midgley, and Stringfield (2006) reinforce this position by stating:

> Principals and other school leaders have been given a difficult charge: take an abundance of student data, mostly in the form of assessments, and turn this data into information to be used in improving instructional practice. (p.2)

Generally speaking, Wayman et al. have precisely, and succinctly defined the challenge facing public educators seeking to institute universal equity measures into academic programming for students. Fowler and Brown (2018) offer an alternative suggestion for educators to consider when reflecting upon which data inputs to select for a given student by stating:

One could argue that both school leaders and teachers must get innovative and attempt to identify what the data are *not* telling them about their students and identify other issues affecting student achievement, especially in those schools that serve high populations of underserved students who continue to represent a large portion of the achievement gap. (p.22)

This point underscores the importance of utilizing both quantitative data, as well as including student feedback as a key consideration when establishing inputs for individualized academic programming for students. Overall, an equitable balance of quantitative and qualitative data must be considered in order for educators to confidently state they are effectively utilizing the full range of available resources to thoroughly inform equitable academic programming for students.

In sum, Adams' Equity Theory offers guiding principles by which educators have

autonomy to decide which data, and the amount of data, represents an adequate input while generating equitable academic programming for all students. However, both legislative guidelines and structured D3M models, like RTI, help set the table for educators to utilize Adams' Equity Theory to judge appropriate input and outcomes.

Chapter 3

Research Methods

As demonstrated through a thorough review of literature, both quantitative and qualitative student data must be considered in order to maintain an educational environment that offers every student the opportunity to engage in equitable academic programming. While some student data can be harvested from databases, others must be generated through inter-personal conversations and interviews with students, as well as observations of student behavior and ability. Ambiguity exists around the data educators *should* be using to determine how to develop equitable academic programming for each student. This "should," represents a highly subjective term, and is one this study seeks to better define. This study argues a key consideration that is often ignored when deciding upon the data to be used when instituting equitable academic programming is educator perceptions respective to the most important data to reference, as well as how much data should be referenced, in order to develop an adequate and equitable academic program for each student. In order to discern educator perceptions of data to be used when creating equitable academic programming, this study takes a phenomenological approach to a qualitative research design; data will be gathered through facilitating interviews with high school teachers, school counselors, and principals. Each constituency of professional interviewed for this study maintains direct contact with students, and is also empowered to directly impact the academic programming in which each student participates.

Consequently, the perceptions sought from these individuals must be considered in order to offer students equitable learning opportunities that provide students access to both the skills and educational opportunities necessary to lead a fulfilling life. This study is predicated on a phenomenological, qualitative research design, with special consideration given to the

constructivist perspectives of each participant. The data gathered from study participants is expected to be highly subjective, and rooted in personal experience. As each professional has constructed their own interpretations of what students need to maintain an equitable academic experience, participants will be encouraged to share their very independent perceptions, and express the rationale behind their responses. This process will satisfy both the phenomenological nature of the design, as well as address the constructivist nature of the study, as responses will be coded and linked to discern themes, though individual perspectives will be published to add context to responses.

Adams' Equity Theory is used to anchor this study, and provide a context through which conclusions can be drawn. Furthermore, this study examines the educator's role in utilizing Adams' Equity Theory to weigh the input of both quantitative and qualitative student data against the output of establishing equitable academic programming for all students. By using Adams' Equity Theory to ground this study, the author's intent is to gather thorough interview responses to establish conclusions based on participant responses. This study's conclusions are meant to offer valuable, highly generalizable information to public secondary educators seeking to institute equitable academic programming for all students.

Study Design

As noted, this study features a phenomenological, qualitative research design with special consideration given to the constructivist nature of participant responses. While many options for a qualitative research design exist – some of which would partially satisfy the requirements of this study – the chosen design represents the most appropriate approach to gather the data necessary to satisfy the scope of this study. However, it is worth noting specific details around the ways in which other study designs fall short of fulfilling the requirements of this study.

A case study design was not selected for this study due to the fundamental differences in design structure. Similar to other qualitative research designs, case studies entrench researches into very particular situations in which they explore phenomena or within a real-life, contemporary context (Yin, 2014). This study seeks to discern the broader phenomena driving a particular dynamic within a particular context, theoretical framework, and with a pool of like participants. This study design matches poorly with a case study design, in that not one particular event, events specific to a particular constituency, are profiled. Thus, the decision was made to facilitate a study anchored by a phenomenological research design.

A narrative research design does offer some appealing characteristics by which this study could be conducted. For example, both this phenomenological study and narrative studies seek to gain insight into phenomena driving participant decisions, and data can be gathered through researcher-participant interviews. However, instead of drilling into a deep perspective of only one or two individuals, this study seeks to discover a broader range of perspectives from an array of participants working in different environments. In addition, this study aims to focus more on a set of participant perceptions, rather than a deep analysis of the story behind why perceptions exist in a particular participant. While a narrative study design does match some of the goals of this study, it does not very well match the broader scope of the intended research. In particular, this study is intended to describe common experiences of a number of individuals, and gather perceptions and demonstrate the constructivist principles by which educators use to make decisions on academic programming. Consequently, this study requires that many professionals be interviewed in order to achieve highly generalizable results, rather than focusing on the experiences of only one or two individuals, and in relatively specific environments, who (Creswell & Poth, 2018).

Ethnographic studies are predicated on a research design centered on researchers describing and interpreting the shared and learned patterns, values, and beliefs of a particular cultural group (Harris, 1968). This study centers less on studying the particular culture of the ways in which educators utilize data to inform academic programming, and more on the broader, constructivist dynamics behind why, and how educators use student data to drive equitable academic programming. This study features a less immersive design that an ethnographic study, as it seeks to link broader educator perceptions.

Grounded Theory dictates a study moves beyond a phenomenological explanation and establishes a theoretical basis for which a process or action is taken (Creswell & Poth, 2018; (Corbin & Strauss, 2007, p. 107). In order for this study to match well with a grounded theory approach, the purpose would need to be cast into a more specific context. Since grounded theory is predicated on developing theory, it is important that all participants experience the same process within the study. This phenomenological study seeks to gain participant perceptions of individuals necessarily working in different environments. Though participants will all be informing the study through exemplifying how student data is used to drive academic programming, the participants follow different processes, which is a pivotal component of the study, as this study seeks to demonstrate how different procedures and protocols work in concert, or against one another, to produce a particular outcome (Creswell & Poth, 2018). Though, and as Charmaz (2006, 2014, as cited in Creswell & Poth, 2018) demonstrates, grounded theory can accommodate a constructivist lens – a similarity between this study and grounded theory – grounded theory remains rooted in establishing a theory, while this study seeks to find similarities and differences between a common experience shared by study participants.

Research Questions

This study features three primary research questions:

1. What data do educators perceive to hold the most value when creating individualized, equitable academic programming for all students?

2. Why do educators perceive particular student data sources are more valuable than others when creating equitable academic programming?

3. How do educators know when a proper balance has been struck between the input, or amount, of student data utilized to create equitable academic plans, versus the outcome of an educational plan featuring equitable academic opportunities for all students?

Each research question featured in this study constitutes a clear, answerable, and open-ended question. Furthermore, this study's research questions are all designed to facilitate participant responses germane to satisfying the phenomenological, constructivist queries of this study.

Ethical Considerations

Study subjects will never be placed in a situation that poses physical, mental, or emotional harm. Participants may terminate an interview at any time, and may refuse initial, or subsequent interview requests. Before any such interview, subjects will be issued an informed consent document to sign, and return, to the researcher. This document will outline the process of the study, and describe the study protocols to which they are committing. A letter of assent will be created, and available, however, this study is only designed to accommodate adult participants. Participant confidentiality will be maintained through assigning each participant

both a letter, and a number, to distinguish both the professional roles of participant, and specific participants, yet keep participant identities confidential (ex., Principals [P1], Teachers [T1], and School Counselors [SC1]). This study will profile nine professionals – three in each of the aforementioned professional categories; participants will be recruited through non-random emails, professional organization events and contact lists, and direct phone calls to potential participants.

Role of the Researcher and Positionality

The author currently serves as an Assistant Principal at Grand Rapids High School in Grand Rapids, Minnesota. A professional foundation in school counseling, and K-12 building leadership create a structure by which the researcher can accurately interpret educator feedback on academic planning, and maintain a comprehensive perspective of equitable academic programming from a school leadership standpoint. Each role in which the author has served public education has seen close relationships being built, and maintained, with each constituency of professional included in this study. Consequently, by maintaining a thorough understanding of the respective availability (ex., teacher preps, teacher duties, summer vacation), professional responsibilities, and scheduling limitations, the researcher can easily adapt data collection schedules to align with participant availability. All participants will included in this study will be employed by school districts outside of Grand Rapids Public Schools, so as to mitigate concerns of bias or invalid study results. In addition, while the researcher has maintained professional positions in two of the three constituencies interviewed for this study, objectivity in gathering data, data analysis, and result compilation will be observed, and predicated strictly on the data offered by participant interviews.

Participant Selection

This study will profile nine professionals currently serving 9th-12th grade public high school students; three Teachers, three School Counselors, and three Principals will all provide perception data necessary to examine study phenomena. Selecting three separate constituencies ensures this study features public education professionals who all have direct contact with students, and all have the capability to influence student programming. Since this study dictates interpersonal interviews, and the potential for subsequent interviews, the number of participants must be kept to a number reasonable in scope, yet great enough to generate the data necessary to draw meaningful conclusions. Furthermore, by limiting the number of participants to nine, the researcher will maintain the ability to offer deeper, richer perceptions driving the phenomena being studied. Consequently, a balance will be struck between the depth of participant responses, and the number of participants included to help maximize the generalizability of the study. Furthermore, it should be observed that each component outlined in this space works to cement the external validity of this study.

Data Collection

Data will be collected exclusively through one-on-one semi-structured interviews with study participants. All efforts will be made to ensure participant interviews are conducted in-person. However, given the broad geographic area in which participants will be located, telephone or electronic teleconferencing tactics may need to be utilized. Interviews will be recorded; some recordings will feature audio, while others may feature electronic video along with audio recordings. All participants will agree to be recorded before beginning the interview. All participants will be asked the same interview questions; interview questions are designed to inform the larger research questions asked within this study. A transcript of this study's

interview questions can be reviewed in Appendix A of this dissertation.

The data collected for this study satisfies the phenomenological and constructivist structure of this study, as the interview questions seek to uncover specific perceptions educators hold respective to utilizing data to create equitable academic programming for public high school students, as well as to inform the ways in which educators balance data use in creating academic programming against the tangible creation of an academic plan. Thus, an analysis germane to the theoretical framework upon which this study is predicated can be considered, and applied to the relationship between educators and data use in creating equitable academic programming for public high school students. Furthermore, the data collected for this study justifies the use of the nine participants included in the study, as interview questions are specific in nature, and delve deeper than would be possible given a greater number of participants. Consequently, conclusions drawn from data produced by this study will be generalizable between school settings, yet flexible enough to provide value to public education professionals serving in different roles. The researcher, upon completion of each interview, will analyze the data collected for this study. Interview content will be coded, and common ideas will be linked in order to facilitate study conclusions.

Finally, The primary threat to this study centers on validity. Since qualitative research is typically predicated on subjective opinions and perceptions, a temptation exists to question results and the validity of responses. The design of this study is intended to mitigate validity concerns. This study features a tight focus on a very prescribed participant pool, with defined roles within the environment they exist. Furthermore, participant responses will be compiled, coded, and linked to demonstrate commonalities in perceptions – in some cases triangulation of perceptions and outcomes will be observed. In addition, and as established, this study presents

itself as highly generalizable, as most all public high schools in America employ teachers, school counselors, and principals – of these professionals, most all also maintain direct student contact and hold influence over academic programming decisions. The reliability of this study is also great – though the qualitative nature of this study dictates that responses will always vary, the context within which it is presented ensures responses will very consistently satisfy research questions. Finally objectivity is prioritized in this study, as the researcher will maintain a focus on ensuring data gathered from participants is the exclusive medium through which conclusions are drawn.

Chapter 4

Results

The purpose of this study was to gather 9-12 public educator perceptions respective to the role student data play in creating equitable academic programming. Principally, this study was based on the following research questions:

1. What data do educators perceive to hold the most value when creating individualized, equitable academic programming for all students?

2. Why do educators perceive particular student data sources are more valuable than others when creating equitable academic programming?

3. How do educators know when a proper balance has been struck between the amounts of student data utilized to create equitable academic plans, versus an actualized educational plan that offers equitable academic opportunities for all students?

My hope is that this study will offer educators context, and in some cases a starting point, as they consider which data, and how much of that data, their peers feel is most impactful in order to ensure *all* students receive equitable academic programming.

This study utilized semi-structured participant interviews used to ascertain individual perspectives respective how educators can best utilize data to drive equitable academic programming for public 9-12 students. Each participant's responses were transcribed and coded in order to link common ideas, and highlight key differences in participant responses. Participant responses were grouped into larger themes in order to capture both broad, and more specific participant perceptions as they relate to the research questions anchoring this study. Some very important themes

emerged upon analyzing and coding participant responses. Participant responses

worked both to validate, and in some cases challenge, a body of research highlighting

the importance of: a) strategic use of student data in creating equitable academic

programming, b) the need to consider both quantitative and qualitative data when

coordinating equitable academic programming, and c) the need to include students and

peers as primary stakeholders when instituting equitable academic programming on a

school-wide level.

Overview of Participant Responses

The following synopsis offers a brief background and summary of each study

participant in order to better describe the ways in which each educator has constructed

his or her perceptions on equitable academic programming. While study participants

serve in different roles as a public school teacher, school counselor, or principal, each

participant worked in a public 9th-12th grade school with a student body numbering

between 500 and 1,000. The names featured in this synopsis have been changed in

order to protect participant identities.

Teacher Responses

Jeff

Jeff is a male Caucasian special education teacher. Jeff is 52 years old, has over

25 years of experience in his field, holds a master's degree in secondary education, and

works in a public school district roughly 50 miles outside the city of Minneapolis,

Minnesota. A large part of Jeff's job is to determine the appropriateness of, and

institute, interventions for students demonstrating a need for greater academic support

than that which is offered by classroom instruction alone. When asked for his

perception on what constitutes equitable academic programming, Jeff stated, "… the modifications and adaptations made to make it a level playing field. It shouldn't be an advantage; it should be making things level to each student's academic level." To support this idea, Jeff explained his strong belief that data must play a role in order to effectively instituting equitable academic programming for all students. When asked, Jeff stated:

> Well, [data] has to play a role because how else do you know what that student needs? So you need to get that data, you need to look at it and that should drive the programming or the accommodation or the modification that that student needs to have an equal opportunity to be successful in that setting.

Furthermore, Jeff explained, "…You need that data to figure out those points and those strategies to even the playing field and give that kid the same opportunity as anyone else." Jeff expressed that he typically relies upon prior student data as a key indicator for planning academic programming that will help students become successful in the present. Jeff stated "… I usually look at some previous testing because we're at the high school level, so a lot of testing's been done to this point." However, he was careful to emphasize both that a comprehensive suite of student data must be reviewed in order to maximize student programming, and that great thought must be giving towards how to apply the data chosen to analyze student need:

> See, I would have to say past academic records, such as grades and stuff because you can look at a Woodcock and it can show the kids got say 110 IQ, but then you can look at their grades and they could have all Fs. So obviously that 110 IQ isn't the issue; it's something in the classroom is the issue. Is it an attention thing? Is it a comprehension thing? Is it a retention? What is it that's causing that? That single score isn't going to answer that. That single test score isn't going to answer why they aren't being successful in the classroom.

Jeff expounded upon this perception, when he explained:

> The aptitude, I think again, that goes towards balancing that playing field. You find that aptitude level and, okay; where is that going to place that student in that class? Is that level going to allow that student an equal chance of being successful? By successful, I'm not saying being an A student, because you're not helping that student in that sense either. If you're making it so easy that it's not a challenge, you're not helping that student; you're hindering them, you're hindering their progress.

While Jeff was clear that he begins his efforts to institute equitable programming for all students with referencing quantitative data, he was also careful to point out the role of a student feedback in the process. He explained:

> I'm working with high school kids, so I go right to the source. All right? Why is this working? What's good? What's not? So to me is that student be able to say, 'Well, I'm using this and this is helping me.' So I go right to the source. We encourage them now.

Consequently, Jeff both supported the idea that data must drive equitable student programming, and that a blended approach of quantitative assessment data and qualitative student feedback must drive the process.

Rhett

Rhett is a Caucasian male math teacher with 13 years of secondary teaching experience. Rhett is 31 years old, holds a bachelor's degree in education, and works in a public school district approximately 300 miles from Minneapolis, Minnesota. Rhett very clearly communicated his perception of an equitable academic plan; when asked what he felt constituted an equitable academic program, he commented, "An equitable academic program for a public high school student is one that addresses their academic needs without inadvertently segregating by other factors." Rhett felt that data plays a role in ensuring students have access to equitable academic programming, but was quick to add that a higher level, more composite data set must be referenced before becoming to specific in identifying and addressing student needs. Rhett

explained:

> I think data does play a role in the process. I think the data needs to look though exclusively at academic abilities at the start rather than bringing subgroups into it right away. If we look at trying to target subgroups and their performance, I fear then that standards can be compromised in terms of making classes what they need to be, that perhaps we lower the level of a class to have more Special Ed students involved in it or have more free and reduced lunch students involved in it, but then not get them what they ultimately need to be successful later and thus the cycle would have to continue. I think it's reasonable after we identify based on academic performance data where students are to then look and see what other trends there are in the students who are grouped accordingly.

Rhett's school utilized a dedicated database to store quantitative data, which staff can reference at their convenience. While he stated that this database plays an important role in driving forward efforts to maximize equitable academic opportunities for students, Rhett was resolute in pointing out the need for interpersonal consultation between educators. He stated:

> We look at Viewpoint, we use Viewpoint to look at STRAND data. We also look at just grade performance, and we're small enough where we can also just have conversations with the teachers and they can say, 'Well, they know this and this. They don't know this. They shouldn't be here.' So it's not necessarily standardized data, but observational data from eighth grade Math teachers or seventh grade Math teachers saying, 'They can do this, they can do this, but they can't do this.'

Furthermore, Rhett emphasized the importance to balance the use of quantitative data against that of qualitative data when designing equitable academic programming for students. Rhett explained, "We're playing qualitative and quantitative together." Rhett commented:

> We're looking at grades, we're looking at performance on standardized tests. We're looking at our performance on classroom assessments, and then we're looking at just are the kids seeming to participate more. Are they more actively involved in the classroom? Are they commenting about Math not being drudgery or a fear-inducing experience. It's quantitative and qualitative again.

Additionally, Rhett emphasized the usage of internal, teacher-generated assessments that align closely with Minnesota state teaching standards when assessing student grades. When asked to detail the most important data to reference when creating equitable academic programming,

Rhett stated:

> Our locally defined assessments that which we create for our classes because we know
> what, across six-12, we know what we're supposed to be teaching at each grade level or
> each course level when you get to the high school. Algebra, Geometry, Algebra 2, et
> cetera. And we generally only have one teacher teaching at each of those levels. So we
> talk together and say this is what needs to happen in each of the levels, and we write our
> assessments to address those standards. And that seems to be the most useful data for
> us…we know that our assessments are aligned to the standards that we want our students
> to be achieving.

Rhett outlined lapses in training and access to student data points as the greatest impediments to

using student data to drive equitable academic programming. Rhett detailed:

> One of the impediments we have had and probably the largest impediment we have had is
> the use of Viewpoint to gather data. We had let the training lapse on it. It wasn't being
> uploaded as regularly, but that has changed in the last few months. They have made at the
> district level a more concerted effort to make sure that that is updated and provide
> everyone adequate training on how to access data. We actually had to have a secretary
> log in so that we could see student data previously, but now we'll have access to all the
> students that are coming in so we can see how they've done in classes and what their test
> scores are like.

Rhett further emphasized the importance of utilizing both quantitative and qualitative data to

assess student academic needs when he stated that looking at post-high school data helped

validate educator efforts to institute equitable academic programming. Rhett explained:

> We are starting to dig into the SLEDS (Minnesota Statewide Longitudinal Data System)
> data to see what has happened with the number of students who have to take remedial
> courses in college. That is one measure of success that we can look at quantitatively. But
> talking with our students to measure their opinions either through a formal survey or just
> have the conversation, 'How is this going? What are your plans from here? How is this
> going to help?' That's how we figure if we're being successful. If we get befuddled looks
> from our students when talking about how things apply later or how they plan to use what
> they're learning in class later, then we know we have work to do on that. And if we don't
> get befuddled books, we must be doing something okay.

Helen

Helen is a Caucasian white female with 23 years of experience as a public high school

Spanish teacher. Helen is 48 years old, holds a bachelor's degree in secondary education, and

works roughly 150 miles outside of Minneapolis, Minnesota. Helen described that equitable

academic programming must consider access to resources. She explained that equitable academic

programming must allow students to "…[have] access to quality teachers and learning and

getting the same information and … [have] the same access to an ability to have the same access

to education as everyone else." Furthermore, Helen felt confident that student data plays an

important role in ensuring students have access to equitable academic programming:

> Well, I think that it's based on how data plays a role. Well I think we can use the data in order to educate students better, find out what their needs are and try to make the best plan as possible for them with the data that we have access to.

Helen stated that standardized student test scores drive equitable academic programming,

however, as a Spanish teacher Helen lamented the fact that she has fewer data points to work

with as a result of fewer standardized tests being offered is subject areas that qualify as electives,

rather than core courses. Helen explained:

> …The data that we as a school in our school, what we use is predominantly STAR testing. And so for STAR testing we use that in both English and math. So they don't use that in every single class… So, like for Spanish, all I know is their ability of level. And that's about it. Like I know from their assessments and I personally get… I think in English and math they have specifics. Theirs is more specific than what I do just because I don't have any standard assessments that I us

While many of Helen's perceptions about instituting equitable academic programming centered

on standardized student assessment data, she also was careful to highlight the role students play

in ensuring equitable academic programming in the schoolhouse. When asked how data can

influence equitable academic programming, Helen stated:

> … kids look at their specific skills, and practice those specific skills as well. And then they have the kids do goal setting too. And I feel like the data that the STAR test gives is maybe more basic and easy to understand.

However, Helen's position that standardized test scores and student feedback data are integral to

the institution of equitable academic programming, she was clear that roadblocks often inhibit

educator efforts to institute equitable academic programming. When asked about the greatest

impediments to using data to drive equitable academic programming, Helen perceived time and

workload to inhibit educator efforts. Helen stated:

> Time. Because there's so much that the teachers want to do in their curriculum too. So I think that's probably the biggest factor… and the number of students that they have and the number of issues that the students themselves have

To combat these impediments, and maximize the opportunity for all students to access equitable

academic programming, Helen stated that schools would need to increase staff. She explained:

> I think it would have to be, they would each have to have some type of an advisor and that advisor would have to sit down with them in personal appointments and go over their plan. Maybe even their plan with their parents because sometimes I think kids don't even know what their needs are.

School Counselor Responses

Samantha

Samantha is a female Caucasian school counselor with two years of professional

experience. Samantha is 24 years old, holds a master's degree in school counseling, and works

approximately 315 miles outside Minneapolis, Minnesota. Samantha related equitable academic

programming to the opportunity for all students to gain the skills necessary to be academically

successful. Samantha explained:

> …I would say, we can have small groups and so if you're having students who are not having needs met, in say a math class, a history class, if they're just not understanding their how to study for tests or exams, that we would have that opportunity for them to learn those skills.

Samantha articulated the need for educators to use data in order to identify areas of specific

student need, and ultimately deliver students opportunities to obtain equitable academic

opportunities. Samantha stated:

> …I look to see, how many students are on free and reduced lunch? How many students are different ethnicities? Since we already know that there's a gap in those populations, how many students go to PSEO classes? And so looking at that data, I was able to see all of the gaps, and how as a school counselor can I help bridge those gaps

While Samantha used quantitative data points to identify at-risk student populations, she also relied upon student-generated data produced by administering a student survey. This survey focused on ascertaining specific student needs – once student needs were identified, Samantha could take action on ensuring student access to equitable academic opportunities:

> …I asked all the students to answer survey for me, we call them needs assessments…so they tell us what they need, either academic support – do they need tutoring? Do they need college information? Do they need career information? They have some social emotional things that they're dealing with, whether that be depression, mental illness, friendship issues, family problems, they're all having to deal with. And then I asked them if they're interested in any groups, that's how I find out if students are interested then I go from there. So I had specifically asked if anybody was feeling depressed or suicidal, and so I was able to slide those students right away into the list, students who did say they were.

Consequently, Samantha's approach to instituting equitable academic programming balanced both quantitative and qualitative data points that offer room for analysis, but also interpersonal communication. Samantha stated, "… The numbers can only give you so much information and so, it's a good place to start, but we get to know the kids and so, as you learn more about them." Furthermore, Samantha explained:

> I think if you hear feedback from the students themselves, if you can see their interest level, if it's peaked and they're ready to learn and they're willing to learn, then you know that what you're doing is on the right track. But then you can also use data results and find out if it's what you're doing is working, or it's going on the right direction that you hoped it would eventually be, yeah

In addition, Samantha highlighted the importance of being efficient with data usage to drive equitable academic programming, as impediments can easily get in the way. Samantha explained:

> As teachers you don't have a lot of time, and working in a school, I mean you don't have a

lot of time. So I create a picture, a concise picture right away to where kind of, you know what the end goal, where you'd want the students to be at, and then figuring out what programs and what you can do to help the students reach their end goal.

Samantha argued that a student-centered approach needed to be observed when validating whether or not actions taken to ensure equitable academic opportunities for students are successful. Samantha stated, "[Students] would know, they could get what they needed…without feeling ashamed or without feeling embarrassed that they would know that the help they're getting in any format, there would be a product if they need help."

Anita

Anita is a female Caucasian school counselor with 10 years of experience in her profession. Anita is 33 years old, holds a master's degree in school counseling, and works in a public school approximately 150 miles from Minneapolis, Minnesota. Anita described that equitable academic programming "…is something that would be able to meet all the students, meet their needs, and meet them where they are." Anita affirmed that data does need to play a role in instituting equitable academic programming. She states, "For my job [data] influences everything. It is what drives everything." Anita's school followed a very prescribed, structured process when it came to reviewing student data. Anita explained:

> …teachers every week, are looking at all the students, because they have a caseload of students that they're looking at. And by looking at that, I mean they're looking at their data weekly, they're looking at the failure rates, they're looking at attendance, and looking for trends in that. And so I feel like data plays a role… we are being equal in that everybody is getting looked at, at least once a week

Anita described that educators can better target specific student needs by following a protocol where data was reviewed on a weekly basis. Anita stated:

> we can provide strategies that are not one size fit all. Because just because we have one strategy doesn't mean it's going to fit for all kids. It's not going to work for all kids. So being able to take those data, the one F kids, the two F kids, and three F kids, and try to dig into why that is happening. I think it's creating more equity, because we're not

shoving everybody into one box, I guess.

While Anita primarily focused her efforts on reviewing quantitative student achievement data,

she also recognized the role quantitative data plays within the dynamic. Anita explained:

> For instance we just did one on goal setting, and the kids wrote down what their long-term and short-term goals were, and then the teachers collected them. So I have them all in my office. So we'll go through and look and see what the kids wrote because sometimes you can pull out some stuff that might help you round out the data a little bit more, the more concrete hard data. I guess this would be soft data that kind of rounds it out a little bit more.

In combining quantitative and qualitative data, Anita was able to use the structure of her data

process and outline clear validation parameters for whether or not her efforts were proving

successful. Anita Stated:

Just when we see that success in either our failure rate going down, when it gets driven down, not only as a whole school, or as a whole ninth grade, but just individually for each student. When we can see improvements in either the number of classes they passed, or the number of the percentage that's going up for them.

However, structure alone was not enough to ensure the success of a data-centered protocol to

instituting equitable academic programming for students. The primary impediment to utilizing

the data Anita outlined to institute equitable academic programming was the lack of time

afforded to educators. Anita summed up this attitude very succinctly by stating, "So that would

be the impediment, is time. I don't have that right now."

Lucy

Lucy is a female Caucasian school counselor with five years of experience as a school

counselor. Lucy is 28 years old, holds a master's degree in school counseling, and works in a

public school district roughly 300 miles outside of Minneapolis, Minnesota. Lucy felt equitable

academic programming was rooted in communication with students, ensuring that all students

understand the options available to them in order to satisfy their respective academic potential.

When asked what constitutes an equitable academic program, Lucy stated, "I guess I would say

just a program that is well communicated to all students, and all students are made aware of all

of the options and opportunities that are available to them." In particular, Lucy felt that data

should be referenced when instituting equitable academic programming. Lucy explained:

> Well, data will help show where the needs lie, where either things aren't being communicated, or it just helps me see what students know, what they don't know, and what they need to know. Or what, in regards to school counseling, it would be, are we having a big issue with maybe something I didn't even realize?

Furthermore, Lucy felt both quantitative and qualitative data should be considered when both

deciphering student needs, and delivering students the types of opportunities necessary to

institute equitable academic programming. Lucy stated:

> I think their voices do matter a lot. I think student input matters. And then the actual hard data from either something like the Minnesota State Student Survey or something like that, I think those are important for me in regards to the social emotional piece

Lucy intimated that using both quantitative and qualitative data to drive equitable academic

programming is at the heart of her approach to supporting students. Lucy explained:

[Data] helps us meet kids where they're at and share the knowledge that they need to know in regards to the academic piece. On the academic side, there's a definite requirement that they cannot stray from. So it helps me understand where the gap is …what they do not know, what they need to know, and all the opportunities. So are they aware…of those opportunities that are here for them.

Lucy indicated that, while following a data-centered process to drive equitable academic

programming is the goal, roadblocks exist – specifically in the forms of time, personnel

shortages, and a lack of communication. Lucy explained, "I don't have the luxury to sit down and

survey or interview every kid individually." Lucy went on to state:

> So the impediments are the communications…for example, our student database system, we use the system Skyward. So if families don't have current address or contact information, what we send out doesn't actually go anywhere. So that's a impediment of getting the surveys sent to where they need to go. And who is answering these questions?

Despite these limitations, Lucy remained able to define what it looks like to successfully institute equitable academic programming. Lucy stated:

> I think the validation comes from seeing where the need or what the gap is, and being able to try to close the gap or fill the need. That would be, I think, the validation piece…I think a successful program would be that [students] are…aware of what they need to, at least if we're talking just secondary, so what they need to graduate. If they're fully aware of that, what they need and how it works in regards to how they can choose different classes, how they earn grades, how the credits work, how the GPA works, how what other opportunities they have here.

Principal Responses

Joe

Joe is a male Caucasian public school principal with 16 years of experience as a principal, and over 30 years as a public educator. Joe is 56, holds a master's degree in educational leadership, and works in a public school roughly 150 miles north of Minneapolis, Minnesota. Joe's vision and perceptions around using student data to drive equitable academic opportunities for students fit within a very tight context. Joe was very concise and clear about the fact that equitable academic programming centers on opportunity. Joe stated, "I just think that access to opportunity, that makes the process pretty equitable…there are times where we had a student who had certain needs that went beyond what was offered in the course." Joe felt that data plays a role in delivering students equitable academic programming – he explained, "Data can play a role in that process. I think data will help provide…data points for interventions for students." In addition to outlining interventions to target specific student needs, Joe felt data should help promote student engagement in their respective schools:

> I'd really like it if we were able to be the one that provides what would really be quality information that would allow students to remain more active in school. We just don't have that. I mean we have different systems in place. We just don't have that.

While John was quick to point out the vision and the ways in which quantitative data can help

guide interventions for students based on specific needs, he was also resolute in stating the

importance of using one's own experiences to both recognize student needs and validate the

approaches used to create equitable academic programming. Joe stated, "Yeah, I guess that's

what I was saying, that we use our own experiences…to guide student success and offer equity.

The validation comes after that time."

Mark

Mark is a male Caucasian public school principal with 11 years of experience as a

principal, and over 25 years as a public educator. Mark is 51, holds a master's degree in

educational leadership, and works in a public school roughly 50 miles north of Minneapolis,

Minnesota. Mark's perception of equitable academic programming is summed up very succinctly

– he stated, "Do the students have access to the curriculum?" Along with this assessment, Mark

was careful to point out that student needs must be discerned, and matched, to ensure access to

curricular offerings. Mark stated, "We look at student achievement data, whether that's a

standardized test or it's a grade or it's a recommendation from a teacher." Mark went on to state:

> …[staff] talk about the kid's various strengths and what the kid does well and where the kid needs support, and then that allows the other teachers to then take that information and apply it in the classroom

Mark's school used a very structured program featuring both quantitative and qualitative data to

determine both student strengths and needs in order to design interventions to ensure students

receive the support necessary to offer academic success. Mark explained,

> Well, it's a strength-based program, so we start with what a student's strengths are. It might be, you know, the kid's got a sense of humor or they're whatever, whatever their strengths are, because it's got more of a social/emotional focus to it… so that's not as quantitative data, it's not a test score, but it certainly is data that we use on a weekly basis. Again, obviously attendance and their grades and their interactions that they have with the teachers, and it's a weekly thing. The teams meet weekly.

Consequently, school staff was able to address student academic needs based both on academic

aptitude and interpersonal relationships. Mark stated:

> [Staff] talk about the kid's various strengths and what the kid does well and where the kid needs support, and then that allows the other teachers to then take that information and apply it in the classroom with that kid

However, when considering his personal inclinations around using data to drive equitable

academic programming, Mark detailed a change in perception. Mark intimated:

> Well I would say the pendulum is swinging for me, and it has over the last several years. …I guess for the purposes of what I'm doing here at North Branch, I've been here now for a while. I know my staff. I know my kids. I'm probably going to go to the more qualitative stuff. I'm going to talk with people about what individual student strengths are.

Mark went on to emphasize the need for utilizing multiple data points when evaluating student

need for the purpose of instituting equitable academic programming:

> …It comes down to personalizing learning. Every kid is different, and unfortunately when you evaluate someone on the basis of the test it's a generalization. Knowing the kid and knowing what their strengths are and then building curriculum around that, or at least building programing that will support those strengths.

Mark felt that utilizing data to institute equitable academic programming did not come without

its challenges. Mark intimated the interpretive nature of some data points, which can imperil the

institution of equitable academic programming when he stated:

> When you're using quantitative data, like I said, it's right there. It's in black and white. Here's how the kid scored, and so this is why the kid has access to this or doesn't have access to that…the challenge though with qualitative data is that, you know, it's open for interpretation. I mean if you use quantitative data, well there's the deal, and then you can use the average…I could look at that spreadsheet and read about a kid and you could read the very same thing I read and you may interpret it differently.

Mark capitulated his position by advocating against the use of only one type of data when he

explained, "I feel that you're just as likely to miss a kid if you just use the quantitative data as

you are if you just use the qualitative. There needs to be a blending of the two." Given the

structure by which he collects and analyzes student data for the purpose of instituting equitable

academic programming, Mark related the validation in his approach to the ways in which

students receive individualized programming to maximize their success, and to the service-based

relationships he has with his counterparts. Mark stated:

> I think, again, it all goes back to creating an understanding for kids… ... we serve people, and people are all different. But I think if you know the folks, you have relationships with them, generally speaking you can figure out what their strengths are and how to guide them in the direction that they need to go.

Charlie

Charlie is a Caucasian high school principal with over 10 years of experience as a school

principal, and 12 years as a secondary teacher. Charlie is 46 years old, holds a master's degree in

educational leadership, and works in a public school district roughly 125 miles from

Minneapolis, Minnesota. Charlie detailed that equitable academic programming is about giving

students options – especially after high school. Charlie stated, "I would say multiple paths. As an

example, we've just recently shifted our focus. We've always been so college prep ready, like

we're so proud of the fact that we offer 70 some colleges in the schools credits." Charlie felt that

data plays a role in delivering students equitable academic programming . Charlie stated, "Yeah,

I think, I would say so, yes." Charlie primarily used data to discern student employment needs

after high school – he felt that while some students are prepared for college, other students need

more flexible options. Consequently, Charlie felt their school's programming must reflect this

dynamic. Charlie explained:

> Well, for instance, we knew that 60% of our kids go to college. We knew that about only 30 or 32% of adults in the US have a bachelor's degree. Yet we as high schools are still in that archaic mindset that every kid has to go to college when it's just not true... so we were talking about trying to connect the workforce needs, and we brought our city workforce development person and the county was also here at Chamber of Commerce. And we connected, we had meetings. And we found out, 'Okay, here's where the jobs are. Here's what we need'

Furthermore, Charlie detailed that by using data to focus on student strengths, rather than only

highlighting areas for improvement, educators can best satisfy student needs for equitable

academic programming. Charlie explained:

> I think we've got to focus on what kids are good at instead of ... I think we focus way too much on data, but what kids are deficient in, and what they're not good at versus what they are good at, then kind of circling the wagons and taking advantage of that

Charlie balanced national data detailing workforce credentials and using school-based

assessments to drive programming matched to the national workforce numbers. Consequently,

Charlie gravitated towards post-secondary entrance exams rather than state proficiency exams to

gauge student needs and abilities. Charlie stated:

> …Sixty percent of our kids go to four-year schools. The fact that only 30% of US adults have [bachelor degrees]. That's kind of what got us into the mindset of creating equitable programming. The pieces of the data that, academic achievement wise, that helped me program, the ones that I look at, the MCA to me is a worthless data to be honest. There's no carrot for kids. By this time they're done playing games. You can maybe get through elementary school even into early middle school and tell them it's important and all this kind of stuff. But by the time they're at the high school level, right, these kids, they know they care for the ACT because the ACT, there's something attached to them for most of these kids. They can get into school or they can't, based on that. So the ACT, I think there's some merit with the ACT, that gives me a good read. The MCA gives me almost no read. I'm very cynical about that. I think it's garbage.

Furthermore, Charlie outlined graduation rates as another data point used to assess student

programming. Charlie denoted:

> I look at graduation rates, I think those are important. I think graduation ... I mean a diploma is a diploma. I mean you're not opening the door to the world for a kid by having them get a high school diploma, but you're certainly keeping it open. If you don't get a high school diploma, the door's closed. You're in big trouble.

Charlie detailed the greatest impediments to using student data to drive equitable academic

programming as the timeliness of the data, access to marginalized student population data, and

personnel shortages. Charlie stated:

> [The data is] not timely enough. There's just so many variables that get in the way in terms of access to it. Even things like, I think of. We can program significantly different if we would know who our free and reduced people are. And of course you can dig into

it, but that stuff is protected… I think accessing the data you need is difficult. And it's one of those deals too, right? If I had another employee that could be my data person, that'd be phenomenal, right? I mean it's just, it's another thing

Charlie felt his school's programming needed to continue evolving in order to adequately deliver all students equitable academic programming. While he did outline some recent progress, Charlie felt that validation for comprehensive, equitable academic programming looked like academic offerings that cater to all skillsets and student abilities. Charlie stated:

[Instituting equitable academic programming] is what we're working on for sure. I mean we're trying to. Like I said, I think as of a year ago, year and a half ago, I would say we haven't been doing a great job of that. I think we were focusing strictly on the top end kids, and we've catered all of our programming to that. So you were either that, or we had just some other crap you could take. And now we're trying to find actual equity so there's a great path that kids will be excited for, whether you're at the top end of the deal or if you're just ... I shouldn't say just if you're a kid who wants to work with your hands and get into the trades and make money that way. So I don't think we did. We haven't done it really well. We're starting to recognize how equity has been a forgotten evil in terms of at least the academic, at least pathways I think. I think educationally as a whole is still are very archaic in terms of pushing everybody to four-year schools.

The purpose of asking these questions was to identify the ways in which educators working in schools featuring similar demographics use student data to drive equitable academic programming. Furthermore, these questions were designed to feature three very different professional roles within public secondary schools – teachers, school counselors, and principals.

Findings

The findings detailed in this section offer keen insight into real educator perceptions on an issue that affects all public 9th-12th grade students – equitable academic programming. Ensuring equity when seeking to frame a student's educational experience features a very student-focused approach to academic planning. Consequently, ensuring student academic needs are both discerned and addressed offers students the best opportunities to realize their respective potential. As an educational leader and a school principal, it is incumbent on me to ensure those

students with which I interact and support gain, and maintain, the types of equitable academic opportunities necessary to achieve academic growth and proficiency. However, while ensuring students are offered equitable academic programming is an ideal worth pursuing, I have often seen students and educators acknowledge academic programming needs only after struggling mightily in the academic situation within which they find themselves. Both students and educators are capable of teaming to promote equitable academic opportunities for students – this study is my contribution to that effort.

My background as a school principal both strengthens and threatens the objectivity I bring to this study. I possess a very thorough knowledge of public 9th-12th grade academic opportunities, while at the same time I work closely alongside educators both within my building and field to identify ways in which to encourage academic equity. Possessing an intimate understanding of the ways in which educators can institute comprehensive, regular opportunities for academic equity has helped strengthen the design of this study. Furthermore, maintaining a deep understanding of the broad range of perspectives held by educators as they relate to utilizing data for the purpose of driving equitable academic programming has helped maximize the integrity of the interview process. In addition, my experiential knowledge of the opportunities educators have to utilize student data in their quest to institute equitable academic programming empowers me to provide context to participant responses, as well as to find key commonalities and differences between participant responses.

However, my experiential and institutional knowledge of the ways in which educators may utilize student data to drive equitable academic programming poses a potential challenge to the objectivity of my study. In addition, I maintain superficial professional relationships with some of this study's participants. This dynamic creates a temptation to allow past conversations

or collaborations to taint objective participant responses to this study's interview questions. Consequently, great care has been taken to mitigate both implicit and explicit biases, so as to preserve the integrity of this study. Furthermore, I have remained vigilant in my efforts to compartmentalize personal perceptions as they relate to compromising the validity or objectivity of this study.

Having served as both a K-12 Assistant Principal and a 9-12 Assistant Principal has offered me the opportunity to see both strengths and opportunities within the realm of K-12 education. Ensuring all students are afforded opportunities for equitable academic programming has always proven a paramount interest of mine. As a building principal I have taken advantage of opportunities to review and assess curricular offerings for the purpose of ensuring academic equity is maximized for all students. Furthermore, the formal doctoral coursework in which I have engaged has helped prepare me to not only navigate the requirements of executing a qualitative research project, but also to preserve researcher objectivity while completing a study.

My doctoral studies have cemented a foundation of institutional knowledge within me; upon this foundation I have built a strong understanding of research methodology – in particular, I have focused my efforts on deconstructing the philosophy behind the phenomenological approach to qualitative research. Furthermore, my professional experience both as a school counselor and a principal have helped me to develop strong inter-personal skills, which are best used to lead personal conversations, and, in the case of this study, inter-personal interviews. Consequently, I have very intentionally leveraged both my professional skillset and formal institutional knowledge in order to maximize both the design and meaning behind this study.

Sample Description

The sample population of this study features some notable demographical similarities and

differences between participants. Using a non-random approach for gathering participants, this study secured nine total participants. This study split the nine total participants into groups of three in order to provide a more comprehensive understanding of perceptual similarities and differences between different professional constituencies within schools. Consequently, three general education teachers, three school counselors, and three building principals were interviewed in order to satisfy the demographic criteria upon which this study is based. Furthermore, in order to meet eligibility criteria, study participation dictated that individuals be employed by a public 9th-12th grade school with a student body numbering between 500-1,000 students. The sample population for this study was chosen carefully, and with intention, to maximize the generalizability of its design and results. Given that 81% educators in the United States are employed by public schools (High School Teachers: Occupational Outlook Handbook, 2019), and the mean number of a United States public high school student is 752 (Overview of Public Elementary and Secondary Schools and Districts: School Year 1999-2000, 2001), the demographical makeup of this study proves highly inclusionary.

This phenomenological study was designed to interpret educator perceptions relating to using student data for instituting equitable academic programming. In order to gain meaningful results, this study employed a constructivist approach to gathering participant perceptions. Each participant engaged in a 14-question interview; all participants both began and finished the interview in one session. Each interview was conducted via phone, and recorded at the discretion of the participant. Participant responses were transcribed, reviewed for content and accuracy, then coded into common themes in order to gauge how individual participant constructs compare to one another. Separately, key differences in perceptions were also noted and coded in order to demonstrate the objectivity of both the sample population as a whole, and between individual

participants.

Using the electronic platform NVivo, participant perceptions in the form of direct quotations were separated into different nodes that matched the common themes found amongst participant responses. The themes used to aggregate participant perceptions were created in direct correlation with this study's research questions, and were identified based upon common perceptions amongst study participants. Once participant responses were organized into themes, a deeper analysis relating to which educators shared common perceptions could be conducted. The analysis and reporting of participant responses will work to satisfy the overarching goal of this study – to offer guidance to educators as they consider where to start with, and end, executing the process of utilizing student data in their efforts to drive equitable academic programming.

Data Analysis Framework

In order to properly analyze the findings of this study, a framework for analyzing qualitative semi-structured interviews was used in order to add structure to the context around which participant responses were coded and grouped. Constructivism was observed insofar as ensuring each participant was empowered to express their own perceptions as it related to the suite of research questions. Consequently, a philosophical phenomenological framework method, developed by Giorgi, Girogi, and Morley (2012), was used to juxtapose individual participant responses against coded results featuring common themes amongst the composite of participant responses. Giorgi, Girogi, and Morley's (2012) philosophical phenomenological framework dictated that the researcher follow five steps in order to properly analyze interview data and draw concrete conclusions from said data:

1. Read entire transcript in order to ascertain the *essence* of respondent perceptions.

2. Assume an attitude that observes a phenomenological reduction of each participant's responses.

3. Recognize themes within participant responses that directly address the phenomena being researched.

4. Draw conclusions based on similarities observed between participant constructs and perceptions, thus, creating a transformed meaning of composite themes as opposed to individual ideas.

5. Draw conclusions based on the transformed meanings found within participant response data

Furthermore, and to aid in understanding Giorgi, Giorgi, and Morley's data analysis model, the reader is encouraged to review

Figure 1

Philosophical Phenomenological Framework

R = Researcher, P = Participant

	Step 1	Step 2
R interviews P or obtains from P a description of a situation reflecting the phenomenon under study. The original description is from the perspective of the Lifeworld or ordinary life. If data collection was by means of an interview, R transcribes it verbatim. If originally a written description, R works with it as given.	R reads the entire transcription or description in order to grasp the basic sense of the whole situated description.	R assumes the attitude of the scientific phenomenological reduction.

Step 3	Step 4	Step 5
R, remaining within the scientific phenomenological reduction, then creates parts by delineating psychological meaning units. A meaning unit is determined whenever R, in a psychological perspective and mindful of the phenomenon being researched, experiences a transition in meaning when he or she rereads the description from the beginning. Slashes are placed in the description at appropriate places.	R, still within the scientific phenomenological reduction, then intuits and transforms P's Lifeworld expressions into expressions that highlight the psychological meanings lived by P. This requires the use of free imaginative variation as well as rendering implicit factors explicit.	Based upon the transformed meaning units, and still within the scientific phenomenological reduction, R uses the transformed meaning unit expressions as the basis for describing the psychological structure of the experience.

Giorgi, Giorgi, and Morley's (2012) framework for analyzing and interpreting qualitative data.

Transcription Review

Upon finishing participant interviews, interviews were transcribed and reviewed for both interviewer and respondent accuracy and content. After reading each transcription, it became clear that there existed many themes both within each respective interview, and between separate interviews. In reviewing interviews, the essence of respondent perceptions became clear, as the common themes mentioned manifested both in questions garnering explicit thematic answers

from respondents, and also indirectly from questions bearing no specific relation to the emergent

themes set forth by respondents. In this way, the essence of participant responses became clear,

as the themes constructed by each participant as they answered the interview questions

manifested as organic, and specific to each participant. Consequently, this process worked to

satisfy step one of the Giorgi, Girogi, and Morley (2012) philosophical phenomenological

framework upon which this data analysis is based.

Step two of Giorgi, Girogi, and Morley's (2012) philosophical phenomenological

framework features the researcher adopting an attitude of objectivity in his efforts to recognize

the different constructs driving each respondent's statements, and being able to both

acknowledge them as individual responses stemming from the individual perspectives creating

particular respondent characters and professional identities. In order to satisfy step two of the

philosophical phenomenological framework, the researcher approached the review of respondent

analysis in two particular ways. First, transcriptions were read in isolation from one another –

this exercise ensured that each interview, and the respondent creating the context for the

interview, gained its own personality by setting forth philosophical and constructivist themes to

be considered for later analysis. Upon gaining a thorough, objective understanding of each

interview, the researcher began linking common themes across interview responses to satisfy the

phenomenological methodology of this study, which dictates the analysis of individual

experiences that work across multiple subjects to expose common attitudes. The next step in

analyzing data was objectively reducing interview results into common themes amongst

responses.

Step three of the data analysis framework, Giorgi, Girogi, and Morley (2012) dictates the

researcher highlight themes between participant responses. These themes must work to transition

the meaning of responses from an individual response focused on one participant construct, to an amalgam of responses that share commonalities between all, or most, respondents. Common themes emerged upon reviewing participant perceptions, thus creating a transformation in the scope of understanding participant responses from the individual, to the composite. Consequently, the thematic perceptions identified in participant responses prompted an exploration centered on discerning the driving forces behind the phenomena this study seeks to explain. Each thematic depiction demonstrates specific ways in which participant responses work to create common attitudes that explain phenomena working to satisfy the research questions anchoring this study. Primary themes were based upon the research questions driving this study, and were created based on common perceptions amongst study participants.

In the fourth step of Giorgi, Girogi, and Morley's (2012) philosophical phenomenological framework, the researcher must center his analysis upon the constructivist nature of participant responses. That is, making implicit themes, idea, or experiences explicit. Drawing conclusions between participant perceptions and deeper-level similarities – such as years of experience in the field, professional title, and level of education – help add credibility to the results and conclusions of this study. Many factors work to support themes beyond simply identifying similar responses; these factors should be highlighted and made explicit in order to make the perceptual, and thematic, connections deeper as a result of comparing constructivist similarities with perceptual realities. Consequently, participant traits and attributes were considered while separating responses into themes. For example, recognition was given when the perceptions of school administrators, participants with higher-level college degrees, or participants with a good deal of experience in the fieldwork share similarities. The constructs of these sub-populations work together to create important considerations when drawing

conclusions respective to study data.

The final step in Giorgi, Girogi, and Morley's (2012) philosophical phenomenological framework dictates the researcher take the analyzed data and draw reasonable conclusions aimed at maximizing credibility and external validity. Analytical conclusions relating to the educator perceptions featured in this study were based squarely on participant responses governing thematic ideas, as well as on the similarities and differences between the individual perceptual constructs as they relate to participant points-of-view. Furthermore, the conclusions of this study were also presented in an easily discernable manner; conclusions were organized by research questions – which also worked to create many of the themes found within the data – in order to maximize the navigability and comprehension of study results.

In sum, utilizing Giorgi, Girogi, and Morley's (2012) philosophical phenomenological framework to analyze the results of this study provided an excellent structure within which study data was organized. Taking care to consider each step in the analysis process ensured elements like external validity, credibility, and reliability were all both observed and satisfied. Consequently, the results of this study offer a firm basis upon which the audience can gain perspective as it relates to the perceptions of practicing educators. This study, then, presents itself as a valuable tool for educators exploring both the ways in which data can be used to drive equitable academic programming, as well as where to set boundaries when using data to drive equitable academic programming.

Presentation of Data

Participant responses have been coded into three primary themes – each theme is based on satisfying the research questions driving this study. The research questions this study explored are as follows:

1. What data do educators perceive to hold the most value when creating individualized, equitable academic programming for all students?

2. Why do educators perceive particular student data sources are more valuable than others when creating equitable academic programming?

3. How do educators know when a proper balance has been struck between the amounts of student data utilized to create equitable academic plans, versus an actualized educational plan that offers equitable academic opportunities for all students?

Some notable themes emerged as a result of exercising a psychological phenomenological data review framework; participant responses were coded and separated into themes based on similarities perceptual similarities.

Research Question One: "What data do educators perceive to hold the most value when creating individualized, equitable academic programming for all students?"

The first research question sought to directly identify specific sources of data educators use to drive equitable academic programming in their respective schools. Educator perceptions were gathered using semi-structured interviews that was predicated on a prescribed list of open-ended questions, yet allowed for participant autonomy respective to question responses. While this research question assumes the use of student data by all participants, the assumption was both supported by a thick body of research, and proved a safe assumption –even superficial forms of student data has become a normalized procedure in 21st Century education; each participant acknowledged data usage respective to impacting student programming. Discerning educator perceptions on the most important data to use in order to ensure students have access to equitable academic planning is an important practice. Furthermore, finding common themes

amongst participant perceptions offers a valid, generalizable set of peer recommendations for all educators seeking to use data to ensure students are offered equitable academic programming in their respective settings.

Each participant stated that educators should use data in order to ensure equitable academic opportunities are offered to all students. This is an important distinction, as it validates the need to separate superficial student data from that which is most important to reference when instituting equitable programming for students. Study participants unanimously asserted the need to utilize student data when instituting equitable academic programs within their respective schools.

When speaking to the need to reference student data when instituting equitable academic programming, Rhett asserted, "I think data does play a role in the process. I think the data needs to look though exclusively at academic abilities at the start rather than bringing subgroups into it right away." Furthermore, Jeff argued that educators must consult student data in order to adequately assess student needs:

> Well, [data] has to play a role because how else do you know what that student needs? So you need to get that data, you need to look at it and that should drive the programming or the accommodation or the modification that that student needs to have an equal opportunity to be successful in that setting.

Helen further intimated the value of using student data to both discern student needs, and subsequently deliver students the academic opportunities necessary to become successful. Helen stated, "I think we can use the data in order to educate students better, find out what their needs are and try to make the best plan as possible for them with the data that we have access to." Anita's perception of the necessary use of data to drive equitable academic programming closely matched those of her fellow study participants. Anita, a school counselor, opined, "…The role that data plays in our process is being able to expose where we maybe are not being equitable."

As a complement to her position on using student data, Anita connected the practice being able to support students before academic inequities occur. Anita stated, "I think in the past we were very reactive, and I think we still are very reactive, but the data lets us be a little more proactive in the strategies that we're building for kids." The demonstrated need to use data to drive equitable academic programming amongst the study's population led directly into discerning exactly which types of data participants found most useful while instituting equitable academic programming for students.

The Case for Quantitative Data.

Generally speaking, most all participants felt very strongly that both qualitative *and* quantitative data must be considered when designing equitable academic opportunities for students. However, each data type proved to have its own value to participants, with an acknowledgment that blending both quantitative and qualitative data offered the most comprehensive method by which to institute equitable academic programming. With respect to quantitative data, participants especially seized upon better identifying specific needs of student populations and taking reliable steps to understand the academic strengths and weaknesses of their students. Samantha took her data usage to a deeper level, separating the needs of marginalized student populations from those of the greater student body. Samantha stated:

> This is my first year at the high school that I'm working at currently, and so my first thing that I did to know the population of students is, I looked at the data. So I looked to see how many students are on free and reduced lunch? How many students are different ethnicities? Since we already know that there's a gap in those populations, how many students go to PSEO classes? And so looking at that data, I was able to see all of the gaps, and how as a school counselor can I help bridge those gaps…so number wise, quantitative wise, you'd go to free and reduced lunches. And then, I mean you I also look at the kids who had failing classes last year.

Samantha's usage of quantitative data proved to be a bit of an outlier, however, most participants emphasized the need to use both past academic achievement reports and standardized assessment

results to ascertain academic ability. Participants intimated that once academic aptitude was

better understood, they could take steps to offer students equitable academic curricula. In some

cases, this meant that participants looked at student deficiencies before looking at strengths.

Jeff explained his rationale behind reviewing past student struggles when considering

student ability level:

> I would have to say past academic records, such as grades and stuff because you can look at a Woodcock and it can show the kid's got, say 110 IQ, but then you can look at their grades and they could have all Fs…I usually look at some previous testing because we're at the high school level, so a lot of testing's been done to this point

Anita affirmed the position of understanding student academic abilities by stating:

> I look at ninth graders. The data that drives mine is, what our current failure rate is. I find that as data point, the number of Fs that they have to be so important to creating equitable programming, is because, like I said before, the reason a kid has three Fs and the reason a kid has one F, that we find trends in that data.

However, most participants emphasized the need to stay current on assessing student academic

capabilities. To do this, many participants shared the ways in which standardized assessments

must support efforts to ascertain student academic abilities. However, participants demonstrated

a wide variety of student data points they reference in order to gauge student ability level.

Interestingly, whereas some participants value certain exams, others denigrate them altogether.

In particular, participants relied upon the following quantitative indicators to drive equitable

academic programming: a) NWEA MAP (Northwest Evaluation Association; Measures of

Academic Progress) testing, b) Star tests (an independent academic assessment tool used to

gauge student abilities in the areas of reading, math, and foreign languages), c) Minnesota

Comprehensive Examinations (MCAs), d) ACT (American College Testing) scores, e) student

grades, and f) graduation rates. While each form of quantitative data proved valuable to different

participants, and in different capacities, Table 1 demonstrates the types of quantitative data

sources this study's population referenced in their responses, and subsequently, data sources identified as most important by each participant:

Table 1

Student Data Points Perceived as Most Important to Participants

	NWEA MAP	MCA	STAR	ACT	Grades	Graduation Rates
Jeff					X	
Helen			X	X	X	
Samantha		X			X	
Anita		X			X	
Joe		X			X	
Lucy				X	X	
Mark	X	X		X	X	X
Rhett		X		X	X	
Charlie					X	X

This table demonstrates which quantitative data points each participant perceived as valuable when attempting to institute equitable academic programming.

Helen, an outlier insofar as seeing particular value in using Star testing to use when driving equitable academic programming, explained how using a skills battery like Star testing empowers educators to pair students in ability groups in order to differentiate teaching. Helen stated:

> I would say that what we're using is the Star data. For the Star testing…for their reading level, because you read so much in English than even some of the other courses. And then they form groups and they also have the kids look at their specific skills too and practice those specific skills as well. And then they have the kids do goal setting too. And I feel like the data that the Star test gives is maybe more basic and easy to understand.

In addition, however, Helen also highlighted the importance of using ACT scores when ensuring equity in student academic programming. Helen explained, "[The] ACT is a little bit more general, but then for ACT each student gets a print out of areas where they could improve." Both Lucy and Mark also intimated that they use ACT data to help complement academic equity

within their school programming, affirming their use and administration of the exam. Rhett was

by far the strongest supporter of the ACT for the purpose of driving equitable academic

programming, while at the same time marginalizing the usefulness of another quantitative data

source. Rhett stated:

> We have chosen to put all our eggs in the ACT basket because our students buy into that more, and the MCA is more of an afterthought. We figure by addressing the ACT, we get the majority of the MCA.

In addition, Charlie postulated that the ACT exam is a data source upon which he commonly

relies when determining student academic ability, stating, "The ACT, I think there's some merit

with the ACT, that gives me a good read." Consequently, the ACT proved one of the most

important data sources educators use to determine student academic abilities.

While some participants found value in referencing student MCA scores to determine

student aptitudes, most participants who spoke of the MCA exams dismissed its effectiveness.

Charlie, for example, stated: "

> The pieces of the data that, academic achievement wise, that helped me program, the ones that I look at, the MCA to me is a worthless data to be honest. There's no carrot for kids…The MCA gives me almost no read. I'm very cynical about that. I think it's garbage.

In addition, Helen explained, "We give the MCAs too, but I don't think it provided enough data

for the teachers to use." Furthermore, Mark expressed frustration about MCA data not being

timely enough to help develop equitable programming for students when she explained, "We use

MCA. I'm honestly not a huge fan of MCA data, I mean at least for the purposes of identifying

where a student should go, because it's basically autopsy data." Rhett argued for using exams

other than the MCA to ascertain student abilities, as he found the data more valuable:

> When you know that other assessments like the ACT, the MCA ... the MCA theoretically would be aligned as well. But we have chosen to put all our eggs in the ACT basket because our students buy into that more, and the MCA is more of an afterthought. We

figure by addressing the ACT, we get the majority of the MCA.

Rhett went on to state the lack of value even the most detailed MCA reporting offers for teachers

by stating:

> If we were to look at STRAND level data for everybody or if we were to look at
> STRAND level data on the MCA, those benchmark reports when we're basing it on one,
> two questions, just not good for us to look at.

However, some participants did find value in utilizing the MCA exam to determine student

aptitude. While Rhett generally found little value in the MCA exam, he did state the benefit it

provides in understanding academic aptitudes in incoming freshman students. Rhett stated:

> We were able to dig into eighth grade MCA data and then talk with the ninth grade
> teachers about those students to see who had the weakest Algebra skills of various sorts
> to decide who should be in that class

Additionally, Anita explained that MCA data helps educators determine why a student may be

struggling in a course when she stated:

> We do look at their ability and aptitude. If I'm looking at the Fs, we do dig into, do they
> have the skill to do it, to pass MCA scores, show that they have the skill to do it? And if
> they do, then we got to build a different strategy, than if they didn't have the aptitude.

Consequently, most participants found little value in using the state MCA exam – the academic

accountability exam sanctioned by the state of Minnesota – when attempting to institute

equitable academic programming.

One of the most seldom used data source amongst this study's population was that of the

STAR exam. In all likelihood, part of its under-representation likely has to do with the cost

associated with administering the exam, as a third-party vendor provides it and comes at a cost to

school districts. Only Helen referenced the exam as being at all beneficial, and mentioned the

benefit residing primarily in discerning two specific academic data points – reading and math. In

expressing its modest value, however, she also lamented the fact that it is not offered in all

subject areas. Helen explained:

> …The data that we as a school is in our school, what we use is predominantly STAR testing. And so for STAR testing we use that in both English and math. So they don't use that in every single class. In our school they use the STAR testing and then they use like the Lexile for their reading level and then they form groups from that. But for the STAR data, we only use it for English and math.

In addition, Helen highlighted the STAR exams ability to challenge students on an

individual level, as it is an adaptable exam that zeroes in on student abilities – especially when

compared to an exam like the ACT. Helen stated,

> When you take the Star test it's a different type of assessment because when they are taking that Star test it gives them another question that moves them up. It gives them different ability levels of questioning where the ACT doesn't do that.

Helen also directly relate STAR testing to equity when she stated, "We're using is the Star data

and I think that, that's probably equitable because they all are getting that same assessment."

Finally, Helen identified STAR reports to be easy to interpret, and simple for educators to

identify opportunities for student by explaining, "I feel like the data that the Star test gives is

maybe more basic and easy to understand." However, for her part, and as useful as she sees the

data being, Helen did feel marginalized insofar as her use of the data, as she teaches in a

discipline other than math or English. Helen lamented, "Really the only data that the school is

using is the Star testing. So I don't use any of that." Consequently, the population of this study

found very little value in STAR testing, as the benefits proved minimal, and its representation

was quite poor.

Another third-party exam used by educators to discern student academic ability is that of

the NWEA MAP test. Like the STAR exam, the MAP test is designed to help educators hone in

on student academic aptitudes. For this study, the MAP exam was also seldom used amongst the

study population. Only Mark mentioned use of the data; in his assessment, the exam offered no

value, and its alignment to other, complementary exams, was questionable. Mark stated:

> We use MAP, so NWEA…I would say the pendulum is swinging for me, and it has over the last several years. I used to be a big NWEA MAP guy, but I've seen over the last, I don't know, seven-eight years it doesn't align with the MCA data.

Consequently, and amongst this study's population, the MAP test presents as the least useful source of data to use when attempting to understand student academic aptitude for the purpose of instituting equitable academic programming.

Graduation rates were another source of quantitative data used by participants to gauge whether or not school programming proved equitable to all students. Charlie argued that educators need to reference graduation rates in order to ensure students are earning diplomas; earning a diploma is, in it's own right, an indicator that academic equity was observed. Charlie stated:

> I look at graduation rates, I think those are important. I think graduation ... I mean a diploma is a diploma. I mean you're not opening the door to the world for a kid by having them get a high school diploma, but you're certainly keeping it open. If you don't get a high school diploma, the door's closed. You're in big trouble.

Similarly, Mark explained that graduation rates need to be prioritized and considered as a complement to other student data points in order to properly assess school programming. Mark stated:

> It's terrible to say, but graduation rates... We've struggled with our graduation rate and we have subsequently addressed it pretty well. We got our kids graduating from high school. Not that they weren't, but our numbers weren't what we wanted them to be, and they are much better now.

Only two participants stressed the need to explore graduation rates as a key data point when considering the strength of their own school's equitable academic programming; thus, study participants clearly did not perceive graduation rates to be of paramount concern to instituting equitable academic programming.

Participants identified student grades and graduation rates as by far the most useful data point when considering how to institute equitable academic programming. Participants stated the importance of both referencing past student grades, and progress-monitoring current student grades in order to ensure equitable academic programming for students. Jeff explained the importance of referencing past student grades as a student aptitude indicator; in his perception, grades proved a more reliable data point that other aptitude tests. When asked what he perceived to be the most important data to use when instituting equitable academic programming, Jeff explained that past academic records were more important than standardized aptitude assessments, such as Intelligence Quotient tests. Similarly, Anita stated her preference to use student grades in isolation of other academic ability data points for the purpose of discerning student strengths. Anita stated:

> We start by talking about what the kid's strengths are, and then why they were brought up to the bar meeting. We take a look at their grades, we take a look at attendance. And then from then, we work on each individual kid, we will give them a strategy. They've been brought up for a specific reason, and now we're going to go give them a strategy.

Similarly, some participants perceived using student grade data in concert with other data points to prove most valuable in understanding student aptitudes for the purpose of instituting equitable academic programming. Samantha explained that she uses student grades as a compliment to other data sources in order to better understand student academic needs. Samantha stated:

> So number wise, quantitative wise, you'd go to free and reduced lunches. And then, I mean you I also look at the kids who had failing classes last year. So I immediately pulled those kids in too, look at their grades and then if they're on multiple lists then I would probably find a teacher or admin and say, "Hey, can you tell me more about this students of what they know?"

Likewise, Rhett perceived student grades to have value as a component of a comprehensive data review process when considering student abilities. Rhett explained:

> We're looking at grades, we're looking at performance on standardized tests. We're looking at our performance on classroom assessments, and then we're looking at just are the kids seeming to participate more… if their grades are on the lower end particularly or if they're in an easier course than on the upper end, we will plow into some of the standardized data that we have.

Charlie also expressed the usefulness of referencing student grades in concert with other indicators of academic ability. When asked about which student data points he perceived to be of most value to reference when instituting equitable academic programming for students, Charlie stated, "Well, you're going to look at data in terms of achievement, whether it be grades, whether it be MCA scores, ACT scores, all that kind of stuff…". Mark perceived there to be great value in progress-monitoring student grades throughout the year when he stated, "Again, obviously attendance and their grades and their interactions that they have with the teachers, and it's a weekly thing. The teams meet weekly." Furthermore, Mark stated that students are, in part, placed in courses based on "…teacher recommendation and grades in class." Lucy perceived communicating with the student as the greatest value of using student grades to drive equitable academic programming. When asked about what a successful equitable academic pan looked like for a student, Lucy explained:

> I think a successful program would be that they are, one, aware of what they need to, at least if we're talking just secondary, so what they need to graduate. If they're fully aware of that, what they need and how it works in regards to how they can choose different classes, how they earn grades, how the credits work, how the GPA works, how what other opportunities they have here.

Finally, Helen recognized student grades to be an indicator of student effort. When asked about using quantitative data to determine equity in academic programming, Helen responded affirmatively; she stated "And I say that because they'll use their grade [as an indicator of] effort."

As demonstrated in the space above, this study's population made great use of quantitative data in order to discern student aptitude levels for the purpose of instituting equitable academic programming. However, participants also found great value in qualitative data to help augment implementing equity when considering student programming.

The Case for Qualitative Data.

In particular, participants perceived direct student and teacher feedback, interviews, and surveys as very powerful ways in which to augment the institution of equitable academic programming. Lucy emphasized the importance of direct student feedback when she explained:

> So I get feedback, which I think there's some definite margins of errors, because teenagers are teenagers and they just want to answer things in the way that they want to answer. But for the most part, I think it's true to what they actually feel or think, regardless of what we actually do provide. So I think their voices do matter a lot. I think student input matters. And then the actual hard data from either something like the Minnesota State Student Survey or something like that, I think those are important for me in regards to the social emotional piece… again, on the academic side, again, I guess just perception data from students and families. Because if I think that I'm getting all this communicated out well in regards to what's the requirements for graduation and here's all the opportunities you have for academics, but they really don't know, then obviously there's something missing there.

Mark reinforced Lucy's position of directly accessing student feedback when considering equitable academic programming in his school. Mark detailed:

> I've been here now for a while. I know my staff. I know my kids. I'm probably going to go to the more qualitative stuff. I'm going to talk with people about what individual student strengths are… there's obviously more room for interpretation with qualitative data. But, again, if you have folks that have worked together and have an understanding of what the philosophy is in terms of what it is you're trying to accomplish… it doesn't take [staff and students] that long to get it.

Anita reinforced the perceived value of gathering direct student feedback for the purpose of offering students equitable academic opportunities when she stated, "we use anecdotal, I guess it'd be more subjective observations from the teachers." Samantha perceived the connection between gathering student data to drive equitable academic programming and understanding

more about both student personal-social needs, and personal goal setting to hold a correlative

relationship. Samantha explained:

> So I work with the ninth and 10th grade students specifically in my school. And so I asked all the students to answer survey for me, we call them needs assessment in the complaint world. And so they tell us what they need, either academic support, do they need tutoring? Do they need college information? Do they need career information? They have some social emotional things that they're dealing with, whether that be depression, mental illness, friendship issues, family problems, they're all having to deal with

Rhett communicated value in the fact that he works in a relatively small school, as it enables a

greater percentage of teachers in the building to know students. Rhett stated:

> …We're small enough where we can also just have conversations with the teachers and they can say, "Well, they know this and this. They don't know this. They shouldn't be here." So it's not necessarily standardized data, but observational data from eighth grade Math teachers or seventh grade Math teachers saying, "They can do this, they can do this, but they can't do this."

While qualitative data was certainly identified as valuable when used in isolation, study

participants expressed particular value in combining qualitative and quantitative student data

when seeking to institute equitable academic programming.

The Case for a Blended Approach.

Study participants communicated a combination of both qualitative and quantitative data

is useful when trying to accurately understand student academic needs and strengths. Samantha

stated the value of using both quantitative data, and teacher and student feedback when seeking

to optimize equitable student programming:

> So number-wise, quantitative-wise, you'd go to free and reduced lunches. And then, I mean I also look at the kids who had failing classes last year. So I immediately pulled those kids in too, look at their grades and then if they're on multiple lists then I would probably find a teacher or admin and say, "Hey, can you tell me more about this students of what they know?"…I think if you hear feedback from the students themselves, if you can see their interest level, if it's peaked and they're ready to learn and they're willing to learn, then you know that what you're doing is on the right track. But then you can also use data results and find out if it's what you're doing is working, or it's going on the right direction that you hoped it would eventually be.

Rhett emphasized the importance of being able to both connect with peers and colleagues, and

consult student data points, in order to best determine student academic programming needs.

Rhett explained:

> We also look at just grade performance, and we're small enough where we can also just
> have conversations with the teachers and they can say, "Well, they know this and this.
> They don't know this. They shouldn't be here." So it's not necessarily standardized data,
> but observational data from eighth grade Math teachers or seventh grade Math teachers
> saying, "They can do this, they can do this, but they can't do this."…Or the conversation
> happens when we're just talking with our colleagues at the middle school and they say,
> "You better watch this student. You better watch that student." And so is holistic the right
> word maybe? It's part of knowing your kids. And we're fortunate to be in a place where
> we can know our kids. We can know them even before they get to the high school.
> I will state there is no way that we could do anything about placement that was
> exclusively quantitative…We're playing qualitative and quantitative together.

Rhett also emphasized the need to directly consult students in order to adequately understand

aptitude levels and how to offer students equitable academic opportunities at school. Rhett

stated:

> …Talking with our students to measure their opinions either through a formal survey or
> just have the conversation, "How is this going? What are your plans from here? How is
> this going to help?" That's how we figure if we're being successful. If we get befuddled
> looks from our students when talking about how things apply later or how they plan to
> use what they're learning in class later, then we know we have work to do on that. And if
> we don't get befuddled books, we must be doing something okay.

Anita spoke to the benefit of considering both quantitative and qualitative student data, while

also cautioning against taking a myopic stance on utilizing only one type of student data. Anita

stated:

> …Sometimes you can pull out some stuff that might help you round out the data a little
> bit more, the more concrete hard data. I guess this would be soft data that kind of rounds
> it out a little bit more. I think it would be balanced, yeah. I would say so. I think that the
> feedback that I'm getting from teachers is important, but I think what we did before bar,
> is we went purely off of the teacher feedback. And so then we weren't paying attention to
> the data.

Jeff also spoke to the importance of utilizing both quantitative and qualitative data to determine

student needs. When asked about the type of data he perceived to be most useful when

attempting to institute equitable academic programming, Jeff stated:

> I think that's very individual. It depends on the student. What are you seeing of the
> student and what data do you need to address that? If the student's doing great
> everywhere else, but say one class, then I would just strictly be focusing on that class.
> What data do I need? Do I need missing assignments? Do I need to look at the academic
> testing? Do I need to look at past history? Do I need to look at classroom setting? Is it
> something in that classroom? It's really, really student driven. If I got a kid here who's Cs
> and Bs, doing well, has minimal support, I'm just looking at that. I'm talking to the kid,
> "Hey, how's it going? Because you're a little weak here. What do you need?" So it's
> really, really individualized, will determine the amount and what type of data I'm going
> to go for.

Mark was resolute in connecting quantitative data points necessary to determine student needs

with teacher input with respect to finding equitable academic opportunities for students. When

asked how educators can help ensure students have access to equitable academic programming,

Mark stated, "Teacher recommendation and grades in class…we look at their student

achievement data, whether that's a standardized test or it's a grade or it's a recommendation from

a teacher." Mark went on to point out that students must also factor into the process of outlining

equitable academic programming. Mark explained: "We start with what a student's strengths are.

It might be, you know, the kid's got a sense of humor or they're whatever, whatever their

strengths are, because it's got more of a social/emotional focus to it." Charlie's perception

centered on a disproportionate focus on using quantitative data to drive equitable academic

programming for students. When asked about impediments facing educators trying to utilize data

points to drive equitable programming, Charlie stated:

> Well, I think it's a hurdle for sure. I think everybody is so concerned about the MCA
> scores and stuff like that, that that's always focused on, is making sure those things go up.
> And to provide equitable opportunity you have to be able to step back a little bit and say,
> "We can't just throw more of the same thing at kids and expect them to always get better
> at it." I think we've got to focus on what kids are good at instead of ... I think we focus

way too much on data, but what kids are deficient in, and what they're not good at versus what they are good at.

In sum, this study's population stated that they rely upon a range of data points when it comes to instituting equitable academic programming for all students. While most participants favored a philosophy centered on utilizing both quantitative and qualitative data to determine student needs in order to institute equitable academic programming, all participants saw value in utilizing one particular data point to discern student needs – grading.

Summary of Research Question One.

Study participants uniformly agreed that referencing student data is central to instituting equitable academic programming for students in their schools. Participants demonstrated divergent perceptions on specifically *which* data points to reference when working to institute equitable academic programming for students. However, each participant identified student grades – both past and present – as a strong indicator of student academic ability. Many other data points – whether school-generated, state mandated, or paid for through a third-party vendor – were also referenced as important components to assess student abilities for the purpose of instituting equitable academic programming. Separately, many participants also identified qualitative means of gathering student information as an important factor in driving equitable academic programming. Techniques like using needs assessments, student and parent surveys, student interviews, and informal peer-peer and educator-student conversations were highlighted as effective ways to understand student needs for the purpose of offering them an equitable academic experience.

However, most participants shared perceptions that supported using both quantitative and qualitative student data points when attempting to equitable program for a students academic experience. Participants perceived great value in referencing quantitative data that helps provide

a context for what students need to be academically successful, while at the same time seeking to understand first-hand what both their colleagues have observed, and what the student perceives they need to be successful. However, given the different programming and educational philosophies employed in each school, the manifestation of a philosophy supporting more than one data type looks very different between participant responses.

Research Question Two: "Why do educators perceive particular student data sources are more valuable than others when creating equitable academic programming?"

While study participants were able to share their perceptions relative to the most important student data points educators should use to institute equitable academic programming, it is necessary to better understand *why* participants identified particular data points. By understanding why study participants identified some as more valuable than others, recommendations can be made, and conclusions can begin to be drawn to bring closure to research question. Study participants identified three primary reasons driving their perceptions of most valuable data points: a) to better understand how to define student success, b) to ensure specific student needs are being identified, and c) to ensure educators *learn* the student as an individual. Examining these reasons will help provide context around the thematic portrayals of commonalities between participant responses.

Identify Specific Student Needs.

Participants communicated a broad range of perceptions respective to using student data to understand student academic needs. Similar to earlier responses, participants demonstrated perceptions that valued taking both quantitative and qualitative data into account in order to better understand both the value of the data, and how it can help students by empowering educators to differentiate academic opportunities. When asked about why the data he identified

as most important to instituting equitable academic programming, Rhett stressed the need to take

a comprehensive approach to adequately understanding individual student needs. Rhett stated:

We're looking at grades, we're looking at performance on standardized tests. We're looking at our performance on classroom assessments, and then we're looking at just are the kids seeming to participate more. Are they more actively involved in the classroom? Are they commenting about Math not being drudgery or a fear-inducing experience. It's quantitative and qualitative [data] again… We look at every student and see if they're in where it would seem they should be in the correct course.

Furthermore, Rhett emphasized the importance of using environmental, peer, and relational

advantages in order to access data that best identifies student needs.

> If we see a student coming into Geometry in ninth grade with an A or a B from middle school, we're probably not going to dig deeper because something must have been going right there. And history has told us that those students tend to be performing where they need or how they should be expected to come ninth grade in a Geometry class. If they have a C and they're signed up for Geometry, we're going to have some conversations. Or the conversation happens when we're just talking with our colleagues at the middle school and they say, "You better watch this student. You better watch that student." And so is holistic the right word maybe? It's part of knowing your kids. And we're fortunate to be in a place where we can know our kids. We can know them even before they get to the high school.

Similarly, Jeff highlighted the need to be comprehensive and shrewd in one's approach to

accurately understanding student need when he stated:

> So you need that data to figure out; where is the student strong, where are they not, where are they struggling, what is it that's causing that struggle? You know. Is it they need more time, they need extended time? Again, is it just a reading thing? A lot of times in math, I've got a kid who can do math, no problem, but if you give him a word problem, he's going to struggle. It's got nothing to do with math. It's got nothing to do with arithmetic. It has to do with the kid can't read. So you need that data to figure out those points and those strategies to even the playing field and give that kid the same opportunity as anyone else.

Lucy stated the need to connect understanding student academic needs with student social-

emotional needs; her perception centered on interconnectedness between the two dynamics. Lucy

explained:

Well, data will help show where the needs lie, where either things aren't being communicated, or it just helps me see what students know, what they don't know, and what they need to know. I think it helps to know where students are at. So it helps us meet kids where they're at and share the knowledge that they need to know in regards to the academic piece. On the academic side, there's a definite requirement that they cannot stray from. So it helps me understand where the gap is that they're not; what they do not know, what they need to know, and all the opportunities. And then on the social emotional side, it definitely helps me see the needs, or what are the issues that kids are facing right now. I take where the needs are and/or what the need is, maybe what the issues are and/or where the gap of information lies. So from that, creating programming to fill those needs.

Furthermore, while Charlie also perceived value in taking a comprehensive approach to discerning student needs, he emphasized the need to remain flexible in one's approach. In addition, and on a note separate from other participants, Charlie stated the importance of the role understanding student academic needs plays on the larger school curricula. Charlie explained:

We do the same way also though with when we're looking at the programming, whether it's on an annual basis in terms of how many sections of calculus are we going to have? Well, you're going to look at data in terms of achievement, whether it be grades, whether it be MCA scores, ACT scores, all that kind of stuff, to determine how many sections we'll have the following year. But then again at the same time, sometimes we throw all that garbage out the window if kids decide like, "Hey listen, my scores are here, but I want to try and do this." A lot of times we just go with that. So it's tough. I mean there's no science behind this for sure, at least on our end.

Mark also incorporated the impact discerning student learning needs has on school curricula. When asked about how educators validate their efforts to institute equitable academic programming, Mark stated:

Well, I guess it comes down to personalizing learning. Every kid is different, and unfortunately when you evaluate someone on the basis of the test it's a generalization. And whatever test it is, whether it's the MCA, or the ACT, if you score this, then you're that. That will give you one perspective. But I know kids that maybe aren't going to excel in those particular areas, but give them an opportunity to work with their hands or give them an opportunity to get on a stage or... So again, knowing the kid and knowing what their strengths are and then building curriculum around that, or at least building programing that will support those strengths…as our counselors go through the process of registration with kids they access all of that data to try to help guide the kids in the selection of their courses.

Consequently, participant responses strongly acknowledged the importance of understanding individual student needs in order to institute equitable academic programming, irrespective of the data used to drive those efforts. In addition, participants also emphasized *learning* the student on a deeper, more individualized level in order to gain perspective on their stated needs respective to equitably offering students academic opportunities to succeed in school.

Learning Students.

Another theme that emerged when analyzing participant results was that of the need for educators to learn the student as a person, and also understand student perceptions as they relate to the equitable academic programming offered to the student. Participants offered many different solutions to digging deeper and truly learning individual students in order to discern student needs that may not come through in data reports, or even 1-1 conversations with the student themselves. Samantha explained, "…The numbers can only give you so much information and so, it's a good place to start, but we get to know the kids and so, as you learn more about them." Mark insisted that truly learning a student is paramount to ensuring a student has access to the academic programming necessary for them to become successful, and continue to develop the skills and strengths students possess. Mark stated:

> Knowing the kid and knowing what their strengths are and then building curriculum around that, or at least building programing that will support those strengths

Participants also connected the need to reference data while seeking a deeper understanding of students as individuals. Anita intimated the role data plays in separating students from one another, which helps open the door to truly learning students. Anita explained:

> What the data does, is make us take a step back and take a look at what the real story is, and especially what the real story is happening with our kids who are not necessarily showing those behaviors that are constantly getting our attention.

Furthermore, Rhett echoed the importance of using data as a segue into constructing a deeper understanding of the personal side of ensuring students are offered equitable academic programming. Rhett explained how educators in his school begin with looking at students as a whole group before more closely exploring who students are on a personal level. Rhett stated:

> We review everyone who's in the course and look back at how they've done grade wise in previous classes, and then for ones where something seems amiss by that, we look in Viewpoint now to see how they've done on previous assessments in previous classes, drilling down where we can to STRAND level data if need be. We don't do that for every student, but we do it where something just seems amiss, and that's the qualitative piece coming in and just knowing students and who they are and all that they do.

Jeff and Helen emphasized the need to consider the adult responsibility in creating opportunities to truly learn students as individuals. Helen shared her perception of an ideal situation that would allow educators to best understand students on a deeper, more personal level. Helen stated:

> [Students] would each have to have some type of an advisor and that advisor would have to sit down with them in personal appointments and go over their plan. Maybe even their plan with their parents because sometimes I think kids don't even know what their needs are.

Jeff very clearly stated importance of adults needing to work together, and with student stakeholders in order to ensure all adults involved with a student understands the individual on a personal level. Jeff stated:

> I can go in and I can see if the kid's been in School A since kindergarten, I can see every grade that student has gotten throughout all of the years until they got here. If I have specific questions, I'll go back to their case manager at the middle school and say, "Okay, so I see Bobby's got this, this and this; what did you see as the hurdle? What was causing him to struggle so much in there?" Or I'll talk to the parents themselves. A lot of times, the parents are excellent resources and there are times where the students are really good resource. Some of them shut down a little bit, but by the high school level, I go directly to them and I say, "Okay, what's the deal? Why is this happening? What do we need to do? What's not working here?" And I ask them; they know it better than we do. They know themselves better than we do.

In concert with emphasizing the need to understand students as individuals, participants also acknowledged the importance of recognizing whether or not efforts to institute equitable academic programming for students have proven successful.

In addition, it's important to note that in two cases, study participants strongly connected understanding and knowing the student on an individualized level to what a successful equitable academic program looks like for a student. Samantha intimated that students would present confidence in their academic programming, knowing they will be supported in the event they struggle. She stated:

> [Students] they would know, they could get what they needed without feeling ashamed or without feeling embarrassed that they would know that the help they're getting in any format, there would be product if they need help

Jeff stated that students would show confidence in the classroom, knowing that they have a realistic opportunity to succeed. Jeff stated, "I believe [what it looks like] would be that student walking into a classroom and honestly feeling like they have a clearly defined opportunity to be successful."

Summary of Research Question Two.

Building off of research question one, question two seeks to better understand the rationale behind why educators gravitate to particular data sources when seeking to offer students equitable academic programming. As demonstrated in the analysis of research question one, many different philosophies exist when considering where to start with offering equitable academic programming in a school. However, upon analyzing participant responses, a common attitude bonded participants. Participant responses centered on both using chosen data sources to best identify student academic needs, and finding ways in which to truly understand, and *learn*, students. Participant perceptions demonstrated that developing a deep understanding of individual student needs empowers educators to offer the best quality of equitable academic programming to their students.

Research Question Three: "How do educators define a threshold for the quantity of

data to be utilized, and limited, in order to develop equitable academic programming

for students?"

Research question three represented a query that proved rhetorical for many

participants, as results demonstrated that there exists no easy answer to the question.

When asked about identifying a threshold for using, and limiting, data in creating

equitable academic programming, Jeff opined:

> I think that's very individual. It depends on the student. What are you seeing of the student and what data do you need to address that? If the student's doing great everywhere else, but say one class, then I would just strictly be focusing on that class. What data do I need? Do I need missing assignments? Do I need to look at the academic testing? Do I need to look at past history? Do I need to look at classroom setting? Is it something in that classroom? It's really, really student driven. If I got a kid here who's Cs and Bs, doing well, has minimal support, I'm just looking at that. I'm talking to the kid, "Hey, how's it going? Because you're a little weak here. What do you need?" So it's really, really individualized, will determine the amount and what type of data I'm going to go for.

Leah shared a similar perception when she stated:

> I feel like that's probably on an individual level, where I feel like, okay, this is a big enough margin of a gap, or... I guess I don't really have a number or a percent. It's kind of a personal decision of saying, okay, yep, this seems like it's a big enough issue. Enough kids have mentioned it or enough people have answered that they don't know, or things like that to fill that, or to create some type of programming to reiterate that information, whatever it may be.

Charlie's perception about creating a threshold was more centered on ensuring quality data that

reveals trends in student data is used, and on making sure enough data is being used to accurately

discern a need. Charlie stated:

> I think we try to find at least a couple of trends or at least a couple that match. Just being as cynical as we are. I mean I think it's easy enough to find one data point that's point you in a direction. But can you find two that suggests? That's probably the right thing to do. So we like to find multiple sources or multiple data points pointing in the same direction.

Separately, some participants were unable to offer a definitive perception. Helen was uncertain

about where to establish a threshold on data usage respective to instituting equitable academic

programming. Helen explained, "It's not specific for any particular student in my case. How do we decide what's necessary to use and what's necessary to omit? I think it's been trial and error over the years." Mark also perceived the line on when to include, and when to limit, data to be uncertain and largely up to the individual. Mark opined, "Well, you know, I don't know if there's anything definitive about a line. I think you – as much information as you need to be comfortable in the decision that you make in providing equitable access." Anita offered a perspective that resolutely supported educators using as much data as possible to learn about student needs. Anita stated:

> I don't know if I can draw the line, because I always look at something and then I want to know more. I want to know what's behind that. And I feel like this addresses equity, because you are trying to give all kids what they need. And so with the data, I don't think you can ever have too much, because the driving force behind why something is happening or what a kid needs could be very different. And so you're trying to find out that reason. I don't know. I just think you can never have too much. I really don't. I'm always asking more questions and wanting to know more.

Helen shared Anita's perception when she reflected on her own school's data usage. Helen stated, "I don't think we do know if what we use is enough, to be honest. I don't think we've ever looked at that and assessed that." Given the very subjective nature of research question three, participants generally acknowledged the importance of validating the effectiveness of the equitable academic programming they were responsible for instituting.

Participants were asked how to evaluate whether or not academic programming in their schools is predicated on equity – many tied the evaluation back to their individual perceptions on the usage of data to drive equitable academic programming. Many participants related that both quantitative and qualitative data should be used in order to adequately validate successful integration of equitable academic programming for each student.

Samantha stated:

I would say that you see the numbers on the paper change, but that you also have parents and community support that, whatever we're doing is working and that you have people asking about, "Oh we did this, can we do this again?" And people remembering the strength of it, and that the program continues, with strength I guess.

Lucy shared a similar experience, stating that a review of both quantitative and qualitative data was necessary to properly evaluate the success of the programming. She explained:

I guess I'd have to go back. I'd have to assess and analyze what data I've taken and what I've done to meet those, to improve things. So if I create some programming, then I would go back and say, okay, I used my student survey, I used the staff survey, I used the parent survey, but I didn't use XYZ. But it'd be really hard to measure, I think, how much of it was used.

Mark also shared his perception on the importance of using both quantitative and qualitative data to validate the effectiveness of an adequate equitable academic program. He stated:

I think you know based on the outcomes that you have for kids and where they end up. I mean ideally they end up walking across the stage and shaking my hand. That's certainly an indicator…I think feedback. We do surveys with our seniors and with our parents, so they give us feedback.

Furthermore, Charlie intimated that both quantitative and qualitative data must be considered when evaluating successful equitable academic programming – both on an individual level, and a school-wide level. Charlie stated:

You're going to hear kids, you kind of hear families and people. Are they happy with the program? Are there people saying, "Man, I wish we had this"? Just in conversation. I think you're looking at enrollments in terms of classes. If we've got nobody taking our shop courses or our trade courses, we're probably doing something wrong. Maybe we have to beef up some other area. If we're exceeding capacity in other areas, maybe we need to reduce in other areas to add more there.

Joe's perception centered on a comprehensive evaluation that centers on personal educator experiences, and that takes many different data points – qualitative and quantitative – into account. Joe explained, "we use our own experiences [with interpreting data] and the validation comes after that time. Anita, on the other hand, perceived quantitative measures – specifically student grades – to be the best indicator of equitable academic programming. Anita explained,

"When we see that success in either our failure rate going down, when it gets driven down, not only as a whole school, or as a whole grade, but just individually for each student."

Summary

Participants again returned to the theme of utilizing both quantitative and qualitative data to determine whether or not academic programming put in place for students is, indeed, equitable. Participants were generally less resolute on specific data points referenced when gauging the effectiveness of equitable academic programming. Considering student stakeholder perceptions and reactions to academic programming was a component shared within the context of this research question, but did not come up with responses relating to research question one and two. Consequently, the attitude amongst participants demonstrated a propensity to determine student needs and decide which tools to use in order to institute equitable student programming, but consult a wider audience – including students – when evaluating programming.

Synthesis

The purpose of this study was to gain educator perceptions respective to how to best use student data to drive equitable academic programming. This study explored the ways in which educators approach data, decide upon which types of data to use, and decide the amount of data to use, when seeking to institute equitable academic programming for all students in their schools. This study sought to establish a better understanding of the ways in which educators utilize student data to ensure an equitable academic experience for all students. Clarifying the relationship between data and equitable academic opportunities creates a resource for educators to utilize when seeking guidance and support in their efforts to both evaluate equity in their schools, and take steps to institute more equity into their own curricula. Young educators, in particular, should find the results of this study helpful, as it offers a comprehensive analysis of a

process by which they may very quickly become overwhelmed. Consequently, this study was designed to yield highly generalizable results and conclusions, so as to empower educators, irrespective of job title, to better understand the relationship between student data and academic equity.

This study was anchored by the following three research questions:

1.   What data do educators perceive to hold the most value when creating individualized, equitable academic programming for all students?

2.   Why do educators perceive particular student data sources are more valuable than others when creating equitable academic programming?

3.   "How do educators define a threshold for the quantity of data to be utilized, and limited, in order to develop equitable academic programming for students?"

The findings presented in this chapter answer the research questions upon which this study was predicated. The findings are presented in the following categories:

1. Educators perceive student data to be an integral component to instituting equitable academic programming for students; educators view both quantitative and qualitative data points should be referenced in order to adequately institute equitable academic programming for students.

2. Discerning specific student academic needs, and learning students on an individual level influences the data points educators rely upon to use as a vehicle to institute equitable academic programming for all students.

3. Educators need to employ different techniques, and observe differences in student needs, in order to determine the adequate amount of data to use when instituting equitable academic programming.

The above findings were generated from interview results that were analyzed, coded, and developed into themes to be presented as the results of this study.

Analytic Category 1: What data do educators perceive to hold the most value when creating individualized, equitable academic programming for all students?

The first research question sought to identify the most valuable data sources referenced by educators when attempting to institute equitable academic programming for all students. All study participants strongly affirmed the need to reference student data points in order to offer students equitable academic programming. Participant responses demonstrated both quantitative and qualitative student data points to hold value when considering equity in academic programming. Study participants identified a broad range of quantitative data points necessary to identify student academic needs. Amongst the range of quantitative data points highlighted by participants, only MCA scores and past and current student grades were identified as actively used by five or more of the nine participants. This, again, demonstrates the wide variety of student data points available to educators, as well as the broad range of ways in which educators utilize student data to drive equitable academic programming.

Participants detailed student feedback, survey data, and 1-1 conversations with students and staff as the most beneficial qualitative data to reference when instituting equitable academic programming. Similar to the lack of a sweeping trend governing quantitative data usage to discern student academic needs, participants reported many different strategies in their approach to gather qualitative information from students designed to increase equity when programming

for a student's academic experience. Participants generally recognized both other educators and students as pivotal partners in the process of designing equitable academic programs. Few participants recognized influences outside the schoolhouse as key contributors to designing equitable academic programming for students.

Analytic Category 2: Discerning specific student academic needs and learning students on an individual level influences the data points educators rely upon to use as a vehicle to institute equitable academic programming for all students

Study Participants were asked to explain why they perceived particular student data points as being the most beneficial to their efforts respective to instituting equitable academic programming for students. Participants generally perceived their preferred data points to help institute equitable academic programming in two ways: a) they help educators identify and target specific student needs, and b) they help educators *learn* individual students, which provides context around which to utilize student data for the sake of instituting equitable academic programming. As the results satisfying research question one demonstrate, educators perceive many different data points as being valuable to their individual efforts relating to instituting equitable academic programming. However, participant perceptions converge when considering the purpose behind using the different data points. Though participants aligned on using student data to discern student academic needs, a slight divergence was noted within this dynamic. Some educators reviewed student data for the primary purpose of discovering student strengths, whereas most participants searched for student weaknesses, or opportunities to improve. However, the purpose behind these approaches once again converge, as reviewing student strengths and weaknesses are both designed to aid in the process of delivering students an equitable academic program.

Analytic Category 3: Educators need to employ different techniques, and observe differences in student needs, in order to determine the adequate amount of data to use when instituting equitable academic programming

When asked to share perceptions on observing a threshold for the quantity of data to be utilized, and limited, in order to develop equitable academic programming for students, participants communicated value in considering individual student circumstances. Participants shared that it is necessary to collect more data on students demonstrating greater, or more specific, needs that students who may be performing at an acceptable academic level. Some participants responded that no discernable limit could be placed on the amount of data necessary to understand student needs, essentially concluding that as much data as possible should be used to drive equitable academic programming. Ultimately, most participants identified the adequate amount of data necessary to equitable program for a student's education as tied to the individual student and their unique situation. Thus, creating a cause and effect relationship with data usage thresholds.

Conclusion

This chapter details the findings of this research project predicated on identifying educator perceptions of how student data is used to institute equitable academic programming for students. This study's population consisted of nine participants – three teachers, three counselors, and three principals – each working in public 9-12 schools with student bodies between 500-1,000 students. The findings support that educators do perceive both quantitative and qualitative student data to be of paramount importance when attempting to institute equitable academic programming in their schools. In addition, the results of this study demonstrate that educators

perceive a need to be flexible when attempting to define a reasonable threshold for the amount of data necessary to develop equitable academic planning for students.

Adams' Equity Theory centers on the input versus outcome – this study used Adams' equity Theory to anchor it in two ways: a) clearly define the perceived value of the input – in this case student data, and b) define the ways in which educators utilize their input to arrive at the desired outcome – equitable academic opportunities for students. These two dynamics demonstrate an important relationship that must be observed in order to establish a deeper understanding of how educators can best utilize student information to ensure each individual an equitable academic program. By utilizing Adams' Equity Theory to frame this study, educators will have the opportunity to better understand where their peers see value in utilizing student data, as well as the ways in which their peers utilize student data to arrive at an output that encourages equitable academic programming for all students.

The final chapter will offer a discussion and interpretation of the findings as they relate to the body of research that focuses on utilizing data to drive equitable academic programming. Study limitations, opportunities for future research, and practical use of study results will also be discussed.

Chapter 5

Summary of Results

This chapter will offer a discussion and interpretation of study findings, as well as consider the ways in which findings relate to research centered on educator usage of student data points as they relate to the institution of equitable academic programming for students. Contrasting the results of this study with pre-existing literature on the topic will help this study add to the body of research existing to help educators understand both the practical application of, and evidence-based empirical research surrounding, student data usage to drive equitable academic programming. In addition to outlining a discussion around student data usage and its relationship with equitable academic programming, this chapter will feature an analysis of the limitations working against this study, considerations for future research on the topic, and an examination of the practical usage of the results generated by this study. This chapter is designed to offer closure both on how this study's results satisfied the research questions, and where limitations and opportunities for future research exist.

The purpose of this study is to better understand what student data points public secondary school educators feel are necessary to consider in order to create equitable learning opportunities for all public secondary school students, irrespective of ability level or social disadvantage. A rich body of research exists to demonstrate value in utilizing data to facilitate academic growth and opportunity – fewer studies explore the ways in which data can be used to ensure equitable academic programming within the public schoolhouse. While many studies explore the effect of utilizing particular student data points to isolate and remediate student learning deficiencies, this study seeks to alter the lens through which data can be used as a tool to support students. Rather than seeking to directly link data-driven student programming to student

achievement, this study focuses on discovering ways in which data can be used to create

equitable learning opportunities for all students that takes into account student aptitude, student

feedback, and educator perceptions. This study is conducted within the context of Adams' Equity

Model, which seeks to establish a balance between the input of data necessary to consider

equitable academic programming for students, and the output of a tangible, equitable academic

plan students can utilize to maximize their respective learning potential.

This study gathered the perceptions of public educators respective to the role student data

play in creating equitable academic programming. All study participants worked with students in

grades 9-12, and with student bodies numbering between 500 and 1,000. Principally, this study

was based on the following research questions:

1. What data do educators perceive to hold the most value when creating

    individualized, equitable academic programming for all students?

2. Why do educators perceive particular student data sources are more

    valuable than others when creating equitable academic programming?

3. How do educators know when a proper balance has been struck

    between the amounts of student data utilized to create equitable

    academic plans, versus an actualized educational plan that offers

    equitable academic opportunities for all students?

This study utilized semi-structured participant interviews used to ascertain participant

perceptions respective to how educators can best utilize data to drive equitable

academic programming for public 9-12th grade students. Each participant's responses

were transcribed and coded in order to link common ideas and highlight key

differences in participant responses. Participant responses were grouped into themes;

alternative and less common perceptions were also identified in order to capture both

broad, and granular, participant perceptions as they relate to the research questions

central to this study. Some very important themes emerged upon analyzing and coding

participant responses. Participant responses worked both to validate, and in some cases

challenge, a body of research highlighting the importance of: a) strategic use of student

data in creating equitable academic programming, b) the need to consider both

quantitative and qualitative data when coordinating equitable academic programming,

and c) the need to include students and peers as primary stakeholders when instituting

equitable academic programming on a school-wide level.

Literature reviewed for this chapter centered both on educator perceptions as they relate

to utilizing for quantitative and qualitative data to institute equitable academic programming, and

on Adams' Equity Theory framed within the context of educator data usage. While a relatively

thorough body of literature exists to review the ways in which educators utilize data to maximize

equitable programming opportunities, scant research has been published in the time it has taken

to complete this study.

Discussion

This study hypothesized that students gain reliable access to equitable academic

opportunities when public secondary school educators utilize both quantitative and qualitative

student data to create student academic programming. The results of this study demonstrated

support for the hypotheses, as participants clearly communicated the value in utilizing particular

data points when seeking to institute equitable academic programming for all students.

Furthermore, study results also serve to offer context around the quantity of data educators

perceive to be adequate when developing equitable academic programming. Study participants

unanimously identified utilizing student data points as an integral step in the process of creating

equitable academic programming for public high school students. Furthermore, participants also

communicated great value in utilizing for quantitative and qualitative data sources. Participants

identified the need to quantitatively review student aptitude, as well as gain direct, and indirect,

feedback on student academic need through inter-personal communication with the student

themselves, educators, and families in order to institute equitable academic programming.

This study's sample population demonstrated diversity insofar as professional role,

experience in the field, and geographic location – some proving much more rural than others. As

participants reliably perceived student data as an important component of instituting equitable

academic opportunities, it is reasonable to conclude that the favorable attitudes towards using

student data transcend educator roles, experience, and location. This conclusion works to

strengthen this study's reliability and external validity – elements of paramount importance when

designing this study. Furthermore, participants identified a broad range of data points they

perceived as valuable when working to institute equitable academic programming. Participants

perceived value in referencing both quantitative and qualitative data points to drive equitable

academic programming; in particular, participants perceived value in *combining* quantitative and

qualitative data points in order to both gather comprehensive evidence of student academic

ability, as well as learn student needs and desires respective to instituting equitable academic

programming.

The conclusions of this study are as follows: a) participants perceived both quantitative

and qualitative student data to be an essential component of instituting equitable academic

programming, b) participants perceived particular data points as more important than others;

participants communicated that some student data points offer better insight into student

academic ability and curricular needs, and c) participants perceived a need to observe each student's academic situation as different, thus, requiring an individualized approach to utilizing data points. Consequently, participants could identify no discernable amount, or limit, of data necessary to reliably institute equitable academic programming.

Educators Perceive Value in Using Quantitative and Qualitative Data To Institute Equitable Academic Programming

Study participants perceived there to be great value in utilizing data to institute equitable academic programming for students. Furthermore, participants highlighted the need to consider both quantitative and qualitative forms of data in order to ensure an understanding of both student aptitudes, and expressed curricular needs from students and stakeholders. A strong body of research exists to validate the importance of utilizing student data when formulating equitable academic programming. This body of research works to support the positions of the educators used to formulate this study's sample population.

Earl and Katz (2002) argue using student data to drive instructional and academic programming decisions is no longer a choice for educators – it is a necessity. According to a meta-analysis completed by Sun, Przybylski, and Johnson (2016), most teachers believe that using data to help inform instruction is definitely helpful. These are attitudes supported by study participants, as the sample population unanimously expressed the importance of utilizing student data in order to institute equitable academic programming for all students. In particular, study participants saw value in referencing student data for the purpose of both identifying specific student needs, and creating systems by which educators can deliver students the types of equitable academic opportunities they deserve. This perspective is shared by Hootstein (2002, as referenced in Gentry and Springer, 1994) when he argues in order to maintain a paradigm in

which academic programming remains centered on equity, academic programming must be focused on student needs, interests, and experiences, while at the same time encouraging exploration in learning opportunities germane to individual student interests. Study participants largely observed this stance, expressing value in both quantitative and qualitative student data types. Study participants intimated that using both quantitative and qualitative student data provides both context and structure around the practice of ensuring all students gain access to equitable academic programming. Utilizing multiple forms of data is a perception supported by Viera and Freer (2015) when they posit that educators must resolve themselves to instituting a structured method by which a comprehensive suite of student data is used to drive academic programming. In addition, Poortman and Schildkamp (2016) argue:

> Teachers can use data, such as assessment data, student background data, and classroom observation data, to determine the learning needs of their students. They can adapt their instruction accordingly, and this can lead to school improvement in terms of increased student learning and achievement.

Utilizing quantitative student achievement data, as well as qualitative data such as student feedback and educator observations, offers educators a wide range of data points from which to choose when creating equitable academic programming designed to meet the individualized needs of all students. Similar to the attitudes of this study's sample population, Fowler and Brown (2018) argue that by using student data to drive academic programming, educators can make more informed decisions about how to best educate and support students. Furthermore, Sun, Przybylski, and Johnson (2016) posit that many educators are moving towards a data usage model that features usage of both quantitative and qualitative data:

> From a research point of view, researchers are moving towards mixed methods from the typical approach to this topic more than 10 years ago when majority of the studies used a qualitative research design. This trend indicates a more matured approach to this problem, moving from describing what is going on in the early state of the inquiry

towards examining relationships between teachers' use of data and its antecedents, shapers, and impacts.

The aforementioned research suggests this study's sample population features a comprehensive, progressive attitude towards utilizing student data to drive equitable academic programming.

While participant perceptions aligned on the intentional use of student data to drive equitable academic programming, some differences existed between the preferred metrics to be utilized in order to create equitable academic programming. However, each participant was able to clearly state the types of data they reference in their pursuit of ensuring academic equity. Consequently, this leads to another key similarity – while preferred data points differed, the methods by which participants used student data all proved intentional within their particular context. Participant attitudes aligned around using student data to structure their approaches to instituting equitable academic programming – a distinction with highlighting, and one supported by the greater body of research surrounding student data and academic equity. Rutledge, Cohen-Vogel, Osborne-Lampkin, and Roberts (2015) contend that schools must exhibit strong and deliberate data structures, as well as give particular attention to both students' academic, and social, learning needs in order to facilitate higher academic performance. Furthermore, Lane, Oakes, Menzies, Oyer, and Jenkins, (2013) posit that maintaining a tight focus on student data points that clearly identify both student strengths, and opportunities for growth, empowers educators to ensure equitable academic opportunities for all students.

Data Must Identify Student Academic Needs; Empower Educators to Learn Students

The second research question driving this study is directly related to the first, and focuses on discerning *why* particular data points are favored over others when designing equitable academic programming for students. While the researcher expected participant responses to center on the perceived value behind specific metrics, answers instead focused on broad themes.

Participants identified two particular reasons for relying upon particular data points identified as most important to instituting equitable academic programming: a) to more accurately discern student academic strengths and weaknesses, and b) to learn the personalities and situations influencing students in their particular situations.

While little consensus existed between participants respective to exact data points to be used in order to best institute equitable academic programming, participants identified the greatest benefit to utilizing their preferred data points as identifying student academic strengths and opportunities. Lane, Oakes, Menzies, Oyer, and Jenkins (2013) argue that maintaining a tight focus on data points that clearly identify both student strengths, and opportunities for growth ensure equitable academic opportunities for all students. Similarly, Eagle, Dowd-Eagle, Snyder, and Holtzman (2015) argue the need for educators to acknowledge both academic data and teacher interviews in order to understand the individual supports each child needs to experience academic success. As the results of this study demonstrate, participant perceptions differ when it comes to deciding upon the particular data points best used to institute equitable academic opportunities for students. However, a common attitude centered on how to best offer students opportunities to experience academic equity and success bonded study participants. Kowalski and Lasley (2009) argue that situations where student education experiences are poorly matched with demonstrated abilities and interests can be avoided when educators use student achievement data, and more specifically, the *right* student achievement data, to offer students high quality, equitable academic experiences. While the perception of what constitutes the "right" data differed amongst this study's population, the practice of utilizing data to produce equitable academic programming proved consistent.

Study participants also acknowledged that referencing student data while considering the ways in which individualized academic programming helps educators understand the personal, situational, and contextual differences between students and their respective academic needs. In essence, participants intimated that referencing student data helps educators *learn* the student, and the situations governing his or her academic needs. Participant perceptions respective to utilizing student data to better understand students as individuals who exhibit specific needs is a dynamic addressed by field research. There exists a robust body of research to support participant perceptions that understanding the person behind the quantitative metrics, and the needs expressed by those number, is critically important to ensuring equitable academic programming for all students. Gentry and Springer (2002) argue the need for educators to consider student feedback and perceptions when creating student education plans, as the involvement in the student as a stakeholder of his, or her, education is paramount to the student following through on such a plan. Similarly, Armstrong and Anthes (2001) found that by utilizing achievement data to better identify student needs, teachers often were able to more accurately pinpoint student academic needs and maintain high expectations for students demonstrated to be "at risk." Utilizing student data while outlining academic programming has also been shown to strengthen student stakeholder groups, as increases in the frequency of positive conversations colleagues, parents, and students have with educators about academic programming have been observed (Wayman & Stringfield, 2006).

Educators Must Treat Student Situations Independently of One Another In Order To Determine The Amount of Data Necessary to Offer Equitable Academic Programming

The third key finding of this study centers on discerning participant perceptions respective to the amount of data necessary to institute equitable academic programming for all

students. Having established that data is an integral component to the process of instituting

equitable academic programming for students, and that particular data points hold greater value

than others, participants were asked to define the amount of data necessary to adequately

institute equitable academic programming for students. Said another way, participants were

prompted to define the threshold between failing to fully capitalize on the input of using student

data to drive equitable academic programming, and becoming mired in the copious amount of

student data available to educators. Bowers (2010) argues:

> At no other time have educators, parents, students and policymakers had so much assessment information with which to make sense of educational reform; at the same time, these groups also receive little guidance regarding what the information means, its quality or what to do with it. Measurement specialists should not be surprised, if, in the face of assessment overload, educators rely increasingly on intuition or arbitrarily pick and choose from discrepant assessment results when they make important educational decisions.

Consequently, educators must practice both diligence and restraint when deciding the amount of

data necessary to institute an effective, equitable academic program. Participants were asked to

share their perceptions on what constitutes an adequate amount of student data to effectively

institute equitable academic programming for all students. Participant perceptions relating to the

quantity of data necessary to offer equitable academic programming were contextualized using

Adams' Equity Theory (1962). Adams' Equity Theory represents a framework by which

educators can more precisely define the balance between discerning the student data necessary to

design equitable academic programming, and the tangible product of an equitable academic plan

for each public school student. Adams' Equity Theory is predicated on an input versus output

model. Adams (Adams, 1963 as cited in Miner, 2015, p.136) argued, "Equity, balance, or

reciprocity exists when outcome-input ratios for the individual and the reference source are

equal, and the motivating force of equity can arise when there is a departure either way from the

steady state." The purpose behind prompting study participants to quantify the amount of student data necessary to constitute an adequate input of student data was to create a result that limited, or completely mitigated, cognitive dissonance around the task outcome (Adams, 1963).

By considering participant responses through the lens of Equity Theory, educator perceptions regarding the proper amount of student data – the input – necessary to create adequate equitable academic programming for students – the outcome – is established. It is important to discern this balance, as educators have access to copious amounts of student data; given the vast amount of student data in existence, discretion must be used when deciding upon the types of student data to integrate into academic plans (Kowalski & Lasley, 2010). Participant perceptions centering on the quantity of student data necessary to institute equitable academic programming offer definition around understanding the proper balance between the input of student data necessary to create an outcome of equitable academic programming for all students.

Despite questions designed to directly discern participant perceptions respective to defining the *right* amount of student data to reference in order to create equitable academic programming for all students, participants were unable to quantify a precise input of student data to be used in order to create an outcome of equitable academic programming. Instead, participants gravitated towards a student-centered attitude rooted in understanding individual student needs before deciding upon the amount of effort spent on referencing data to ensure equitable academic programming for students. This attitude ties back research questions one and two that sought to: a) discern participant perceptions on the most important data to reference when designing equitable academic programming, and b) understand *why* participants identified particular data points as more valuable than others.

Viewed through the lens of Adams' Equity Theory, participants were faced with the

challenge reconciling preferred data points, in addition to the reasoning behind using those data points, with the quantity of those data used to institute equitable academic programming. Participants perceptions communicated the need to understand individual student needs, as well as personal situations affecting them in the school setting, in order to determine the amount of data necessary to equitably program for each students' academic needs. Consequently, as participants demonstrated in responses to research questions one and two, educators must seek to understand individual student needs in order to determine both the structure around using data to address student academic needs, and the input of student data necessary to create the outcome of equitable academic programming for all students.

Limitations

Study Limitations

One limitation of this study is that only adult perceptions were considered. As this study and the supporting literature demonstrates, adult perceptions are an important consideration centering on the role data plays in ensuring students are granted access to equitable academic opportunities. However, many stakeholders hold a vested interest in ensuring students receive equitable academic programming. While the results of this study offer practical insight and direction to educators seeking ways in which to best utilize data to institute equitable academic programming for all students, adding student perceptions to the same research questions could offer contrasting, or corroborating perspectives. A strong body of research states students should be a partner when considering academic programming – this measure helps to ensure equity, as the student is able to offer direct feedback.

Another potential limitation is the existing lack of prior research done to specifically address how public secondary educators utilize data to institute equitable academic

programming. Much of the research built around the topic of utilizing data to drive student programming centers on instituting interventions to help students hone in on a particular deficiency, rather than on work that aims to institute equitable academic programming on a school-wide basis. Additionally, there also exists a healthy body of research relating to marginalized populations and the struggles associated with achieving academic equity in public schools. While each of these topics do relate to the institution of equitable academic programming, they proved more granular in scope than this study, which sought to consider academic equity on a broader scale irrespective of specific academic deficiency or demographic marginality. This limitation created a dynamic in which research supporting the scope of this study was very difficult to locate; consequently, broader ideas presented by studies centered on different components of academic equity were utilized both to find similarities and differences between ideas and theories relating to academic equity. While this is not all bad, a body of research focusing more on instituting academic equity for student bodies at large, rather than specific populations, would have helped strengthen the external validity of this study.

Delimitations

Delimitations worthy of consideration include: a) the number of participants chosen for this study, and b) the decision to focus on the adult perspective. This study was predicated on gaining perspectives from nine participants. While this number is reasonable from a research standpoint, a larger number of participants could have resulted in study conclusions demonstrating more reliability amongst participants. This measure may have offered audiences a thicker set of results and recommendations upon which to predicate their own practices related to utilizing student data to establish equitable academic equity within their own schools.

Furthermore, this study's decision to focus on adult perceptions omits a complementary

perception identified as integral both by participants and the larger body of research underpinning this study – the student perspective. Considering alternative and complementary perspectives (ex. Students, families, other school support services, etc.) might have added value to the results and conclusions of this study. While the results and conclusions of this study do present particular value, deeper contextual considerations including perspectives outside of school personnel could offer the audience added value insofar as practical consideration and application.

Implications

The implications of this study rest squarely on offering value to public high school educators insofar as the ways in which they utilize data for the purpose of instituting equitable academic programming. As demonstrated by a robust body of research, utilizing data to positively affect student achievement has become normalized behavior within the field of education. Discerning the ways in which educators in different roles utilize data to create equitable programming irrespective of student aptitude or particular need is a key area in which educators need support. As demonstrated by participant responses and supporting research, and while data usage models centered on pinpointing *specific* academic needs of very few students exist, there exists no particular formula to guide educators in their quest to utilize data for the purpose of offering all student an equitable academic experience. The results of this study offers educators perception data gathered directly from their peers – a measure designed to prompt reflection and consideration of alternative ways in which to use data to equitable program for student academics.

Furthermore, the theoretical foundation upon which this study rests – Equity Theory – sought to help define for educators an appropriate balance between the effort and data utilized to

create an output of equitable academic programming for all students. While participants

identified no discernable quantification for the appropriate amount of data to use when instituting

equitable academic programming, the attitude of considering student needs and situations on a

case-by-case basis was established and validated. This finding offers educators in the field a peer

perspective that recommends an intentional understanding of student aptitudes and personal

academic goals before making decisions upon which data points to reference, and the amount of

data necessary to satisfy each student's need for academic equity.

Recommendations for Future Research

Recommendations for further research include: a) emulating the same student design

centering on student perceptions, and b) considering this study's design within the context of

Self-Determination Theory. The design of this study is sound, insofar as it achieved the goal of

discerning adult perceptions around using data to drive equitable academic programming.

However, designing a study to gather student perceptions on how the data they generate for

adults can help or hinder their endeavors to experience equitable academic programming would

offer educators perceptions they simply cannot generate on their own. Furthermore, by creating a

complementary study based on student perceptions, educators would be provided research-based

conclusions that can be used to discern key similarities and differences between student and

professional perceptions on using data to create equitable academic programming. The

perspective created by considering similarities and differences between the ways in which

students and professionals can utilize student data to drive equitable academic programming hold

practical applications. While professional educators certainly construct their own realities around

using data to drive equitable academic opportunities, considering a student perspective – the

individual at the center of the academic programming – a new perception is presented. With this

new perception comes the opportunity to reconcile perceptions and impact the ways in which

educators utilize data to help students experience equitable academic programming in their

respective schools.

In addition, Self-Determination Theory would offer an interesting anchor around which

to construct a similar study. Ryan and Deci's (2000) Self-Determination Theory centers on

considering the ways in which human motivation and utilizing inner resources for personal

development and self-regulation drive human behavior. Within the context of this study, or a

similar study featuring student perceptions, Self-Determination Theory might offer audiences

interesting insight into the constructivist behavior and perceptions around utilizing student data

to drive equitable academic programming. Whereas this study is designed to generate results that

offer generalizable practical value for educators, a study centered on Self-Determination Theory

could prove particularly reflective for educators, as it would offer many unique perceptions on

both the motivation and thought processes behind *why* and *how* student data is used to create

equitable academic programming. While a study grounded in Self-Determination Theory may

offer less explicit practical value, the contemplative nature of the possible results could prove

practical when considered within the context of an individual or group professional development

exercise.

Finally, predicating a similar study on Self-Determination Theory offers an excellent

means by which one can discern perceptions of students on the ways in which the academic data

they generate works to influence their motivation and use of resources in an academic

environment. The results of such a study would offer educators valuable insight into the ways in

which students perceive ease of access to equitable academic programming. Furthermore, such a

study would offer educators insight into how students juxtapose their demonstrated academic

aptitude against their individualized, intrinsic academic programming desires. Comparing and contrasting the results of this study against a student-centered study featuring Self-Determination Theory would offer educators a comprehensive perspective on actions necessary to partner with students in order to institute equitable academic programming on an individual basis.

Conclusion

This phenomenological, qualitative study centered on defining educator perceptions relating to the ways in which data can best be utilized in order to institute equitable academic programming for public school students in grades nine through twelve. The study sought to produce results offering definition around: a) educator perceptions of the most important data to reference when instituting equitable academic programming, b) *why* particular data points were identified as holding greater importance than others, and c) to define educator perceptions around the threshold at which student data should be utilized or limited, in order to develop equitable academic programming for all students. This study was anchored by Adams' Equity Theory; utilizing Equity Theory as the foundation for this study offers audiences the opportunity to consider the ways in which educators define and value student data usage as it relates to instituting equitable academic programming for all students

The results of this study support the stated hypothesis that educators perceive students gain reliable access to equitable academic opportunities when public secondary school educators utilize both quantitative and qualitative student data to create student academic programming. However, study results prove inconclusive insofar as defining a threshold for student data usage to be observed by educators when attempting to offer all students equitable academic programming. This study found: a) participants perceived both quantitative and qualitative student data to be an essential component of instituting equitable academic programming, b)

participants perceived particular data points as more important than others; particular data points offer better insight into student academic ability and curricular needs, and c) participants perceived a need to observe each student academic situation as different, thus, requiring an individualized approach to utilizing data points. Consequently, no consensus was found amongst participants when attempting to define an adequate amount of, or limit to, data necessary to reliably institute equitable academic programming.

The results of this study are aimed at offering educators a generalizable set of peer perceptions and recommendations around which to design data usage models that encourage the institution of equitable academic programming for all students. While confusion and discord around student data usage certainly exists amongst the greater institution of public education, the results of this study demonstrate that common attitudes respective to the ways in which educators can best utilize data to drive academic equity exist. Consequently, educators can use the results of this study to guide their efforts in ensuring students have access to equitable academic programming – a result that provides an equal benefit to students, families, and the communities to which our schools belong.

Appendix

The term "equitable academic programming" must be defined in order for study participants to both accurately interpret, and understand the nature of this survey. Consequently, the term "equitable academic programming" is defined as: The academic opportunities available to students in order to ensure reliable access to academic coursework and curricula that meets the learning needs, and skill development, of all students.

Interview Questions

1. What constitutes an equitable academic program for a public high school student?

2. Is it reasonable to expect all students can have access to equitable academic programming? If so, does data play a role in the process? How, or how not?

3. How does student data influence the ways in which you create equitable academic programming for students?

4. What student data do you perceive to be the most important to reference when creating equitable academic programming for students?

5. Why do you perceive these data points to be most important to creating equitable academic programming for students?

6. Do you use these data reliably, regardless of student ability or aptitude? Why, or why not?

7. What validates your decision to utilize the data you select when creating equitable academic programming for students?

8. How do you access student data for the purpose of creating equitable academic programming?

9. Do you perceive there to be impediments to gathering the data necessary for you to institute equitable academic programming for students? If so, please detail the impediments.

10. Is there data you need, but do not have access to, in order to adequately institute equitable academic programming for students? If so, please detail this data.

11. Please detail the process by which you utilize student data in order to create equitable academic programming for students.

12. How do you decide the amount of data necessary to create equitable academic programs for students?

13. What does a successful equitable academic program look like for a student?

14. How do you know the amount of data you have used has produced an adequate, equitable academic program for a student?

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