HOW EAGLE PUBLIC SCHOOLS' GIFTED PROGRAM WORKS AS A SYSTEM:

A CASE STUDY

by

Casey Ward

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

Rebecca Harrison, Ed.D., Committee Chair

Lucinda Spaulding, Ph.D., Committee Member

Abstract

Learners who are gifted often underachieve due to various issues related to how they are served in their gifted programs. The purpose of this qualitative single-instrumental, embedded case study was to describe how the components of the gifted program of Eagle Public Schools, a small suburban school district in northern Virginia that recently implemented a new talent search approach in its gifted program, work together as a system to address the problem of underachieving gifted learners. The study sought to answer the central question: How do the components of Eagle Public Schools' gifted program work together as a system? The conceptual framework guiding this study was systems theory, which stresses the importance of looking at not only the individual parts of a system but also the interaction between the parts when evaluating a system. Participants included parents, teachers, staff members from the gifted program, and administrators. Data from a document review and individual and focus group interviews of parents, teachers, gifted program staff, and administrators in the district were analyzed. The most significant finding of this research was that communication is a vital part of a system, and when it is lacking, the system cannot function well across all its components. This study holds many potential implications for policy and practice in Eagle Public Schools, particularly related to the need to provide professional development about the identification of students from historically excluded populations as gifted and to consolidate communication about the gifted program to one central location.

Keywords: gifted underachievement, systems theory, evaluation, communication, historically excluded populations

Copyright Page

Dedication

I dedicate this dissertation to my parents and my grandmother, who taught me from a young age that I could do anything I put my mind to. To my husband, the first Dr. Ward in this house, and my son, Kyle, thank you for supporting me through this process with unending love and understanding. To the many colleagues who have supported me along the way as they have waited patiently to call me Dr. Ward, I thank you. Finally, to Mrs. Lane, my first-grade teacher, who made an indelible mark on me as a person, as a learner, and as a teacher, though you are no longer with us, I am forever thankful for the love you showed me and the support I always felt while I was around you.

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Gifted and Talented Advisory Committee (GTAC)

Institutional Review Board (IRB)

Jacob K. Javits Gifted and Talented Student Education Act (Javits Act)

CHAPTER ONE: INTRODUCTION

Overview

People who are gifted are valuable to society because they develop innovative ideas and creative ways to solve problems. Often, educational systems struggle to help gifted learners, whose talents differ from their peers to such a degree that differentiated educational opportunities must be provided to further affirm and develop their potential, and many of those gifted learners underachieve. The purpose of this chapter is to introduce the single-instrumental, embedded case study that aims to describe how the different components of a gifted program in the school district referred to by the pseudonym Eagle Public Schools work together as a system to help gifted learners demonstrate their expected ability and achieve their anticipated performance. The Eagle Public Schools district has recognized its struggle to meet the needs of gifted learners effectively and has recently made changes to its program to focus on talent development starting in kindergarten and incorporate coaching into the program model. The study provides an in-depth description of the gifted education processes in the school district and how the components work together as a system. It also describes stakeholders' overall perceptions of the new gifted program. Discussed in this chapter are the historical, social, and theoretical contexts of the problem of underachieving gifted learners as seen through a systems theory lens. Also explained in this chapter are the situation to self for the researcher and the significant effects of the underachievement of gifted learners, which is the problem being addressed in this study.

Background

Gifted education has had a long history, but despite federal attempts to promote quality instruction for gifted students, the lack of a universal definition of giftedness and lack of federal

funding have led to inconsistencies in educational opportunities for gifted students across the United States (McBee & Makel, 2019; VanTassel-Baska, 2018). Local governments have been put in charge of making decisions about gifted programming, and those decisions often lead to the underrepresentation of cognitively, culturally, linguistically, and economically diverse students in gifted programs (Crabtree et al., 2019; Hodges et al., 2018); lack of specific curriculum for gifted students (Gubbins et al., 2021); and lack of quality differentiation (Graham et al., 2021; Robbins, 2019; VanTassel-Baska & Hubbard, 2019). When the cognitive, social, and emotional needs of gifted students are not met, these students often underachieve and have a high risk of becoming depressed and even suicidal (Winsor & Mueller, 2020), causing society great losses. Gifted processes and underachievement of gifted learners have been explored through various theoretical lenses, but this research explores gifted processes in the Eagle Public Schools district through a systems theory lens to discover how the different components of gifted education work together as a system.

Historical Context

Interest in educating gifted learners has existed for decades in the United States. Though the first federal program addressing the needs of learners with special educational needs dates back to 1931 and the first federal act to provide funding for the creation of challenging mathematics and science curricula was the National Science Foundation Act of 1950, gifted education in the United States as it is known today has its roots in the passing of the National Defense Education Act (1958) after the Soviet Union launched Sputnik and Americans began embracing the idea of identifying and providing diverse learning opportunities for the country's most capable learners. Less than a decade later, the Elementary and Secondary Education Act (1965) authorized the use of federal funding to improve the education of all learners; however,

few states used these funds for gifted learners (Jolly & Robins, 2016). It was not until 1972, when the Marland report defined gifted education and made recommendations for the education of high-ability learners, that states began developing plans to meet the needs of gifted learners (Marland, 1972).

Despite efforts made by states to meet the needs of gifted learners, the 1983 *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983) showed that students at all levels in the United States were underachieving, causing great concern across the nation because gifted students, who are typically the highest-performing students, were not achieving their potential. Five years later, the Jacob K. Javits Gifted and Talented Student Education Act (Javits Act, 1988), as part of the amended Elementary and Secondary Education Act, provided federal funds to support developing talent in United States Schools (National Association for Gifted Children, n.d.-a). Despite subsequent acts intended to further gifted education such as the continued reauthorization of the Javits Act, with little federal funding earmarked for advancing the needs of gifted learners on a local level, the responsibility for the education of gifted learners has been primarily left on the individual states (Zirkel, 2016), causing inconsistencies across the nation in services for gifted learners in terms of availability of options and practice (VanTassel-Baska, 2018). The National Association for Gifted Children (n.d.-b) created standards to help schools meet the needs of gifted learners and provide high-quality classroom-based opportunities for advanced learning. The standards are meant to provide a basis for policies, rules, and procedures, but are not enforced by all states which contributes to unequal educational experiences for gifted learners.

Social Context

The lack of a clear definition of giftedness limits policymakers' ability to provide appropriate educational opportunities for gifted learners (McBee & Makel, 2019). Emphasis on state responsibility for gifted education has led to some variation in how gifted programs are run and inconsistencies in the opportunities available for gifted learners (VanTassel-Baska, 2018). Some of the variations seen are in the identification processes, which has led to the unequal representation of culturally, linguistically, and economically diverse students (Acar et al., 2016; Carman et al., 2018; Coronado & Lewis, 2017; Ecker-Lyster & Niileksela, 2017; Ezzani et al., 2021; Gubbins et al., 2020; Hodges et al., 2018; Morgan, 2019; Mun, Ezzani, & Yeung, 2021; Olszewski-Kubilius & Corwith, 2018; Peters, Gentry, et al., 2019; Peters, Rambo-Hernandez, et al., 2019; Ricciardi et al., 2020; Silverman & Gilman, 2019; Worrell et al., 2019; Wright et al., 2017) and students with disabilities (Foley-Nicpon & Assouline, 2019; C. W. Lee & Ritchotte, 2018; List & Dykeman, 2021) in gifted education programs. Inconsistencies are also evident in curriculum and services and professional development opportunities for teachers of gifted students. Gifted identification processes usually rely on assessments and recommendations that are biased against culturally and linguistically diverse students or students with special needs (List & Dykeman, 2021). These biases most often lead to the underrepresentation of African American and Latinx students in gifted programs (Peters & Rambo-Hernandez et al., 2019; Ricciardi et al., 2020; Wright et al., 2017). Teachers and administrators are expected to meet standards of professional practice that include professional knowledge. Knowledge about giftedness appears to contribute to the successful teaching of gifted learners, yet knowledge about giftedness continues to lack priority status, so substantial misconceptions about giftedness exist (Heyder et al., 2018), specific curriculum for gifted students is rare (Gubbins et al., 2021),

and there is a lack of quality differentiation occurring in the schools for gifted learners (Graham et al., 2021; Robbins, 2019; VanTassel-Baska & Hubbard, 2019).

Though there have been many definitions of giftedness over the decades (McBee & Makel, 2019), most descriptions of gifted learners include generally higher academic achievement, more intrinsic motivation than nongifted peers, and psychosocial adjustment that is on par with gifted peers (Heyder et al., 2018). Though most gifted learners display higher achievement and motivation, some gifted learners underachieve. Underachievement is a major concern in gifted education and society in general as learners with high potential are dropping out of school and facing negative life outcomes instead of reaching their personal bests and helping solve society's problems (Ritchotte & Graefe, 2017). Gifted underachievers, in comparison to typically achieving gifted learners, appear to lack motivation and may have psychosocial and emotional problems, which may be part of the reason they underachieve despite their high academic potential (Obergriesser & Stoeger, 2015). Even the most structured teacher may not be able to promote autonomous motivation in gifted children if the needs of learners are not met through regular differentiated instruction (Guay et al., 2017). In addition to teachers' lack of understanding their gifted learners' needs and inability to provide appropriately differentiated instruction, some of the characteristics that gifted learners often possess may lead to depression and possibly even suicide due to their preoccupation with high expectations that can lead to feelings of hopelessness, helplessness, and worthlessness (Winsor & Mueller, 2020).

Theoretical Context

Gifted underachievement has been studied using various theoretical frameworks (Steenbergen-Hu et al., 2020). Some of those theories of intrinsic and extrinsic motivation include Csikszentmihalyi's (1991) concept of flow, which states that optimal achievement occurs

when challenge and skill are equal, and Deci and Ryan's (1985) self-determination theory, which

posits that learners are motivated to do things because they feel competent, have autonomy, and

believe that what they are doing relates to their lives. Other theories through which gifted

underachievement has been studied include achievement goal theory, which suggests that

learners have purposeful engagement in learning-related tasks due to their specific goal

orientation; expectancy-value frameworks, which suggest that the value placed on the task is

based on the amount of effort the person believes he will have to exert to succeed in the task;

self-regulated learning, which suggests that learners make goals and self-monitor their progress;

and the achievement orientation model of interventions, which focuses on the relationship among

student beliefs and values and motivation (Steenbergen-Hu et al., 2020). Additionally, Ziegler

and Phillipson (2012) developed a systemic approach to gifted education, and Ziegler and

Stoeger (2017) built an argument for using a systemic approach in gifted education.

Using Von Bertalanffy's (2015) general systems theory, which stresses the importance of

looking not only at the individual parts of a system but also at the interactions among the parts,

the present study builds on existing literature by putting Ziegler and Stoeger's (2017) suggestion

to use a systematic approach in gifted education into practice in the Eagle Public Schools district.

The study aims to provide an in-depth description of how the different components of Eagle

Public Schools' gifted program work together as a system. It also describes stakeholders'

perceptions of the new gifted program. By doing so, the research has the potential to provide

valuable information to the school district to use in evaluating the system's effectiveness.

Problem Statement

The problem is that many gifted learners underachieve and, instead of reaching their

personal bests and helping society answer its difficult questions, drop out of school or become

incarcerated, depressed, or even suicidal (Lee-St. John et al., 2018; Ritchotte & Graefe, 2017; Winsor & Mueller, 2020). Although gifted learners typically excel in the classroom and are often viewed as having high potential due to their ability to learn at a rapid pace, a growing number of gifted learners underachieve, meaning that there is a discrepancy between their expected ability and their anticipated performance (Nomaan et al., 2016). When gifted learners underachieve, they are often viewed as unmotivated, and the blame for that lack of motivation is typically placed on the learners or the families. However, there can be reasons for lack of motivation that have little to do with the gifted learner (Jakšić & Malinić, 2019).

Many gifted learners are placed in general education classrooms for most of the day with teachers who may not understand what giftedness is or have the requisite knowledge and skills to meet the needs of gifted learners (Rowan & Townend, 2016). In short, many general education teachers are unable to support gifted learners' needs (Ritchotte & Graefe, 2017) including their motivational needs (Bennett-Rappell & Northcote, 2016; Jakšić & Malinić, 2019). While in those classes, gifted learners may be involved in uninteresting, unchallenging, and slow-moving activities from a curriculum that is often not differentiated to meet their needs (Gubbins et al., 2021). That often produces frustration and boredom, which may lead to lower motivation and underachievement (Tze et al., 2016). Professional development opportunities that focus on the needs of gifted learners are not in abundance for general educators (Callahan et al., 2017; Sayı, 2018; Zhbanova & Fincher, 2020), and gifted programs are rarely evaluated to ensure alignment among the different components of gifted education (Ezzani et al., 2021; Mun, Ezzani, & Yeung, 2021; Mun et al., 2020; Wright et al., 2017). Though research that addresses concerns in individual components of gifted education can be found, a need exists to explore how the

individual components work together as a system so that fewer gifted students fail to achieve their potential.

Purpose Statement

The purpose of this single-instrumental embedded critical case study was to describe how the gifted education processes work together as a system in the Eagle Public Schools district (a pseudonym used to protect confidentiality). Gifted education processes was defined as the processes for identifying and servicing students whose talents differ from their peers to such a degree that differentiated educational opportunities must be provided to affirm and develop their potential. The theory guiding this study was systems theory (Von Bertalanffy, 2015), which relates to how the components of gifted programs work as a system. Systems theory stresses the importance of looking not only at the individual parts of a system but also at the interactions among the parts. The examination of a school district's gifted program related to systems theory because the intent behind the examination was to describe how the gifted education processes work together as a system, not just to describe one component of the program.

Significance of the Study

Determining the ways in which a gifted program's components work as a system has significance in multiple areas. This study contributes to existing empirical research about gifted education and systems theory. It also adds gifted education to the list of fields in which systems theory is used to explain how systemic research can improve organizations. It may also have practical significance to the Eagle Public Schools district, the first subject of a systemic study of a gifted program, as the research provides a description of how the new gifted program is perceived by stakeholders.

Empirical Significance

Gifted underachievers have been a topic of study for many researchers (Hately &

Townend, 2020; Hornstra et al., 2020; Lamanna et al., 2019; Lee-St. John et al., 2018;

Mammadov et al., 2018; Ritchotte & Graefe, 2017; Steenbergen-Hu et al., 2020; White et al.,

2018; Wiley, 2019; Winsor & Mueller, 2020). Gifted education has been researched from

various perspectives, and school systems have used the research to improve certain components

of gifted education, such as non-culturally-responsive identification processes (Ezzani et al.,

2021; Mun, Ezzani & Yeung, 2021; Mun et al., 2020; Wright et al., 2017), which have been

known to lead to underrepresentation of cognitively, culturally, linguistically, and economically

diverse students in gifted education programs (Acar et al., 2016; Carman et al., 2018; Coronado

& Lewis, 2017; Ecker-Lyster & Niileksela, 2017; Ezzani et al., 2021; Foley-Nicpon &

Assouline, 2019; Gubbins et al., 2020; Hodges et al., 2018; C. W. Lee & Ritchotte, 2018; List &

Dykeman, 2021; Morgan, 2019; Mun, Ezzani, & Yeung, 2021; Olszewski-Kubilius & Corwith,

2018; Peters, Gentry, et al., 2019; Peters, Rambo-Hernandez, et al., 2019; Ricciardi et al., 2020;

Silverman & Gilman, 2019; Worrell et al., 2019; Wright et al., 2017). Research has also been

conducted about curriculum and services (Callahan et al., 2017; Demo et al., 2021; Graham et

al., 2021; Gubbins et al., 2021; Lamanna et al., 2019; Renzulli et al., 2020; Rimm et al., 2018;

Robbins, 2019; Rubenstein & Ridgley, 2017; Siegle et al., 2017; Steenbergen-Hu et al., 2020;

VanTassel-Baska, 2018; Yuen et al., 2018) and professional development (Bibir et al., 2021;

Brigandi et al., 2019; Callahan et al., 2017; Cotabish et al., 2020; Ford et al., 2018; Heyder et al.,

2018; Johnsen & Kaul, 2019; Powell & Bodur, 2019; Rowan & Townend, 2016; Sayı, 2018;

Song et al., 2018; VanTassel-Baska & Hubbard, 2019; Yuen et al., 2018; Zhbanova & Fincher,

2020). Though limited, there is also some research on the evaluation of gifted students (Callahan

et al., 2017; Ezzani et al., 2021; Mun, Ezzani, & Yeung, 2021; Mun et al., 2020; Robbins, 2019; Wright et al., 2017) and on the use of systemic processes in gifted education (Ziegler & Phillipson, 2012; Ziegler & Stoeger, 2017). Though some research exists on the use of systemic processes in gifted education and there has been a push toward the use of a systems perspective in gifted education (Ziegler & Phillipson, 2012; Ziegler & Stoeger, 2017), the focus of this study is on how the different components of Eagle Public Schools' gifted program work together as a system, which has not been the focus of any previous study.

Theoretical Significance

Systems theory (Von Bertalanffy, 2015) was developed to help solve organizational problems as a way to unify an organization. The organization in this study is Eagle Public Schools' gifted program, the main function of which is to provide educational opportunities for gifted learners to meet their potential, as is the goal of all gifted programs (Renzulli, 2012). The problem identified for this research study was gifted underachievement, the presence of which can suggest a flaw in how the different components of the gifted program work together as a system. For a system to improve as a system, there must be an exchange of energy between the system and its environment, which is where feedback occurs (Von Bertalanffy, 2015). This study of Eagle Public Schools' gifted program focused on how specific components of the program (i.e., identification and services, professional development and identification, and professional development and services) interact with each other as a system and how the system provided opportunities for feedback. This study aimed to extend system theory research by putting prior research on the need for systems theory integration in gifted education (Ziegler & Phillipson, 2012; Ziegler & Stoeger, 2017) into practice.

Practical Significance

How the different components of Eagle Public Schools' gifted program work together as a system was not studied prior to this research. This study informs parents, teachers, and administrators of areas within the program that may be working well in the system and those that may not be working well in the system and provides the district with information on things to celebrate or improve. Improving the system may improve the achievement of gifted learners on standardized tests and help the district meet accreditation standards and other academic goals. The study gives different stakeholders of the program, including parents of gifted students, a voice as important members of the school community, as their perceptions of the new program are described in the study. Finally, completing a systemic study of the gifted programs in Eagle Public Schools allowed the district to focus on students who are expected to achieve but often do not achieve their potential and may result in decreased underachievement across the district, allowing more gifted students to meet their potential and possibly make more significant contributions to society instead of dropping out of school or being otherwise negatively impacted due to their underachievement.

Research Questions

This single-instrumental, embedded case study had a central question and four subquestions that relate to a systemic study of Eagle Public Schools' gifted program and the problem of gifted underachievement.

Central Research Question

How do the components of Eagle Public Schools' gifted program work together as a system to support gifted learners in reaching their full potential?

The purpose of the study was to describe how the different components of Eagle Public Schools' gifted program work together as a system to help gifted learners reach their full potential. Though many studies have addressed individual components of gifted programs (Acar et al., 2016; Brigandi et al., 2019; Callahan et al., 2017; Hodges et al., 2018; Johnsen & Kaul, 2019; Lamanna et al., 2019; Mun, Hemmler, Langley, Ware, Gubbins, Callahan, McCoach, & Siegle, 2021; Rimm et al., 2018; Song et al., 2018; VanTassel-Baska, 2019; Yuen et al., 2018) and a few studies have been conducted on the use of systems theory in gifted education (Ziegler & Phillipson, 2012; Ziegler & Stoeger, 2017), there had not been any research about how the different components work together as a system in a specific school district prior to this study. In systems theory (Von Bertalanffy, 2015), the stress is on the importance of looking not only at the individual parts of a system but also at the interactions among the parts to determine how well the system functions. The components of gifted education programs cannot work in isolation; all parts should be aligned (Gubbins et al., 2021). That was the focus of this central question, which aimed to determine how the different components of Eagle Public Schools' gifted program work together as a system.

Subquestion 1

What is the relationship between the procedures for identifying students as gifted learners and the services gifted learners receive in Eagle Public Schools?

Callahan et al. (2017) suggested that the definition of giftedness and procedures for identifying students as gifted learners should guide the services provided for gifted learners. Gubbins et al. (2021) concurred, stating that identification and programming should align. Peters, Gentry, et al. (2019) suggested that identification and servicing should be aligned. Subquestion 1 focused on the interaction between two of the components of the gifted program in Eagle Public

Schools: identification and servicing. It was through this study that the relationship between identification of students as gifted learners and the services gifted learners receive in the school district was characterized.

Subquestion 2

What is the relationship between professional development and procedures for identifying students as gifted learners in Eagle Public Schools?

Like Subquestion 1, Subquestion 2 intended to study the relationship between two components of gifted programs, but this question focused on how professional development and identification of gifted learners relate. Rowan and Townend (2016) suggested that more professional development be provided to teachers for their work with gifted students. VanTassel-Baska and Hubbard (2019) stated that professional development for gifted education has been offered frequently, but Song et al. (2018) specified that professional development should be of high quality. Particularly important in gifted education is professional development that coaches teachers to be aware of how giftedness manifests itself in different cultures so as not to be biased in the identification of culturally, linguistically, and economically diverse students (Mun et al., 2020), who represent a large portion of Eagle Public Schools' students (Hodges et al., 2018; Mun et al., 2020; Peters, Rambo-Hernandez, et al., 2019). If the function of gifted education is to provide academic opportunities for gifted students to realize their potential (Renzulli, 2012), teachers must be prepared to identify those students who need special servicing.

Subquestion 3

What is the relationship between professional development and the services gifted students receive in Eagle Public Schools?

Sayı (2018) found that most teachers do not receive training in gifted education and that it is important to provide this training. Yuen et al. (2018) suggested that professional development is the key to helping gifted learners reach their potential, as many teachers are unaware of the emotional, cognitive, and social needs of gifted learners. If the function of gifted education is to provide academic opportunities for gifted students to realize their potential and better society (Renzulli, 2012), educators must realize the potential of these students and provide services to help them reach that potential. If educators are unaware of how to do so, they must be provided opportunities to learn. Subquestion 3 related to the function of gifted programs and the relationship between two components of gifted programs in Eagle Public Schools—professional development and services provided. It was through the study of the relationship between professional development and services that an understanding of how different components work together as a system was further developed.

Subquestion 4

How does the gifted program of Eagle Public Schools solicit and use feedback from its stakeholders?

Mun, Ezzani, and Yeung (2021) stated that strategic plans should include all stakeholders. Similarly, Gubbins et al. (2020) noted the importance of communication between all stakeholders in the identification of gifted learners. Ezzani et al. (2021) recognized the value of support from stakeholders in the development of a vision of gifted education that includes equitable practices, sustained professional learning, and program evaluation. From a systems theory (Von Bertalanffy, 2015) perspective, feedback is vital to the stabilization of a system. Subquestion 4 aims to discover how the gifted program solicits and uses feedback from its stakeholders to stabilize the system. In this case, teachers, gifted department staff members,

administrators, and parents/adult family members of gifted learners were the stakeholders. Although students are also considered stakeholders in the gifted program, students were not used as participants in this study because the subject of the study is the program and students do not play a role in how the components work as a system.

Subquestion 5

What are stakeholders' overall perceptions of the efficacy of Eagle Public Schools' new gifted program?

Districts have an ethical responsibility to evaluate gifted programs to ensure that they are meeting the needs of their gifted learners (Speirs Neumeister & Burney, 2019). Evaluation may be one of the most important components of gifted programming, as it is through the evaluation process that changes can be made or cultural aspects of a system can be maintained (Robbins, 2019). While Subquestion 4 aimed to gather information about how (if at all) the Eagle Public Schools district elicits feedback from stakeholders, Subquestion 5 asked stakeholders to share their perceptions of the new gifted program that was meant to better meet the needs of gifted learners. The information collected from the stakeholders will be shared with the school district.

Definitions

The literature lacks clear definitions of giftedness and what it means to be a gifted underachiever, making it difficult to pinpoint universal definitions of those terms. When possible, the definitions below were taken from documents from Eagle Public Schools' gifted education documents so that there is alignment between definitions and analysis.

1. *Gifted* – According to Eagle Public Schools, gifted students are students whose talents differ from their peers to such a degree that differentiated educational opportunities must be provided to further affirm and develop their potential.

2. *Gifted underachiever* – Gifted underachievers show a large discrepancy between expected achievement and actual achievement when no diagnosed learning disability is present (White et al., 2018). Gifted underachievers differ from selective consumers/achievers in that selective achievers' actual achievement matches their expected achievement, but only in their areas of interest (Hébert & Schreiber, 2010).

3. *Stakeholders* – Stakeholders of the gifted program in Eagle Public Schools are defined as parents, students, teachers, gifted program staff members, and administrators. Though students are stakeholders in the gifted program, students are not included as participants in this study because they do not play a role in how the elements of the program work together as a system.

4. *Systems theory* – Systems theory (Von Bertalanffy, 2015) examines the interactions among the individual parts of a system.

Summary

Despite having high academic and/or creative potential, many gifted learners underachieve, and some drop out of school, causing a multitude of negative effects on students who are expected to make great contributions to society. This single-instrumental, embedded case study aims to address the gifted program in the Eagle Public Schools district. The purpose of this case study is to describe how the different components of a gifted program work together as a system by providing an in-depth look at the gifted processes in the school district referred to by the pseudonym Eagle Public Schools. The study is also designed to allow stakeholders to share their perceptions of the new gifted program that was put in place to better meet the needs of gifted learners in the Eagle Public Schools district. As the first study of this gifted program and how its components work as a system and first effort to gather feedback from stakeholders to

improve the system, this research has the potential to have lasting empirical, theoretical, and

practical effects.

CHAPTER TWO: LITERATURE REVIEW

Overview

A systematic review of the literature was conducted to examine existing literature that describes concepts related to the components of gifted programs, the role the components may play in the underachievement of gifted learners, and systems theory, which is the theory that guides this research. There is a plethora of research about individual components of gifted programming such as identification and curriculum and services; the social, emotional, and environmental needs of gifted learners; and reasons for gifted underachievement. There is also some research on professional development and evaluation of gifted programs. The focus of much of the research on the evaluation of gifted programs is the effects of the individual components of gifted education on meeting the needs of gifted learners in different school systems as opposed to how the components of a gifted program work together as a system. The first section of this chapter will discuss how systems theory can be used to evaluate how the components of gifted education work together as a system. That section will be followed by a synthesis of literature related to the history of gifted education, the definition of giftedness, the components of gifted programs including the identification of gifted learners, the various needs of gifted learners, the underachievement of gifted learners, professional development, and program evaluation. The chapter concludes with a summary of important ideas presented in the literature, and a gap in the literature will be identified, justifying the need for this research.

Theoretical Framework

The theory guiding this study is systems theory, which is attributed to Ludwig Von Bertalanffy (2015). In systems theory, which Von Bertalanffy used to describe organisms, each part of the organism is analyzed to determine how it interacts with the other parts of the system

(Hammond, 2019). According to systems theory, each part is valuable to the functioning of the organism, and systems can be closed or open. When systems are closed, all energy is drawn from within the system; outside factors are not considered (Razik & Swanson, 2010). In open systems, energy and information are taken in from outside factors, highlighting the importance of relationships (Hammond, 2019).

The components of gifted programs, like parts of an organism, cannot work in isolation, as there should be an alignment of all parts (Gubbins et al., 2021). For example, a student who was identified as a gifted learner based on his mathematical intelligence will experience little benefit if he is taken for enrichment services in language arts, just as there is little benefit for stakeholders if students are identified as gifted students when the identification procedures do not align with the definition of giftedness. Although the components of a program cannot work in isolation, neither can the entire system cannot work in isolation from the environment in which it exists, as outside factors such as federal or state laws play roles in the development of the system. The current procedures for evaluating gifted education include evaluating variables and identifying the variables that promote excellence. The problem with that approach is that the focus is usually only on one variable and significant, lasting change does not often occur (Ziegler & Phillipson, 2012). This review of literature will provide basic information on each component of gifted programs and focus on how each component of gifted education relates to the achievement of gifted students.

Though much literature exists about the different components of gifted programs such as identification (Acar et al., 2016; Hodges et al., 2018), curriculum and instruction (Callahan et al., 2017; Lamanna et al., 2019; Rimm et al., 2018; VanTassel-Baska & Hubbard, 2019), professional development (Brigandi et al., 2019; Johnsen & Kaul, 2019; Song et al., 2018; Yuen

et al., 2018), and evaluation of programs (Callahan et al., 2017; Mun, Ezzani,- & Yeung, 2021); the social and emotional needs of gifted learners (Cavilla, 2019; Hébert, 2020; Jacobs & Eckert, 2017; Speirs Neumeister & Burney, 2019); and the environmental needs of gifted learners (Hébert, 2020; L. E. Lee et al., 2021; Miedijensky, 2018), and the use of systems theory to describe gifted education has been documented (Ziegler & Phillipson, 2012; Ziegler & Stoeger, 2017), this research is important because it adds to systems theory literature by focusing on a specific school system. This study provides system information that decision-makers may choose to use to make adjustments to their gifted program. It also adds gifted programs to the list of programs for which systems theory has been used to study functioning, which may spark a continuing investigation into how systems theory can be used in the field of education.

Related Literature

A systematic literature review was conducted to identify a gap in research on which to focus in this single-instrumental, embedded case study about the underachievement of gifted learners. Uncovered in the research was much information about the history of gifted education, the definition of giftedness, the various needs of gifted learners, and the reasons for and impact of underachievement of gifted learners. Much research was also located about how the different components of gifted programs affect gifted learners, but little was found about how those components work together as a system. That led to the discovery of a gap in the literature on gifted education, which is how the different components of a gifted program work together as a system.

History of Gifted Education

People of the United States have been interested in educating gifted learners for decades. Gifted education in the United States as it is known today has its roots in the passage of the

National Defense Education Act (1958) after the Soviet Union launched Sputnik and Americans began embracing the idea of identifying and providing diverse learning opportunities for the country's most capable learners. The Elementary and Secondary Education Act (1965) provided federal funding to improve the education of all learners; however, few states used the funds for gifted learners (Jolly & Robins, 2016). It was not until 1972, when the Marland Report attempted to define gifted education and made recommendations for the education of high-ability learners, that states began developing plans to meet the needs of gifted learners (Marland, 1972). In 1988, the Javits Act, as part of the amended Elementary and Secondary Education Act, provided federal funds to support developing talent in United States Schools (National Association for Gifted Children, n.d.-a). Despite subsequent acts intended to further gifted education such as the continue reauthorization of the Javits Act, with little federal funding earmarked for advancing the needs of gifted learners on a local level, the responsibility for the education of gifted learners has been primarily left on the individual states (Zirkel, 2016). That, combined with legislation that mandates schools demonstrate certain levels of academic achievement on standardized tests, has led some states to prioritize other programs over gifted programs, which are often seen as a luxuries rather than services that gifted students need to be able to fill important social roles later in life (Hodges et al., 2018; Renzulli, 2012). From a systems theory perspective, the history of gifted education plays an important role in understanding why universal gifted program requirements do not exist.

Definition of Giftedness

A multitude of definitions of giftedness have been proffered over the years (McBee & Makel, 2019). The Marland Report of 1972 established what it means to be gifted and talented through a composite definition that included academic and intellectual talent, leadership ability,

visual and performing arts, and creative and productive thinking, as well as psychomotor ability, which was later removed (Heacox & Cash, 2014). Students who had the capability to perform at a high level in those areas and who required services that were not typically provided by the schools would be considered gifted (Marland, 1972). Other conceptualizations of giftedness have included psychometric definitions, which mainly involve high scores on off-grade-level tests of mathematical or verbal reasoning; neurobiological/cognitive definitions, which are based on findings from neuroscience or cognitive science; creative-productive definitions, which rely on the examination of giftedness on standardized tests as well as on performance tasks; psychosocial definitions, which consider the role of the individual and the environment in the development of giftedness; and the advanced academic approach, which looks at the needs of students in a school system and systematically identifies students to work toward the agreed-upon advanced options (Ayers Paul & Moon, 2017).

Though there have been many definitions of giftedness over the decades (McBee & Makel, 2019), some generally accepted characteristics of gifted learners include overall higher academic achievement, more intrinsic motivation than non-gifted peers, and psychosocial adjustment that is on par with gifted peers (Heyder et al., 2018). Different states have taken the federal definition and adapted it to meet their own needs over the years (Rimm et al., 2018) and developed programs based on those definitions, but the lack of a universal definition of giftedness limits policymakers' ability to provide appropriate educational opportunities for the gifted (McBee & Makel, 2019). The lack of a universal definition of giftedness has an impact on the system of gifted education because it allows for misinterpretation and misunderstanding, forcing school systems to create their own definition as a base for entire programs. With individual definitions and interpretations can come vastly different numbers of students

identified as gifted across districts, which can lead to inequities in funding. Lack of clarity in the definition of giftedness can also make determining the success of a program difficult, which can affect funding (McBee & Makel, 2019). In short, having a clear definition of giftedness is crucial to all aspects of gifted programming (Callahan et al., 2017).

Components of Gifted Programs

For schools to be able to meet the needs of gifted learners, it is important that they thoughtfully develop gifted programs while keeping in mind the components of identification, curriculum, and instruction; social and emotional supports; environmental needs of gifted learners; professional development; and program evaluation. Each component of the system should align to allow for interaction among the individual components. Alignment between identification and services is especially critical, as the definition of giftedness and identification procedures should guide all other components of the program (Callahan et al., 2017; Peters, Gentry, et al., 2019). Social and emotional support as well as the environmental needs of gifted learners should also be considered. Evaluations of what is and is not working in the program should be conducted to determine whether the program is successful at meeting the needs of gifted learners (Callahan et al., 2017).

Identification

Identification of gifted students has been thoroughly researched due to the perceived underrepresentation of culturally, linguistically, and economically diverse students (Acar et al., 2016; Carman et al., 2018; Coronado & Lewis, 2017; Ecker-Lyster & Niileksela, 2017; Ezzani et al., 2021; Gubbins et al., 2020; Hodges et al., 2018; Morgan, 2019; Mun, Ezzani, & Yeung, 2021; Olszewski-Kubilius & Corwith, 2018; Peters, Gentry, et al., 2019; Peters, Rambo-Hernandez, et al., 2019; Ricciardi et al., 2020; Silverman & Gilman, 2019; Worrell et al., 2019;

Wright et al., 2017) as well as students with disabilities who also show signs of giftedness (Foley-Nicpon & Assouline, 2019; C. W. Lee & Ritchotte, 2018; List & Dykeman, 2021). Also possibly underrepresented are preschool-aged children, whose schools often do not have procedures for identification of giftedness, whose teachers do not have training in the identification of gifted learners, and whose abilities develop asynchronously (Kettler et al., 2017). Gifted students are often identified through recommendations from teachers and assessments, both of which can be biased against culturally, linguistically, and economically diverse students or students with special needs. The theory of intelligence often used in schools to identify students for gifted programs can also lead to disproportionality (List & Dykeman, 2021). These biases most often lead to the underrepresentation of African American and Latinx students (Peters, Rambo-Hernandez, et al., 2019; Ricciardi et al., 2020; Wright et al., 2017). Many students of color are influenced by stereotype threat and experience heightened stress when taking intelligence tests, likely lowering their scores, but students of African American descent have been found to have higher self-concepts of creativity and intelligence (Luria et al., 2016), which seems to suggest that the use of creativity as an indicator of giftedness might increase the representation of culturally diverse students in gifted education.

Hodges et al. (2018) found disproportionality in all races across all identification methods. Because of the inequitable practices related to gifted identification, students who should be identified as gifted often miss out on challenging educational opportunities that would prepare them for advanced coursework (Crabtree et al., 2019) and may underachieve due to frustration with tedium, lack of motivation, or other noncognitive factors (Wiley, 2019). Hamilton et al. (2018) found that students living in poverty are less likely to be identified for gifted services and that students of poverty in poorer districts have even lower identification

rates. This finding supports the conclusion that schools should implement more culturally sensitive identification methods (Ecker-Lyster & Niileksela, 2017), establish policies that align with culturally, linguistically, and economically diverse identification policies on the federal level (Ezzani et al., 2021), and advocate for typically underrepresented populations of students in gifted programs (Mun et al., 2020). Grissom et al. (2019) suggested training for teachers that emphasizes mindfulness of giftedness among nondominant groups as a way to combat underrepresentation.

Ricciardi et al. (2020) found that African American students are underrepresented in gifted programs, but English learners, many of whom are Latinx, are not. Similarly, Gubbins et al. (2020) found that English learners were proportionally represented in the nine districts in their study, raising the question of why a group of students who have been found in research to be historically underrepresented were not underrepresented in the nine districts studied. To truly be able to eliminate underrepresentation in gifted education, schools must identify the root cause of underrepresentation and develop goals for equity in identification (Wright et al., 2017).

School districts, like those represented in Gubbins et al. (2020), have found ways to mitigate the effects of bias in the identification process on the representation of culturally, linguistically, and economically diverse students. Employing a larger percentage of teachers of color can help increase the representation of students of color in gifted classes because teachers of color have high expectations for students of color and can serve as role models (Morgan, 2019). Many districts use multiple pathways for identification (Acar et al., 2016; Hodges et al., 2018; Peters, Gentry, et al., 2019) such as performance and nonperformance methods, which Acar et al. (2016) suggested be collected and evaluated concurrently. Some districts only require that a student demonstrate advancement on one scale of an assessment such as the Wechsler

Intelligence Scale for Children Fifth Edition (Silverman & Gilman, 2019). School psychologists should be an integral part of the identification of students who are gifted and have disabilities (Foley-Nicpon & Assouline, 2019), as school psychologists have extensive training in cognition, intelligence, and assessment.

Though nonverbal assessments such as the Cognitive Abilities Test 7 Nonverbal Battery and the Naglieri Nonverbal Abilities Test 2 have been used to identify students for gifted programs, Carman et al. (2020) found that the Cognitive Abilities Test 7 underidentifies students and the Naglieri Nonverbal Abilities Test 2 overidentifies students. Further, it does not appear that the use of nonverbal assessments guarantees proportionality in gifted education programs (Carman et al., 2018). The two approaches found in research to be most helpful in increasing the representation of culturally, linguistically, and economically diverse students are providing universal screening (Grissom et al., 2019; Gubbins et al., 2020; Morgan, 2019; Olszewski-Kubilius & Corwith, 2018; Yaluma & Tyner, 2021) and changing the norms by which assessments are interpreted (Carman et al., 2018; Olszewski-Kubilius & Corwith, 2018; Peters, Gentry, et al., 2019; Peters, Rambo-Hernandez, et al., 2019). Analyzing assessments by group- or school-specific local norms (Carman et al., 2018; Olszewski-Kubilius & Corwith, 2018; Peters & Gentry et al., 2019) and by combining state and local norms (Peters & Rambo-Hernandez et al., 2019) have both been found to increase the number of students from historically underrepresented groups identified for gifted programs. Some researchers suggest that the calculation methods for determining the underrepresentation or disproportionality of specific populations in gifted education should shift away from comparing the rate at which a student group is identified to the overall population. This conditional probability explains how

two students of similar backgrounds differ in their probability of being identified as gifted

(Peters et al., 2020).

Parents play an important role in the academic, social, and talent development of their

children (Mun, Ezzani, & Yeung, 2021; Olszewski-Kubilius et al., 2014) and are often the first to

identify students' gifts and talents, which makes their expertise an important part of the

identification process. Parental involvement is particularly important in preschools, as many

preschool teachers are not trained in identifying gifted preschoolers (Kettler et al., 2017).

Families are also responsible for transferring basic cultural knowledge to students and providing

early socialization (Gali et al., 2019), which is important for gifted students, who often struggle

in social situations due to their asynchronous development. Despite the importance of parents in

the development of gifted learners, parents of students from culturally, linguistically, and

economically diverse backgrounds and twice-exceptional learners have experienced decreases in

the quality of communication from gifted programs as students progress from elementary school

to high school. As learners progress through school, less information related to gifted education,

such as assessment instruments and identification processes, is provided to parents. Instead of

leveraging the information that parents bring to discussions about their children, many school

districts are leaving parents out of the conversation despite research that shows that the more

involved culturally diverse parents are in the identification process, the less likely their children

are to be overlooked (Lockhart & Mun, 2020; Mun, Ezzani, & Yeung, 2021), as parents help

provide a well-rounded view of their children's giftedness (Lockhart & Mun, 2020).

Talent search is another method by which learners can be identified as gifted. Talent

search is based on the idea that appropriate assessment helps match student abilities with

academic programming and emphasizes above-grade-level, domain-specific assessments because

above-grade-level assessments decrease the ceiling effect often brought about by grade-level assessments and domain-specific assessments provide useful information to determine students' strengths (Makel et al., 2020). Another method for the identification of gifted services is talent development, which aims to transform potential and recognized abilities into domain-specific competencies and expertise (Subotnik et al., 2020). Though talent development has existed for a few decades, it is resurfacing due to factors such as changing demographics in U.S. school populations, continuing national focus on achievement gaps between students meeting minimum standards and those excelling in their achievement, increasing numbers of children living in poverty, and the underrepresentation of culturally, linguistically, economically diverse students (Olszewski-Kubilius & Thomson, 2015). Talent development allows for a wider array of students to exhibit gifted behaviors over time (Subotnik et al., 2020), as it emphasizes the developmental nature of talent and provides opportunities to nurture talents earlier (Olszewski-Kubilius & Thomson, 2015). In preschools, talent development may also be a way to mitigate achievement gaps and prepare often-underrepresented groups of rising kindergarteners with advanced cognitive potential (Kettler et al., 2017).

Gifted Learners' Needs

Gifted learners, like all other students, have needs that must be met in schools so they can meet their potential or benefit from enrolling in school. Teachers who participate in programs for gifted learners must be trained to meet the gifted learners' need for advanced and differentiated curriculum as well as their various other needs (Leppien & Westberg, 2017). Though proponents of learning-styles-based education suggest that teaching be tailored to the learning preferences of students, that approach can be ineffective for gifted learners, as their learning preferences are often based on what is easiest for them, but they learn best when learning is somewhat difficult

(Fowler & Snyder, 2020). As is true with most concepts related to gifted education, there is no one-size-fits-all definition of the needs of gifted students because gifted students, like nongifted students, are unique. The uniqueness of learners can explain why teachers of gifted students often lack understanding of their needs (Robbins, 2019). To understand gifted students' needs, it is vital to let them share their perspectives about practices meant to meet their needs (Kitsantas et al., 2017). Kitsantas et al. (2017) conducted interviews with elementary and middle school students and found that gifted students have academic functioning and social-emotional functioning needs. The students in the study perceived a need for more challenge, choice, and depth in the content they explore. Beason-Manes (2017) stressed the importance of recognizing student strengths and interests and tapping into the students' motivation for engaging in the creative process.

Gifted learners' cognitive, physical, social, and emotional development often occurs in an asynchronous way, which can create some struggles for them (Jacobs & Eckert, 2017). Areas of potential struggles for gifted learners include self-concept, identity, and perfectionism (Szymanski, 2020). Students who are identified as gifted have social and emotional needs that are often influenced by their cognition and participation in gifted programs (Wiley, 2019). They often struggle with the gifted label (Kitsantas et al., 2017) and peer relationships because the label reflects a difference between them and nongifted students. Further, some gifted students have issues regarding perfectionism (Siegle, 2013) or fear of failure (Brandišauskienė, 2019; Hately & Townend, 2020) due to the stress the gifted label places on them. These struggles can affect their achievement because emotional responses related to their interest in a topic or perception of a situation can lead to underachievement due to frustration (Wiley, 2019) or a sense of isolation when they are in general education classes, as teachers often are not aware of

nor do they understand gifted students' cognitive and emotional needs (Yuen et al., 2018). For some gifted learners, such as culturally and linguistically diverse gifted learners, stereotype threat may cause them not to take advantage of opportunities that are provided to them for fear of looking bad in front of others (Szymanski, 2020). If culturally and linguistically diverse students who are identified as gifted learners take advantage of gifted services, there is still a chance that they will not remain in the program if their social and emotional needs are not met (Hébert, 2020). It is, therefore, important that services provided address social and emotional issues associated with being identified as gifted. Each area of a gifted student's needs should be met by the components of gifted programs, as each has the potential to affect achievement.

Twice-exceptional gifted learners also have specific areas of need. Though there are many definitions of twice-exceptional learners, the general understanding is that twice-exceptional learners show talent in one or more domains while also experiencing learning, social emotional, or behavioral challenges (Foley-Nicpon et al., 2017). Disabilities common to twice-exceptional learners include autism spectrum disorder, attention deficit hyperactivity disorder, specific learning disabilities, and emotional or behavioral disturbances (Foley-Nicpon et al., 2017). Identifying students as twice-exceptional learners can be difficult because oftentimes their learning disabilities mask their exceptionalities or their exceptionalities mask their learning disabilities, making it difficult to ensure that both their disabilities and exceptionalities are recognized and addressed (Baldwin et al., 2015; Fugate, 2020). Twice-exceptional learners are often creative but struggle to get their ideas on paper, have high levels of comprehension but struggle with limitations in reading ability, have the potential for expertise but have difficulty learning new skills, and have towering academic standards but often turn in sloppy and incomplete assignments (Baum et al., 2017). In addition to these academic concerns, some twice-

exceptional learners also have social and emotional difficulties that get in the way of their learning (Foley-Nicpon et al., 2020). For example, twice-exceptional learners may have negative opinions of themselves and the school (Beckmann & Minnaert, 2018). This can be particularly true of gifted girls with attention deficit hyperactivity disorder, as they often struggle with self-concept and cope by trying to behave like someone they are not to fit in with peers (Fugate, 2020). Twice-exceptional learners should be taught by addressing their strengths, providing appropriate social and emotional support, adapting the curriculum to meet their strengths, and making accommodations to meet their learning needs (Baldwin et al., 2015).

Curriculum and Instruction to Meet Gifted Learners' Academic Needs. Curriculum and instruction for gifted learners should be developed to allow gifted students to engage in a challenging curriculum that is adapted to meet their needs. The demands of the curriculum should escalate as the students make progress through the program, and students should be given opportunities for acceleration and enrichment. Additionally, the students' cognitive, affective, and social needs should be met through the curriculum (Rimm et al., 2018). As cultural demographics change in the schools, the need for curriculum and instruction that is culturally responsive increases as well (Lockhart & Mun, 2020). Schools should consider curriculum and service delivery models when developing their gifted programs (Rubenstein & Ridgley, 2017). They should also ensure that curriculum and services are guided by the definition of giftedness and identification procedures of the school (Callahan et al., 2017).

A curriculum designed specifically for gifted students is not as easy to find as a curriculum that is appropriate for other learners, leading many districts to choose to differentiate other curricula by using instructional strategies that are thought to work well with all learners (VanTassel-Baska, 2021). Some current trends in curriculum for the gifted include an emphasis

on mindfulness, the use of makerspaces, and the use of videos as a three-dimensional learning tool to create products that address problems (VanTassel-Baska, 2021). Despite the small number of options for a curriculum specifically designed for gifted learners, schools have found ways to balance regular standards-based curriculum and gifted curriculum. The approaches typically follow one of four patterns. The first pattern emphasizes the regular curriculum and employs a differentiated curriculum only after gifted learners complete the regular curriculum. This approach benefits schools because it allows them to meet their general education goals, but it does little for gifted learners. The second pattern provides a differentiated curriculum that meets gifted learners' needs before addressing the regular curriculum. This is beneficial for gifted learners but can make the regular curriculum appear to be less important. The third pattern presents the regular curriculum in conjunction with the differentiated curriculum. While this is a very economical approach, it requires much understanding from teachers of how regular and differentiated curricula are similar. The last pattern integrates both curricula and allows teachers to decide what needs to be cut, integrated, reinforced, or extended. While this approach benefits gifted learners, it requires teachers to have expertise in curriculum development (Kaplan, 2020).

Gifted students, particularly gifted underachievers, benefit from differentiated instruction since many of these students are in general education classrooms for much of the day (Steenbergen-Hu et al., 2020; Yuen et al., 2018). However, like many concepts related to giftedness, there is not a consistent definition of differentiation (Graham et al., 2021). Teachers who value differentiation find ways to differentiate but admit that it is difficult (Graham et al., 2021), principals tend to have a limited view of what differentiation is, and superintendents want differentiation for all (VanTassel-Baska & Hubbard, 2019). Differentiation has been the primary strategy used by schools for meeting the needs of gifted learners, but few schools have an

established differentiated curriculum for gifted students (Gubbins et al., 2021), and there is a lack of quality differentiation occurring in the schools for gifted learners (Graham et al., 2021; Robbins, 2019; VanTassel-Baska & Hubbard, 2019). VanTassel-Baska et al. (2020) found that general educators and gifted resource teachers alike underutilize differentiation, differentiation strategies are often not matched to instructional purposes, flexible grouping practices are used inconsistently, and middle schools are less likely to use differentiation strategies than either elementary or high schools. Using a systems theory perspective, one might suggest if teachers collaborate to differentiate for students, differentiation will be more likely to occur and more manageable.

Though most people associate acceleration with grade-skipping, acceleration can take many forms, such as content acceleration, where students take advanced courses, and grade-based acceleration, where students study multiple grade levels' content, skip a grade, or are allowed to enter a school at an earlier age than usual (VanTassel-Baska, 2018). Acceleration has been found to have notable positive effects on gifted students (Lamanna et al., 2019; VanTassel-Baska, 2018). Enrichment is another approach that helps gifted students meaningfully progress in their learning. Enrichment differs from acceleration in that enrichment is more qualitative whereas acceleration is more quantitative (Renzulli et al., 2020). Many schools choose to form enrichment clusters that allow groups of students who share common interests to work together weekly and create something based on their common interests. Teachers with the same interest or a student with advanced knowledge or skill in the area of interest can facilitate the cluster for an 8 to 12-week period. Facilitators of cluster groups must identify a real-world problem related to the interest, a product to create or service to provide, and an audience. The challenge provided by enrichment clusters makes for an enjoyable time in school and allows students to show their

creativity in learning and problem-solving (Renzulli et al., 2014). Other schools provide in school-wide enrichment, which provides opportunities for all students to engage in enrichment, not just those who have been identified as gifted (Renzulli & Reis, 2014).

Research has found that students who do not engage in enrichment are unlikely to be given opportunities to take Advanced Placement courses (Assouline et al., 2013; Crabtree et al., 2019), get advanced degrees, produce scholarly works, or contribute professionally at high levels (Assouline et al., 2013). Despite the importance of enrichment, teachers typically do not have expansive knowledge of the topic (Yazıcıoğlu & Akdal, 2020), which can make implementing it difficult or impossible. Teachers often find it challenging to provide enrichment work without students perceiving it as a punishment and keep students from getting bored with the material. Finding time to create and implement enrichment activities is another struggle for teachers of gifted students, as they must ensure all their students pss standardized tests (Redenius & Skaar, 2017).

Other service delivery models include pullout programs, specialty programs or special schools (Siegle et al., 2017), push-in services (Gubbins et al., 2021), and mentorships (Steenbergen-Hu et al., 2020). Pull-out programs take identified students out of the classroom and give them opportunities to acquire knowledge and skills and strengthen creative thinking. Mentorships have been found to benefit gifted students (Steenbergen-Hu et al., 2020) as they are a great way to bring the outside community inside the schools. Push-in programs allow gifted resource teachers to work with students in general education settings, which allows for more gifted and talented students to be identified (Rimm et al., 2018). The prevalence of push-in services has been increasing (Gubbins et al., 2021) and teachers' opinions of them tend to be case-specific (Demo et al., 2021), though it would be difficult to argue the benefits of having

more support in the classroom and more opportunities to search for gifted and talented students within the general education setting.

Social and Emotional Supports. Equally important as providing curriculum and instruction that meet the academic needs of gifted learners is providing curriculum and instruction that supports healthy social-emotional development. Not doing so can magnify the effects of gifted learners' asynchronous development between their academic and social-emotional skills (Cavilla, 2019; Hébert, 2020). Brandišauskienė (2019) found that a gifted learner can have complex and contradictory feelings related to their academic success and struggles to fit in. Providing support to address the social and emotional characteristics of gifted learners allows these learners to reach their full potential (Brandišauskienė, 2019; Cavilla, 2019; Speirs Neumeister & Burney, 2019). When provided systematically, social and emotional support can help gifted learners create meaningful lives outside of school as well (Zeidner & Matthews, 2017).

Some of gifted learners' characteristics that may need to be addressed include perfectionism, internal motivation, emotional sensitivity, and empathy. Gifted learners often have high expectations of themselves and others, which may present as a positive when students strive for excellence and meet their goals or as a negative when students compulsively strive for unrealistic or unattainable goals. Educators should strive to help gifted learners reach their goals but also enjoy the process of working toward those goals (Hébert, 2020). Gifted learners, like other learners, have varying levels of internal motivation. Since lack of motivation is often associated with underachievement (Lamanna et al., 2019; Wiley, 2019), educators who are tasked with supporting gifted learners must understand internal motivation (Hébert, 2020). Emotionally sensitive gifted learners can form deep emotional connections with other people and

may struggle to forgive themselves if they believe they have hurt others' feelings, as they are often self-analytical and self-critical. Gifted learners are often empathetic, which allows them to understand others' feelings and see things from another perspective. Though many gifted learners are sensitive to the feelings of others, some may not be sensitive to others' feelings and may become easily hurt when offered feedback that is critical of them (Hébert, 2020).

Other characteristics that have been exhibited in gifted learners that may require attention include advanced levels of moral maturity, a strong need for self-actualization, resilience (Hébert, 2020), stress, and difficulties with interpersonal skills (Abdulla Alabbasi et al., 2021). Gifted learners are capable of internalizing moral principles and conforming to them. This is true even when they are not in the presence of an adult. Gifted learners can complete complex tasks that require advanced moral maturity, and they have a strong need for self-actualization, which may lead to fixation on questions of a philosophical, religious, or political nature with emotional significance. Resilience is another characteristic found in gifted learners, particularly those who live in low-income households (Hébert, 2020). Though some of these characteristics of gifted learners may appear to be positive, if left unaddressed, they could lead to emotional struggles. Abdulla Alabbasi et al. (2021) found that gifted students lagged behind nongifted students in the areas of stress management and interpersonal skills. This suggests a need for more attention on helping gifted students manage the stress that may be impacting their peer relationships.

In addition to gifted learners in general needing support to meet their social and emotional needs, there are three specific populations of gifted learners who may need different supports to meet their complex needs: gifted underachieving students, twice-exceptional learners, and gifted culturally diverse learners. Gifted underachievers can be influenced by factors such as personality (Hébert, 2020), family, and social, cultural, and other environmental factors (Hébert,

2020; Lamanna et al., 2019). Twice-exceptional learners experience academic concerns as well as social and emotional concerns (Foley-Nicpon et al., 2020; Fugate, 2020), and they may have negative opinions of themselves and the school. Twice-exceptional learners with learning disabilities, in particular, may become frustrated with their academic situation despite having high levels of motivation, coping skills, and perseverance (Beckmann & Minnaert, 2018). Their challenges may be due to not fitting traditional definitions of either of their exceptionalities and the lack of attention paid to the affective needs of this population of students (Hébert, 2020). Culturally and linguistically diverse gifted learners have social and emotional needs related to their racial or ethnic identity. Diverse gifted learners often struggle to balance their racial identity with their academic achievement and manage the expectations that their cultural groups, peer groups, and society place on them (Hébert, 2020; Szymanski, 2020). Along with stereotype threat, diverse gifted learners may fear that they will be criticized by community members for "acting White" (Szymanski, 2020). This occurs often when diverse learners find themselves in settings that reflect the expectations of the dominant White culture (Hébert, 2020). English learners may struggle with balancing school and home because each has unique languages, norms, values, and expectations (Mun et al., 2020). The families of culturally and linguistically diverse gifted learners, many of whom immigrated to the United States for better lives, may place pressure on the gifted learners to succeed academically so the gifted learners can access better opportunities than their parents. These expectations can be stressful for gifted learners, as they can cause the students to be at odds with their parents over their choices or fail to meet their parents' expectations (Hébert, 2020). Culturally and linguistically diverse gifted learners may also struggle with the school community's mindset if their families cannot support them in their gifted education because of perceived communication differences, lack of experience with gifted

programming, lack of availability of care for young children, or lack of transportation (Lockhart & Mun, 2020).

Services designed to meet the social and emotional needs of gifted learners must maintain the challenges in the curriculum (Jacobs & Eckert, 2017; Neihart, 2017) and ensure students have opportunities to interact with others who are like them. Additionally, these services must include accommodations are differentiated to meet specific students' needs, and the means of addressing these needs must be designed in a systematic, purposive way that is based on best practices (Jacobs & Eckert, 2017). Best practices for supporting students' social and emotional needs include providing professional learning and information sessions for educators and parents, addressing common social and emotional characteristics in the curriculum while also recognizing and supporting additional issues that affect gifted learners from traditionally underrepresented populations, facilitating healthy psychological development of students, providing opportunities for choice while facilitating intrinsic motivation and independent learning skills, and providing differentiated college and career guidance activities (Speirs Neumeister & Burney, 2019).

Neihart (2017) described three guiding principles for developing services to meet the social and emotional needs of gifted learners in gifted programs. Those guiding principles include the importance of a challenging curriculum that can be accessed by interacting with others with similar interests; the need to differentiate accommodations to fit the needs of students across different demographics, such as gender, age, culture, and socioeconomic status; and the need to systematically design programs based on the best available evidence. In addition to the guided principles set forth by Neihart (2017), Jacobs and Eckert (2017) suggested that, on a secondary level, opportunities should be planned for gifted learners to engage in counseling and

discussion groups that promote self-discovery and understanding of what it means to be a gifted adolescent. They also recommended schools engage in regular communication with students and their families because the parents' role in providing emotional support is important to maximize students' talent development (Lockhart & Mun, 2020).

Environmental Needs of Gifted Learners. In addition to academic, social, and emotional support, gifted learners need specific environmental support to help promote creative processes. These supports begin even before the first day of school as teachers prepare classrooms that are conducive to learning for gifted learners. Hébert (2020) stressed the importance of creating a learning environment where students and teachers can feel connected to the classroom space and those in it, providing balance in the classroom by making sure the room is not too stimulating and not too relaxing, and ensuring vitality in the classroom by making the space uplifting but also comfortable. Miedijensky (2018) suggested that the classroom environment should also be secure, supportive, and nonthreatening to gifted learners. Appreciative feedback is one way to make students feel secure and supportive. When teachers use appreciative feedback, they let students know how they were personally affected by a student's work (Hébert, 2020).

Teachers of gifted learners should integrate the creative process into the learning environment by allowing students to take part in strengths-based, interest-driven investigations; encouraging creative productivity through feedback; differentiating programming to meet students' needs; designing collaborative environments; establishing reflective cultures; and coaching students in psychosocial skills development (L. E. Lee et al., 2021). The curriculum taught in that environment should enhance higher-order thinking skills, and teachers should use

strategies that are appropriate for gifted learners, such as team teaching, inquiry-based learning, and independent studies (Miedijensky, 2018).

Underachievement of Gifted Learners

Though most gifted learners display high achievement and motivation, some gifted learners underachieve when their needs are not met. Underachievement can be a direct result of the different components of the gifted education system or the students' outside environments. Underachievement is a major concern in gifted education and society in general, as learners with high potential are dropping out of school and facing negative life outcomes instead of meaningfully contributing to society (Ritchotte & Graefe, 2017). It is clear that gifted underachievement exists and is a concern (Ritchotte & Graefe, 2017), as some of the characteristics that gifted learners possess may lead to depression and possibly even suicide due to their preoccupation with demands and expectations leading to feelings of hopelessness, helplessness, and worthlessness (Winsor & Mueller, 2020). However, what cannot be agreed upon is the definition of underachievement in gifted students (Siegle, 2013), which is not surprising since the definition of giftedness cannot be agreed upon either.

The lack of clarity around what defines underachievement in gifted students may be due to terms related to underachievement such as *covert underachievers*, *involuntary underachievers*, and *selective consumers/achievers*. Overt underachievers can be noticed easily due to their poor grades, but covert underachievers may not be so easy to identify, as they often choose to take easier courses but earn high grades in those courses (Siegle & McCoach, 2020). Involuntary underachievers are students who want to succeed, but their schools provide inadequate services for them and they often do not achieve their potential. Selective consumers are learners who choose the areas in which they are interested in achieving (Siegle & McCoach, 2020) and put

their focus on those areas. Unlike traditional underachievers, selective consumers have a positive self-concept, choose to engage only when their preferred learning style is met (Figg et al., 2012), and are often independent and resistant to conformity (Hébert & Schreiber, 2010), causing many researchers to discount them as underachievers. Complicating the understanding of underachievement further are the gifted students who have not been identified as gifted because they have not achieved high grades in classrooms or because their gifts and talents are not recognized in the school's gifted identification processes (Mofield & Peters, 2019).

Some researchers suggest that gifted underachievers, in comparison to typically achieving gifted learners, lack motivation and may have psychosocial and emotional problems such as perfectionism, fear of failure (Hately & Townend, 2020; Wiley, 2019), lack of perceived self-efficacy (Obergriesser & Stoeger, 2015), anxiety (Obergriesser & Stoeger, 2015; Rimm, 2008), and difficulty managing stress (Abdulla Alabbasi et al., 2021), all of which may be part of the reason gifted underachievers underachieve despite their high academic potential (Obergriesser & Stoeger, 2015). Lack of development in important psychosocial areas such as emotional self-regulation, cognitive self-regulation, metacognitive self-regulation, and social skills may also contribute to underachievement (Olszewski-Kubilius et al., 2019). Other predictors of academic underachievement are the locality of the school, class size, and aggression (Nomaan et al., 2016), as well as peer influence, curriculum, teacher influence, family, emotional issues, social and behavioral issues, lack of motivation, cultural conflict, poor self-regulation, boredom, poverty, and absenteeism (Lamanna et al., 2019). Hébert (2020) suggested that along with family, social, cultural, and environmental factors, personality also has a role in gifted underachievement. Though these factors have been identified in research as possibilities that may lead to underachievement, the sample size of the is often limits the ability

to determine causality or generalize across populations of gifted students. Siegle et al. (2020) found that students', parents', and teachers' perceptions of underachievement causes differ, which contributes to the uncertainty. To make matters worse, there is not much research on how school contexts affect underachievement in gifted students (White et al., 2018).

Despite the lack of a universal definition of underachievement, researchers have found many factors associated with underachievement (Lamanna et al., 2019) and that underachievement can be addressed or possibly reversed through targeted interventions (Lee-St. John et al., 2018), though the effectiveness of these interventions is dependent upon the age of the student (Snyder et al., 2019). Long and Erwin (2020) studied a school-based program for high-ability underachievers and found that being identified for the program increased students' self-efficacy and self-perception and caused them to feel empowered by the agency brought about by taking part in the program. Bennett-Rappell and Northcote (2016) found one-to-one teaching, positive teacher identification, differentiation, and the use of multiple approaches to address underachievement help mitigate gifted underachievement. When teachers provide gifted students with more autonomy (Hornstra et al., 2020; Mammadov et al., 2018), less structure, and equal levels of involvement compared to nongifted students, students' feelings have been found to change (Hornstra et al., 2020). When students' personal strengths and positive attributes are reinforced, gifted underachievers become motivated and self-regulated and put more effort into academics (Steenbergen-Hu et al., 2020), often leading to increased participation in activities and increased achievement.

Professional Development

The professional development of teachers of gifted students is another component of gifted education that has been studied at length. There is an underlying belief that professional

development is important in education, but there is no consensus as to its specific benefits (Gubbins & Hayden, 2020). Research shows that professional development is needed to support teachers of gifted students as they are often provided with no or little instruction on the needs of gifted learners (Callahan et al., 2017; Sayı, 2018; Zhbanova & Fincher, 2020). Though their article did not specifically mention gifted or twice-exceptional students, Rowan and Townend (2016) found that beginning teachers often feel less prepared to teach diverse students. This may be because gifted students are not often included in the study of pedagogical skills for special populations in teacher training programs and earning an extra certification for gifted education is not feasible for many educators (Crutchfield & Ford Inman, 2020). Teaching gifted students can be particularly difficult for early childhood teachers, whose schools are often unprepared to identify gifted learners or meet the developmental needs of young children with high academic skills and intellectual abilities (Kettler et al., 2017).

Teachers of gifted learners are often inhibited by a lack of content knowledge, knowledge about differentiation and modification of the curriculum, and classroom management skills that address learner differences, as well as their attitudes toward gifted learners (Benny & Blonder, 2016). Professional development that helps educators become aware of the emotional and cognitive needs of gifted students is key to helping gifted students reach their potential (Yuen et al., 2018), helping underachieving gifted learners recognize that they are not reaching their potential, and possibly stimulating their desire to change their current circumstances (Cavilla, 2019). Educators of gifted students should also be trained to be equity-minded and culturally responsive to meet the needs of diverse gifted students (Ford et al., 2018, 2020) as well as to recognize giftedness (Bibir et al., 2021) and underachievement in gifted students (Heyder et al., 2018). Though there is still a need for professional development and cultural competency in

gifted education, VanTassel-Baska (2019) compared three different gifted programs and found that professional development was one of the top priorities those programs. From a systems theory perspective, one benefit of professional development is that it allows for the possibility of bringing in experts from outside the community to train staff who may be lacking knowledge about giftedness or the needs of gifted students.

Professional development should be provided with the understanding that it can benefit all students in the classroom, as its goal is to help teachers provide appropriate educational services for students (Gubbins & Hayden, 2020; Imbeau & Beasley, 2017). Although professional development can benefit teachers and students, not all professional development is effective (Song et al., 2018). Change is a long-term process, and professional development should occur over an extended time frame (Brigandi et al., 2019; Sayı, 2018) in formal and informal ways (Gubbins & Hayden, 2020). The National Association for Gifted Children recently changed the terminology in their programming standards from *professional development* to *professional learning* to reflect the idea that professional development should be long term (Cotabish et al., 2020).

Professional learning should be delivered in a way that allows for collective participation and active learning (Song et al., 2018) and supports teachers in the implementation of research-based instructional strategies with gifted students (Johnsen & Kaul, 2019). Additionally, it should provide teachers with the opportunity to gain knowledge about the diverse needs of gifted learners, but it should also include practical suggestions for how teachers might effectively respond to those needs (Imbeau & Beasley, 2017). Job-embedded professional development can promote continuous learning (Powell & Bodur, 2019). One example of job-embedded professional learning that has been around for decades but is on the rise in education once again

is coaching (Kraft et al., 2018). Coaching requires that coaches and teachers work collaboratively to develop a professional learning plan to help teachers better their instruction with a focus on the teacher's specific goals over an extended time. Coaches observe teachers' instructional strategies, provide feedback for improvement, and guide teachers toward instructional improvements (Gubbins & Hayden, 2020). Teacher coaching programs have been shown to have large positive effects on instruction, but coaching is rarely implemented on its own because teacher instructional practices often change when teacher knowledge changes (Kraft et al., 2018).

Even if professional development is delivered in the manner suggested, there is still a chance that it will not benefit teachers and students if barriers to implementation exist (Johnsen & Kaul, 2019). Brigandi et al. (2019) found that even after professional development about instruction for gifted learners leading to increased knowledge about gifted learners, teachers' underlying beliefs or approaches to gifted education did not change because of lack of time or other barriers to change. When teachers are ill prepared or unwilling to address the needs of gifted learners, gifted learners may be more likely to underachieve, as they are not in an environment that is conducive to their learning.

Evaluation of Gifted Programs

Evaluation may be one of the most important components of gifted programming, as it is through the evaluation process that changes can be made or cultural aspects of a system can remain (Robbins, 2019). It is through the evaluation process that barriers to successful gifted programs such as lack of understanding of gifted needs, perceptions of gifted programs as elitist, and beliefs in myths about giftedness (Robbins, 2019) can be identified and a plan can be put in motion to break down those barriers. Though evaluations do not necessarily result in positive change, at the very least, there is the potential for negative beliefs about a program to be

challenged (VanTassel-Baska, 2019). Research exists about the need for critical evaluations of components of gifted systems, including the identification and servicing of culturally, linguistically, and economically diverse students (Ezzani et al., 2021; Mun, Ezzani, & Yeung, 2021; Mun et al., 2020; Wright et al., 2017). By completing evaluations to see what does and does not work in the programs, school systems can improve their gifted programs (Callahan et al., 2017). Evaluations also allow school districts to ensure that their gifted programs are grounded in best practices and are meeting the cognitive, social, and emotional needs of gifted learners (Speirs Neumeister & Burney, 2019).

Evaluations of gifted programs can be formative or summative. Formative evaluations of gifted programs can be used to help stakeholders understand the strengths and challenges of a program and factors that contribute to the overall effectiveness of a program (Callahan, 2017; Speirs Neumeister & Burney, 2019) while summative evaluations of programs can be used as a way of collecting data to determine the worth of a program (Callahan, 2017) or document compliance in states that have gifted education mandates (Speirs Neumeister & Burney, 2019). Evaluations should include analysis of data about program design, gifted identification processes, curriculum and instruction, the affective domain, professional learning, and program effectiveness. Formative and summative evaluations can be conducted internally by a team of district employees or externally by gifted education and evaluation methodology experts from outside the district. Many districts opt for internal evaluations for many reasons including limited costs, ease of access to data, and the benefits of insight provided by insiders of the program, while others opt for external evaluations that allow for analysis through a more objective lens (Speirs Neumeister & Burney, 2019). Regardless of the type of evaluation conducted, it should include key stakeholders from the very beginning of the process, have opportunities for

formative and summative evaluation, include multiple data collection methods and sources, use reliable and valid assessment tools, consider issues that are unique to programming for gifted learners, and be shared publicly with stakeholders and the community (Callahan, 2017). The focus of this study is to describe how the different components of Eagle Public Schools' gifted program work together as a system and how stakeholders perceive the efficacy of the new program. The information will be given to decision-makers for use for possible improvements to the program.

Summary

The purpose of this case study is to describe how the different components of Eagle Public Schools' gifted program work together as a system and how stakeholders perceive the efficacy of the new program. There is a national problem of gifted students underachieving, which can lead learners with high potential to drop out of school or face negative life outcomes instead of meaningfully contributing to society (Ritchotte & Graefe, 2017). Some of the characteristics that gifted learners possess may lead to depression and possibly even suicide due to their preoccupation with high demands and expectations leading to feelings of hopelessness, helplessness, and worthlessness (Winsor & Mueller, 2020). It is the responsibility of the school systems to ensure that the valuable resources that are these gifted students have their needs met and can meaningfully participate in the world.

The theoretical framework guiding this study is systems theory, which is attributed to Ludwig Von Bertalanffy (Hammond, 2019; Razik & Swanson, 2010; Ziegler & Stoeger, 2017). In systems theory, each part of an organism is analyzed to see how the parts interact with each other in a system (Hammond, 2019) and each part is valuable to the functioning of the organism. That approach applies to gifted programs because each component of the program should align

to best meet the learning needs of gifted students. Systems should be evaluated to determine what works and what does not work so improvements can be made instead of creating a one-size-fits-all model (Callahan et al., 2017) that completely goes against the idea of gifted students having exceptional needs.

Most existing research has been conducted as studies of individual components of gifted programs. There is a plethora of information about identification processes, curriculum and instruction to meet the academic needs of gifted learners, social and emotional supports, environmental needs of gifted learners, and professional development, as well as some information about the need for evaluation of gifted programs. When the focus is put on one component of a program, significant, lasting change often does not occur (Ziegler & Phillipson, 2012). Analyzing the entire system of a local gifted program from a systems theory approach will inform the school system of how the components of the system relate to each other and will add to the existing literature about systems theory in gifted education.

CHAPTER THREE: METHODS

Overview

The purpose of this chapter is to explain the methods of the single-instrumental, embedded critical case study that aimed to describe how the components of Eagle Public Schools' gifted program work as a system and to add to the existing literature about systems thinking in gifted education, which is sparse. The chapter includes information about the design of this qualitative research study. It also discusses the approval obtained to conduct the research and describes the setting of the research, procedures for recruiting participants, methods for collection data, and procedures for analysis of the data within this study. This chapter defines the researcher's role as a human instrument in this study, describes some ways in which the study demonstrates its trustworthiness, and addresses ethical issues that were considered in the design of the study before ending with a summary of the chapter.

Research Design

Qualitative inquiry involves studying the meaning of people's lives, representing views and perspectives, accounting for real-life contextual conditions, attempting to explain social behavior and thinking, and relying on multiple sources (Baxter & Jack, 2008; Yin, 2016). Qualitative research attempts to make meaning of phenomena in natural settings (Creswell & Poth, 2018). A qualitative single-instrumental, embedded critical case study design was selected because the purpose of the study was to use data collected from various participants to describe how the components of Eagle Public Schools' gifted program work together as a system within the school district to help gifted learners reach their potential. That purpose is supported by case study research, which often answers how and why questions (Yin, 2018) in an in-depth manner.

Case study research helps investigators understand a real-world phenomenon within a

specific context (Yin, 2018) through in-depth study of the chosen case or cases (Creswell & Poth, 2018). Case study as a design has been used in various fields such as health care, nursing, social work, and education for many years because it helps to answer how and why questions on contemporary topics (Yin, 2018). Yin (2018) described five types of cases that are appropriate for a single-case study approach: critical, unusual, common, revelatory, or longitudinal cases. I was led to a case study design because I wanted to study how the components of one gifted program work together as a system through an in-depth study of that program from a systems theory (Von Bertalanffy, 2015) perspective.

This case study was a critical case in that critical cases help to extend theories (Yin, 2018). The study was a single-instrumental, embedded critical case study in which the specific case was the gifted program, which is bound by its location in the Eagle Public Schools district. The case was instrumental because it is focused on one specific case that helps understand the problem (Creswell & Poth, 2018) of underachievement in the gifted student population of Eagle Public Schools. The school district has recognized a need for improvement in its efforts to help gifted learners meet their potential and has recently begun piloting a new gifted program to better identify and meet the needs of gifted learners by focusing on talent development beginning in kindergarten and incorporating coaching into the program, making this a critical case. In embedded single-case studies, data about a single case can be analyzed on different levels (Yin, 2018). In this study, the case was the gifted program of Eagle Public Schools, but the data were analyzed across schools (embedded units) within the district.

Research Questions

Although systems theory (Von Bertalanffy, 2015) has been used in different fields and to the need for its use in gifted education has been demonstrated (Ziegler & Phillipson, 2012;

Ziegler & Stoeger, 2017), it has not been used to study a gifted program in this way. The questions in this study aimed to explore the relationships between the different components of the gifted program in Eagle Public Schools to determine how the different components work together as a system and to describe how stakeholders perceive the efficacy of the new program. This information will be provided to the school system for its consideration.

Central Research Question

How do the components of Eagle Public Schools' gifted program work together as a system to support gifted learners in reaching their full potential?

Subquestion 1

What is the relationship between the procedures for identifying students as gifted learners and the services gifted learners receive in Eagle Public Schools?

Subquestion 2

What is the relationship between professional development and procedures for identifying students as gifted learners in Eagle Public Schools?

Subquestion 3

What is the relationship between professional development and the services gifted students receive in Eagle Public Schools?

Subquestion 4

How does the gifted program of Eagle Public Schools solicit and use feedback from its stakeholders?

Subquestion 5

What are stakeholders' overall perceptions of the efficacy of Eagle Public Schools' new gifted program?

Setting and Participants

A single-case study requires the collection of data at a single site (Yin, 2018). In this case study, the case was the gifted department of a school district in the mid-Atlantic region of the United States. In this situation, the case is bound by its location—Eagle Public Schools school district. The case study involved participants that represented each of the different schools (embedded units) within the school district. The participants of the study were vital to the data collection process. The following sections describe the setting of the research in detail and explain the procedures for selecting participants for this research.

Setting

Eagle Public Schools was chosen because of my interest in studying how the components of the gifted program in this school district work as a system. The school district has recently begun a pilot talent development program to better identify and meet the needs of gifted learners. The program puts greater focus on talent development starting in kindergarten and incorporates coaching into the program model for the first time in the program's existence. Within my study of how the components of the gifted program work together, I wanted to determine the efficacy of the new program as perceived by the stakeholders. I also wanted to gather information to present to the district that may inform further improvement efforts. The school board encourages effective curriculum research to be used to benefit district students, which I intend to do as I share my research with school officials.

Participants

Eagle Public Schools was the case for this case study because the interest of this study is the specific gifted program in the district. Participants for this study were selected using purposeful criterion sampling. As Patton (2015) stated, "The point of criterion sampling is to be

sure to understand cases that are likely to be information-rich because they may reveal major system weaknesses that become targets of opportunity for program or system improvement" (p. 281). The original criteria for participation included being an educator, staff member, administrator, or parent/adult family member of a gifted learner in Eagle Public Schools for at least 3 years and having taught gifted learners, had gifted children who have participated in the gifted program, or had experience working in the gifted education office for at least 3 years. Educators, staff members, administrators, and parents/adult family members are all stakeholders in gifted education. Students were not used as participants because the subject of the study is the program and students do not play a role in how the components work as a system.

The criterion of 3 years for educators, staff members, administrators, or parents/adult family members was chosen based on the researcher's belief that it takes at least 3 years to get a handle on teaching, and Virginia Code Section 22.1-303 (2022), which requires a probationary period of 3 years before teachers can be considered for a continuing contract, supports that. The number of years of experience required remained the same for other staff members and families for consistency's sake. A recruitment email detailing the criteria for participation in the study was sent to educators, administrators, gifted program staff members, and parents/adult family members of the five elementary schools in the district because Yin (2016) suggested there would be more confidence in a study's findings if the findings were consistent across multiple sites rather than taken from a single site. Although Eagle Public Schools is one site, the participants came from the different school communities in the district and can be considered as being from across sites.

After obtaining approval from the Institutional Review Board (IRB; see Appendix A) and site approval from Eagle Public Schools (see Appendix B), I sent a recruitment email (see

Appendix C) to general educators, gifted program staff members, administrators, and parents/adult family members of gifted learners explaining the criteria that were used to determine who could participate in the study. After receiving a response from only one teacher after multiple attempts to reach out to the school district for help, I was informed that the criterion of having taught gifted students for 3 years was too rigorous, as school district personnel are a transient population. I returned to the IRB to request a modification of the criterion to 1 year, and it was granted. I then updated the recruitment information and consent form to match the new criterion and submitted them to officials in the school district to send them out again. I was also informed that it would be best if I emailed administrators directly. After I still did not recruit any teachers through the information sent from the district, I asked if I would be allowed to email teachers directly using the email addresses published on the school websites, which was listed in my proposal as a possible way for me to recruit participants, and I was granted permission. That led to the recruitment of a few teachers. Parents from the Gifted and Talented Advisory Committee (GTAC) were emailed directly after I obtained permission from the school district. Snowball sampling (Patton, 2015) was used often throughout the recruitment process. Parents reached out to other parents and teachers and parents provided me with teachers' email addresses after they were permitted to do so. I then sent the recruitment email to the participants who had told parents that they would participate, and the participants returned a signed consent form (see Appendix D) via email before taking part in the study.

The ideal sample size for qualitative research is highly contested in the literature, as experts in the field have suggested anywhere from 10 to 50 participants (Alam, 2021). Qualitative research generally works with small numbers of participants (Patton, 2002), and the concept of saturation plays an important role in participant sampling and data collection (Alam,

2021; Lincoln & Guba, 1985; Polkinghorne, 2005). Saturation, also known as redundancy, is when sampling is completed until no new information is forthcoming (Lincoln & Guba, 1985). Guest et al. (2006) found that saturation of data can occur within 12 interviews, and Crouch and McKenzie (2006) found that a small number of cases helps a researcher get close to interviewees and enhance validity in in-depth inquiry. Stake (1995) suggested that some potential participants may not consider the study worthy of their time. That was true in this case, as I struggled to find participants. In the end, 12 participants agreed to take part in the study, which Guest et al. (2006) suggested should achieve saturation. Data collection continued until thematic saturation was reached in this study. Twelve participants representing different roles in the gifted program (i.e., teachers, gifted education staff, administrators, parents) were interviewed using semistructured individual interview questions (see Appendix E). Participant demographics are provided in Table 1. For this table, numbers were used in place of participant psuedonyms to help maintain confidentiality. Including participants who had different roles related to the gifted program allowed for varied perspectives, which is an important element of qualitative research (Baxter & Jack, 2008; Yin, 2016).

Table 1

Demographics of Participants

Participant	Gender	Relationship to gifted student	Level(s) experienced
1	Female	Teacher	Elementary
2	Female	Parent	Elementary, intermediate, middle, high
3	Female	Parent and former teacher	Elementary, intermediate, middle, high
4	Male	Parent	elementary, intermediate
5	Female	Parent; instructional staff	Elementary, intermediate, middle, high; elementary
6	Female	Parent	Elementary, intermediate, middle, high
7	Female	Gifted-endorsed teacher	Intermediate
8	Male	Parent	Elementary, intermediate
9	Female	Administrator	Elementary, high
10	Female	Gifted-endorsed teacher	Intermediate
11	Female	Teacher	Middle
12	Female	Parent	Elementary, intermediate, middle

For focus groups, six to 10 participants are suggested, though there is no agreed-upon best number of people for focus groups (Merriam & Tisdell, 2016). Creswell and Poth (2018) and Patton (2002) suggested using focus groups when interviewees are similar and cooperative with each other. In this case study, participants played one of four roles: educator, administrator, staff member of the gifted program, or parent/adult family member of gifted learners. Three of the four roles (educator, administrator, and staff member) are employees of the school district, and the parents of gifted learners are not. Though that difference is important, the fact that all participants have a vested interest in the gifted program makes the participants similar. Also, from a systems theory perspective, it is important to include different stakeholders in the program because they each have a role in the system. Two focus groups were conducted with a total of six participants using questions (see Appendix F) that were adapted after interviews and document analysis occurred. I intended to include representatives of each of the roles in the study

in each focus group, but only teachers, gifted staff, and parents were able to attend focus groups, so there was no administrator representation at the focus groups.

Researcher Positionality

In this research, my hope was to add to the existing research about using a systemic approach to gifted education. As a parent of a gifted underachiever in the school district I am studying, I have seen the effects of my son not having had his needs met as a gifted learner. I have also been a teacher for about 15 years, have worked with gifted learners over that time, have completed my gifted endorsement, and was on the gifted committee for about 8 years. Because most research about gifted education has been about specific components of gifted programs rather than how the components work together as a system, I was interested in looking at how the components of the gifted program of Eagle Public Schools work as a system and determining the efficacy of the new gifted program by examining stakeholders' perceptions. I will provide that information to the school district to use in its evaluation of the effectiveness of the gifted program as a system.

Interpretive Framework

With this research, my hope was to add to the existing literature about systems theory (Von Bertalanffy, 2015) in education and provide information to decision-makers about how the individual components of the gifted program work together as a system in Eagle Public Schools. I approached this research using the postpositivism paradigm, which is characterized by a scientific approach to research (Creswell & Poth, 2018). Postpositivists also look to emphasize meaning to explain social concerns and recognize that knowledge is not neutral. Using the postpositivist paradigm allows researchers to present a narrative that reflects personal and professional experiences (Henderson, 2011), which will be helpful in this research because I

have had both personal and professional experiences with gifted students as a mother and a teacher of gifted students.

Philosophical Assumptions

The philosophical assumptions that led me to this research are rhetorical, ontological, epistemological, and axiological in nature. The rhetorical assumption concerns itself with personal and literary narratives (Creswell & Poth, 2018). In this research, I use the first-person voice to connect with readers as is often done in qualitative research. Ontological issues are related to the nature of reality, and in this study, I aim to report different perspectives on the gifted processes in one school district. I want to know what teachers, gifted program staff and administrators, other administrators including school board members, and parents think about how the gifted program works as a system. With the epistemological assumption, qualitative researchers position themselves in relation to the content and setting of the research. Finally, with the axiological assumption, qualitative researchers make their values known in the study (Creswell & Poth, 2018).

Ontological Assumption

Ontological assumptions relate to a researcher's belief in the nature of reality (Creswell & Poth, 2018). With this research, I believe that reality is relative and that perspectives vary with experiences and people's individual thoughts and opinions. For this case study, through multiple data collection methods, I gathered information about the multiple perspectives of the participants. This led me to determine how the elements of the gifted program in the Eagle Public Schools district work together as a system.

Epistemological Assumption

The epistemological assumption relates to how knowledge is known, how the knowledge

is justified, and the relationship between the researcher and what is being researched (Creswell & Poth, 2018). I gathered data from teachers, gifted program staff members and administrators, other school administrators in the district, and parents in this case study. As a resident of the city in which this school district is situated and a parent of a gifted student who has attended five of the schools in the district, I considered myself close to the setting of the research, and I became even closer to it through the interview process. I also recently became endorsed in gifted education, so this research was conducted from the perspective of someone who has been trained in gifted education.

Axiological Assumption

Axiological assumptions relate to the researcher's values and the role of those values in research (Creswell & Poth, 2018). I am a teacher who has completed a gifted endorsement, a resident of the city in which the research is being conducted, and a parent of a gifted student in the school district. All those roles had an impact on how I analyzed data. The philosophical assumptions that drove this research included the following:

- Education is a right for all students.

- All students deserve to be treated fairly and equitably.

- Gifted students are equally important as other students and have varied needs that should be met.

- All teachers should be given opportunities to prepare to meet the needs of all students, including gifted students.

- Gifted program components should align for maximum effectiveness.

- Parents should be seen as partners in their children's education.

Researcher's Role

In this study, my role as a researcher was characteristic of qualitative research: a human instrument collecting and analyzing data (Merriam & Tisdell, 2016). My main goal was to give various stakeholders of the Eagle Public Schools gifted program a voice by scheduling and conducting interviews and analyzing transcripts of the interviews as well as field notes from those interviews, collecting documents and analyzing data obtained from them, and exploring themes and patterns evident in the interviews and document analysis more deeply in focus groups. According to Lincoln and Guba (1985), humans-as-instruments in research have seven characteristics that make data collection nearly as reliable as more objective means: interacting with the situation in context, collecting information about multiple factors simultaneously, analyzing a situation in relation to its context, taking knowledge further into what is felt rather than only what is known, processing data and generating hypotheses immediately, summarizing and clarifying data collected quickly, and exploring atypical responses. As a human instrument in this case study, I was present during the collection of data and demonstrated each of those characteristics as I collected and analyzed data to obtain an accurate understanding of the data collected in the context of gifted education in Eagle Public Schools.

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Procedures

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Because the case study involved human subjects, approval from the IRB to conduct the study had to be obtained. After approval to conduct this study was obtained from the IRB (see Appendix A) and the school district (see Appendix B), participants were elicited via a recruitment email (see Appendix C) sent to all general educators currently serving gifted students, gifted education staff members, administrators, and families of gifted students in Eagle Public Schools. The recruitment email defined the criteria for participation, and the consent form

was attached. Those who fit the criteria of being an educator, staff member, administrator, or parent/adult family member in Eagle Public Schools for at least 3 years and having taught gifted learners, had gifted children who have participated in the gifted program for at least 3 years, or had experience working in the gifted education office for at least 3 years were expected to email a signed consent form back to the researcher. Because the criterion of 3 years was too rigorous, a modification of the study had to be sent to and approved by the IRB. Recruitment information also had to be updated and re-sent to the district representatives. Identifying information about the families of gifted students was not easily obtained, so snowball sampling using the recruitment email as a script occurred after the researcher was permitted to directly email GTAC members. Participants that were recruited from the GTAC and snowball sampling from those parents were sent the recruitment email with the criteria for participation listed as well as the consent form (see Appendix D), which they signed and returned to the researcher via email before participating in any part of the study.

Documents regarding the gifted program of Eagle Public Schools were reviewed to help me gain an understanding of how Eagle Public Schools' gifted program's components work as a system. The main document was the district's Local Plan for the Education of the Gifted. I requested other documents, but I was told that certain documents were not allowed to be shared, though the supervisor of gifted and talented programs emailed me to clarify what was present in the local plan. Yin (2018) suggested that a review of documents should be conducted to corroborate or augment data previously collected. Document analysis occurred first, and then, once participants were selected, interviews and focus groups occurred. In this case study, along with the goal to gain a better understanding of the gifted program's components and how they work together as a system, the purpose of the document review was to corroborate or augment

data collected from interviews. The document analysis was also helpful in determining additional questions to ask in the interviews.

A way to save time in document analysis is to use the triage method as described by Yin (2018) to determine what to spend time reading. Before reviewing data, the researcher developed a plan for that review as suggested by Stake (1995) and Yin (2018). The plan for determining what documents to review was based on specific mention of identification, professional development, and servicing, but special attention was paid to determining the purpose behind the document and understanding the case study so that time was not wasted reviewing impertinent documents. In this case, the Local Plan for the Education of the Gifted was the only document provided, so the plan did not come to fruition. Data collected from the document were typed into a table created in Microsoft Word and coded before categorical aggregation was used to establish themes and patterns.

The second data collection method for this case study was semistructured interviews. Interviewees can suggest explanations or provide insight (Yin, 2018). The questions for the interviews were reviewed by experts, approved by the IRB, and then piloted with a small sample of individuals not included in this study to determine whether the wording was clear and questions were comprehensible before their use in this study. The interviews took place via Zoom and were recorded using Zoom's record feature.

Transcripts of Zoom interviews were created by the automatic transcription feature and then reviewed and adjusted by the researcher to reflect what was said in the interview. The transcripts were typed on a password-protected computer and saved on a password-protected thumb drive to ensure the safety of the data collected. The interviewees were sent the edited transcripts to review for accuracy as part of the member-check process. In one instance, technical

difficulties did not allow for a full recording and transcript, but I was able to use my notes directly after the interview to create a transcript that was then member checked by the participant for accuracy. Data obtained from interviews were coded and then analyzed using categorical aggregation to establish themes and patterns, using direct interpretation to develop generalizations of what was learned and analyzed (Stake, 1995). Sometimes, after the initial description of the case is prepared based on the interviews, additional participants may be added until the data reaches a saturation point where no new data are being obtained (Polkinghorne, 2005). In this case, no new participants were added because saturation was met after 12 participants were interviewed.

After themes and patterns emerged from document analysis and initial interviews, participants were invited to engage in focus group interviews to allow for in-depth exploration of themes and patterns found after the initial interview process had been completed (Patton, 2015). I contacted participants via email sharing a link to a survey with options for the focus group interview time. Once the two times most preferred by participants were identified, emails were sent with invitations to the focus group interviews at least a week before the events, and a reminder email was sent at least 48 hours before the event. The focus group interviews occurred over Zoom, as internet focus groups tend to reduce anxiety (Patton, 2015). As another way to reduce anxiety and produce a nonthreatening environment, participants were given the choice to remain off-camera if they preferred, and their names were changed to numbers that corresponded to the order in which they interviewed. This procedure was put in place to protect participants' anonymity. Numbers were used in all notes taken by the researcher as well. Numbers were changed to pseudonyms later in the process.

Throughout the process of collecting and analyzing data, I did some memoing, took

notes, and maintained an audit trail that describes all decisions made in the study. I also employed a cycle of data analysis and made sure to address anything that might be considered an ethical issue as it came up with my chairperson. There were no issues with noncompliance, risk and adverse effects, or conflict of interest, so I did not have to contact the IRB (Liberty University, n.d.).

Permissions

Informal conversations with both the superintendent of the school district and the supervisor of gifted/talented and advanced programs in the Eagle Public Schools district occurred before I applied for approval from the IRB because I wanted to make sure there was a possibility of completing the research in the district. Formal permission from the district was sought after I obtained permission from the IRB, however, by following the required steps for acquiring permission. To obtain permission from the school district, I was required to provide a written description of the study, a letter from the study chairperson granting permission, a letter from Liberty University approving the human studies research, a list of questions used in the study, a copy of the participants' letter stating that participation is voluntary, and a letter noting that the school district would remain anonymous. The approval letter from the IRB can be found in Appendix A, and the approval letter from the school district can be found in Appendix B.

Recruitment Plan

Participants were solicited via a recruitment email (see Appendix C), which defined the criteria for participation and had the consent form (see Appendix D) attached, to all current general educators, gifted education staff members, administrators, and families of gifted learners in Eagle Public Schools. The school district sent this initial recruitment email. The recruitment email and consent form had to be updated after a few months of not being able to recruit more

than one teacher because the district shared that teachers had told them that the requirement for 3 years of teaching experience in the district was too rigorous since the school district has a transient population that may not stay in the district long enough to work with gifted learners for 3 years. I modified my study to require only 1 year of teaching gifted learners and received approval for the modification from the IRB before updating and re-sending the information to the school district to share. After further attempts to recruit participants did not prove to be successful, I obtained permission from the school district to send the recruitment email directly to teachers, parents, and administrators, which was listed in my application to the IRB as a method to recruit participants. Those who fit the criteria of being an educator, staff member, administrator, or parent/adult family member in Eagle Public Schools for at least 1 year and having taught gifted learners, had gifted children who have participated in the gifted program, or had experience working in the gifted education office were asked to return a signed consent form to me via email before I would schedule individual interviews. Snowball sampling using the recruitment email as a script occurred for much of this study. Participants who were recruited through snowball sampling were sent the recruitment email with the consent form attached and were expected to return the signed consent form to me via email before participating in any part of the study.

Data Collection Plan

A case study has strength in its multiple sources of evidence such as observations, interviews, and artifacts (Yin, 2018). After permission was obtained from the IRB to collect data for this study, multiple data sources were used to understand how the components of Eagle Public Schools' gifted program work together as a system. Data for the study were collected through document analysis, semistructured interviews, and focus group interviews. When

collecting data for the study, Yin's (2018) four principles of data collection were followed: using multiple sources of evidence, creating a case study database, maintaining a chain of evidence, and exercising care when using data from social media.

Document Analysis

Document analysis can help provide background knowledge about a topic. In case study analysis, documents are used to corroborate and augment evidence from other sources (Yin, 2018). In this case study, document analysis served the purpose of corroborating and augmenting data collected in the interviews. By studying the document that described Eagle Public Schools' gifted education plan, I was able to either corroborate the information provided from interviews or ask other clarifying questions. Document review was completed first because it allowed me to get an overall picture of what the school district's plans for the gifted program were. Through the categorization and analysis of this document using the Document Review Table (see Appendix G), my hope was to gather more information about how identification and professional development work in the local system, to determine how the gifted program of Eagle Public Schools works as a system within the entire system of gifted education in Virginia, and to determine the extent of openness of the local system. Understanding the purpose of the document and its possible use in answering the research questions were at the forefront of the analysis, as suggested by Yin (2018).

Document Analysis Data Analysis Plan

a content analysis of the available document to find relevant data. The document was analyzed for emerging themes (Bowen, 2009). I coded the data using provisional coding, I had generated beforehand but adapted at this point in the data analysis process. In provisional coding, a researcher prepares a start list of codes that may appear in the data before collecting data. The

researcher determines those codes based on a preparatory investigation that may include research for the literature review, a researcher's prior knowledge or experiences about the topic of research, or researcher-formulated propositions (Saldaña, 2021). For this research, I used my prior experiences with working with gifted students in gifted programs and observations of my son's experiences with the gifted program in Eagle Public Schools as well as information gathered in my literature review to determine provisional codes. Then, I analyzed data using categorical aggregation to establish themes and patterns, using direct interpretation to develop generalizations of what was learned and analyzed for themes (Stake, 1995). Themes were used to modify existing interview questions (see Appendix G).

Individual Interviews

Interviews are one of the most important sources of data in case study research (Yin, 2018). Semistructured interviews were scheduled and conducted via Zoom using the video and transcript features of the platform. The semistructured interviews were the main source of data collection and were chosen as a data collection method because they allow participants to demonstrate their understanding of a topic, share their perspectives (Merriam & Tisdell, 2016), and answer how and why questions (Yin, 2018). The questions for the individual interviews (see Appendix E) were examined by experts and then piloted with a small sample outside of the intended study sample to determine if changes needed to be made to make the questions clearer. During a semistructured interview, the wording of the questions may be altered to allow for flexibility within the interview (Creswell & Poth, 2018; Merriam & Tisdell, 2016). The interviews were recorded using Zoom's recording feature. Field notes were taken during the interviews, and transcriptions were obtained from Zoom's automatic transcription feature. I reviewed all transcriptions for accuracy and sent them to participants to be checked before

adding them to the case study database. All but one participant responded to requests for an interview member check.

The central research question in the study was: How do the components of Eagle Public Schools' gifted program work together as a system? The subquestions were: What is the relationship between identification procedures for gifted services and the services gifted students receive in Eagle Public Schools? What is the relationship between professional development and identification procedures for gifted services in Eagle Public Schools? What is the relationship between professional development and the services gifted students receive in Eagle Public Schools? How does the gifted program of Eagle Public Schools solicit and use feedback from its stakeholders? What are stakeholders' overall perceptions of the efficacy of Eagle Public Schools' new gifted program? The interview questions stemmed from each of the research questions.

Though semistructured interviews are not necessarily rigidly planned out (Creswell & Poth, 2018), the following guiding questions were used to get the conversations started. Patton (2002) described the use of five possible kinds of questions: experience and behavior questions, opinions and values questions, feeling questions, knowledge questions, and sensory questions.

Individual Interview Questions

1. Please describe your experiences in relation to the gifted program in Eagle Public Schools. (RQ 1)

2. What do you know about the procedures for identifying gifted learners in Eagle Public Schools? (RQ 1, RQ 2, RQ 3)

3. What experiences, if any, have you had with identifying gifted learners in Eagle Public Schools? (RQ 2)

4. How do you feel about the way that Eagle Public Schools identifies gifted learners? (RQ 2)

5. In what ways does the community's understanding of how to identify gifted learners help gifted learners? (RQ 2)

6. What do you know about professional development opportunities that are available for learning about identification of gifted learners in Eagle Public Schools? (RQ 1, RQ 3)

7. Once a student is identified for gifted services in Eagle Public Schools, how are services determined? (RQ 1, RQ 2)

8. What professional development opportunities are available for learning about how to best teach and support gifted learners? (RQ 1, RQ 3, RQ 4)

9. Please describe any professional development or learning experiences you have had in relation to gifted learners. (RQ 1, RQ 3, RQ 4)

10. What benefits do you think that the professional development opportunities about learning how to best teach and support gifted learners have had on gifted learners in Eagle Public Schools? (RQ 3, RQ 4)

11. What are some things that the gifted program can do to include parents in their children's gifted experiences? (RQ 5)

12. Now, let me ask you about feedback, an essential component of working systems. What procedures that you know of are in place for soliciting feedback about the gifted program in Eagle Public Schools? (RQ 1, RQ 5)

13. What opportunities, if any, have you been given to provide feedback about the gifted program in Eagle Public Schools? (RQ 1, RQ 5)

14. What is your opinion about the quality of the new gifted program? (RQ 6)

15. The next question will ask you to put the previous ideas together. What suggestions do you have for Eagle Public Schools about the components of its gifted program working together as a system? (RQ 1, RQ 5)

16. We have covered a lot in this conversation and I appreciate your input. What else do you think is important for me to know about the gifted program? (RQ 1, RQ 2, RQ 3, RQ 4, RQ 5)

Most of the questions asked in the interviews were knowledge questions, which are designed to find out what the respondents know; experience questions, which are meant to obtain information about experiences that respondents may have had; and opinion questions, which are asked to find out what the respondents think about a topic (Patton, 2002). The use of these types of questions aligns with the motive behind case study research—to provide an in-depth description of a case (Yin, 2018). Knowledge and opinion questions were written in the present tense because questions in the present tense are typically easier to answer (Patton, 2002), and experience questions were written to reflect past experiences.

Questions 1, 3, 9, and 13 were asked to get an understanding of the respondents' background experiences in relation to the gifted program in Eagle Public Schools. Questions 1 and 14 allowed respondents to share their overall experiences with the gifted program, while Questions 3, 9, and 13 delved into experiences that were specific to the identification of gifted learners, professional development, and feedback about the program. The questions were designed not only to allow me to get to know more about the respondents, but also to frame the respondents' perspectives. Without asking these questions, I would not have understood the respondents' experiences (Patton, 2002), nor would the context of the responses have been as evident (Yin, 2018).

Questions 2, 6, 7, 8, and 12 were asked to acquire further knowledge about how the components of the gifted program of Eagle Public Schools work together as a system. Knowledge questions are aimed at determining what a respondent knows (Patton, 2002). In this case study, the knowledge questions were used to gather information that relates to how procedures work in the program. This laid the groundwork for how the components of the program work as a system because there must be an understanding of the elements and their interrelations in systems theory (Von Bertalanffy, 2015). Question 12 introduced feedback as an important component of a system. The inclusion of a prefatory statement provided focus for the question, and respondents were given a chance to think about their response (Patton, 2015). This question was meant to evoke information about what procedures are available for soliciting feedback for the gifted program of Eagle Public Schools.

Questions 4, 10, 11, 14, 15, and 16 were opinion questions. These questions allowed opportunities for feedback, which is vital to a system, and helped determine what kind of system the gifted program is (Von Bertalanffy, 2015). These questions were designed to put the respondents in the role of expert and give them a chance to share opinions about the way the gifted program works as a system. Question 15 included a prefatory statement to give time to allow respondents to think for a moment about a response (Patton, 2015). The closing question, Question 16, was a one-shot question (Patton, 2015), which allowed respondents to add any further information that they forgot to mention or thought did not fit within the framing of the previous questions.

Individual Interview Data Analysis Plan

Saldaña (2021) suggested the use of the following coding types for case studies: attribute, in vivo, process, values, evaluation, dramaturgical, motif, narrative, metaphor, causation,

longitudinal, and themeing the data. Attribute coding involves data that describe the demographics and characteristics of participants. In vivo coding uses participants' language as codes. Process coding uses *-ing* words (gerunds) as codes, while values coding involves codes that reflect participants' values, beliefs, and attitudes. Evaluation coding assigns judgment to the merit of programs or policies. Dramaturgical coding focuses on the social drama of interviews and observations. Motif coding uses codes from literature's symbolic events for analysis, while narrative coding uses literary terms and metaphor coding identifies metaphors and comparisons used by participants. Causation coding extracts causal beliefs from participant data. Longitudinal coding compares data collected over time. Finally, themeing the data occurs in the second cycle of analysis and uses themes to summarize beliefs about data (Saldaña, 2021).

Data from interviews were coded in the first cycle of coding using the following coding methods: attribute, in vivo, evaluation, and causation. The coding method used the most was in vivo coding because I wanted to make sure the themes were coming from the voices of the participants. Provisional coding, which is generated by the researcher beforehand but may be adapted at this point of the data analysis process (Saldaña, 2021) was used in the beginning, and themes were adjusted as the process continued. In the second cycle of coding, themeing the data was used (see Appendix H).

After coding took place, data were analyzed using categorical aggregation to establish themes and patterns and using direct interpretation to develop generalizations of what was learned and analyzed for themes. For this instrumental case study whose purpose was to describe how elements of a gifted program work as a system, categorical aggregations took the lead in the analysis, as instrumental case studies seek to understand a phenomenon or a relationship within it (Stake, 1995). Themes were used in the creation of additional focus group interview questions.

After the initial description of the case was prepared based on the interviews, no additional participants were added because no new themes were identified as new data were collected and analyzed (Polkinghorne, 2005). Data were further analyzed for recurring themes and compared and contrasted with other forms of data to triangulate findings.

Focus Groups

After document analysis and interviews were completed and data were analyzed for themes and patterns, focus groups were conducted. Focus groups are a way to allow participants to share their perspectives and further insights about a topic. They provided a nonthreatening environment for participants who may feel uncomfortable in one-on-one environments to share information in a social context while considering their views in context to others' views and providing checks and balances to each other (Patton, 2015). Patton (2015) suggested that internet focus groups reduce anxiety, so in this case study, heterogenous focus groups of parents and educators were conducted using Zoom. Participants were able to turn off their cameras to protect their anonymity. Heterogenous groups were chosen so that a variety of perspectives were presented and interviewees could consider their views in context with others'. Focus groups were recorded using Zoom's record feature, and observational notes were taken on things that offered insight into the situation.

Focus Group Questions

Although the hope was to have a semistructured focus group where there is a structured list of questions that can be supplemented by further probing questions (Gall et al., 2007), until themes and patterns emerged from previous data collection, there was no way to know which specific questions should be asked to dive deeper in those themes and patterns. A short list of

general questions was created to get the process started. They were revised once themes and patterns were determined.

1. What are your first thoughts or feelings that come to mind when you think about the gifted program at Eagle Public Schools? (RQ 1)

2. If you could change one thing about the procedures for identifying gifted learners in Eagle Public Schools, what would it be? (RQ 1, RQ 2)

3. Please describe any professional development opportunities you think teachers of gifted learners would benefit from. (RQ 1, RQ 2, RQ 3)

4. What are some ways that you would like Eagle Public Schools to communicate information about the gifted program? (RQ 1, RQ 4)

5. If you could change one thing about Eagle Public Schools' ways of soliciting feedback from the community about the gifted program, what would it be? (RQ 1, RQ 5)

6. Is there anything else you would like to share about Eagle Public Schools' gifted program? (RQ 1, RQ 2, RQ 3, RQ 4, RQ 5, RQ 6)

Questions 1 through 6 were meant to give participants a forum to share their opinions about how well the program works and what, if anything, the district might consider changing. After patterns and themes emerged from the interviews, it was determined that the original Questions 5 and 6 would be removed because only two participants knew about the new gifted program and most participants would not have much to add about that. Because communication was an underlying theme throughout most interviews, a question about how participants would like to have information relayed to them about the gifted program was added. The final question

was a way to wrap up the conversation and allow participants to add additional comments if they had them.

Focus Group Data Analysis Plan

After data were collected from focus group meetings on Zoom, they were coded using the same analysis procedure as was used for individual interviews, which included attribute coding, in vivo coding, evaluation coding, and causation coding when applicable. Data were coded first using provisional codes, which were generated by the researcher beforehand but were adapted at this point of the data analysis process (Saldaña, 2021). Then, data were analyzed using categorical aggregation (Stake, 1995) to establish themes and patterns (see Appendix I), and direct interpretation was used to develop generalizations of what was learned and analyzed for themes (Stake, 1995).

Data Synthesis

After all the data were collected and analyzed individually from all data sources and within each embedded unit (i.e., school), an aggregative method of synthesis was used to synthesize the information collected from each of the data sources because I am close to the setting, my ontological stance shows the importance of gathering information from multiple perspectives, and my research question was predetermined (Saini & Shlonsky, 2012). By analyzing data obtained across documents, interviews, and focus group interviews, I triangulated the data (Patton, 2015; Yin, 2018). In this case study, I developed preliminary codes and then grouped them to come up with categories. Next, I reduced the categories to create themes, from which I generalized based on my engagement in this research. Categorical aggregation is particularly important in instrumental case studies like this one as the purpose of the case study is to understand a phenomenon and the relationships within it (Stake, 1995). I created themes in my

data analysis from each method of data collection and synthesized the themes across the case study (see Appendix J) to create an overall description of the gifted program as a system and identify the lessons learned from studying this case. Though single case studies are not the most generalizable form of qualitative research, people can learn from others' generalizations (Stake, 1995) and make naturalistic generalizations of their own if the process is described well enough that the readers feel as though they are living vicariously through the description of the research.

Trustworthiness

Being able to trust research is important in professions like education because research-based practice is often used for intervention purposes (Merriam & Tisdell, 2016). When evaluating research to use, it is important to ensure that findings accurately describe reality, that repeated studies would most likely yield similar results, and that what is found can be transferred to other contexts. It is for that reason that the topics of credibility, transferability, dependability, and confirmability are considered when evaluating research. The credibility of this case study was addressed in the triangulation of data across document analysis, interviews, focus group interviews, as well as in member checking of the transcriptions of the interviews. Dependability and confirmability were ensured by using high-quality recording devices and maintaining an audit trail. Transferability was addressed by providing thick, rich descriptions of cases to allow readers to have a deep understanding of the information presented in the study so that they can make naturalistic generalizations of their own as they read.

Credibility

Credibility, which can also be described as internal validity, refers to whether findings are considered credible given the data that are presented (Lincoln & Guba, 1985). With case study analysis, the purpose of which is to take part in an in-depth study of a phenomenon in a

real-world context, triangulation is important to establish credibility (Miles et al., 2020; Patton, 2015; Yin, 2018). In this study, extensive data were collected through document analysis, semistructured interviews, and focus group interviews. I corroborated the data by synthesizing the data collected through multiple and different sources and developing naturalistic generalizations that were validated by describing the research in ordinary language, making information about me available, and providing raw data before interpretation as suggested by Stake (1995). Another way in which this study established credibility was member checking (Creswell & Poth, 2018). Member checking involves soliciting feedback on findings from the study (Merriam & Tisdell, 2016; Miles et al., 2020). Birt et al. (2016) described some of the forms that member checking can take, such as returning the interview transcripts to participants, conducting member check interviews, conducting member check focus groups, and having members check the synthesized data. In this study, participants were allowed to read transcripts to check for accuracy to increase the credibility of the data collected in the interviews. All but one participant responded to requests for member checks for the individual interviews, and all participants responded to requests for member checks for the focus group interviews. I analyzed the data by building an explanation of the case. When analyzing a case, there are many times when inferences need to be made because the researcher is not present to make a direct observation. In this case, it is helpful that the researcher has prolonged engagement in the field of education and with gifted learners because the inferences are made based on experiential knowledge gained from working in school systems and on the gifted committee. This increases credibility and makes for a more compelling case study (Yin, 2018).

Transferability

Transferability relates to a study's external validity or its ability to be generalized to other situations (Lincoln & Guba, 1985). This is extremely important in case study research, as the goal of case study research is to understand a case by generating naturalistic generalizations (i.e., lessons learned; Stake, 1995). Generalizing qualitative data in the statistical sense can be difficult if not impossible, but researchers can provide enough information to allow readers to transfer the study to their situations (Merriam & Tisdell, 2016). Though the purpose of this case study was to describe how the components of Eagle Public Schools' gifted program work together as a system and describe stakeholders' overall perception of the efficacy of the new gifted program, which does not necessarily lend itself to generalizability to other situations, generalizing helped me make assertions about this specific case of Eagle Public Schools' gifted program and how its components work as a system. Other school systems that have gifted programs that are like that of Eagle Public Schools can use the data collected from this study to make basic comparisons to determine how their programs work as systems. In this case study, a rich, thick description (Creswell & Poth, 2018) of the case itself as well as of how the components work together as a system allows for the possibility of transferability to other similar settings with similar demographics and characteristics.

Dependability

Dependability refers to the reliability of research (Lincoln & Guba, 1985). In qualitative research, dependability is more of a concern than the ability to replicate the results of a study (Merriam & Tisdell, 2016; Yin, 2018). In this case study, dependability was addressed through a detailed description of procedures and an inquiry audit by Liberty University in the proposal process. Yin (2018) suggested that qualitative researchers should "conduct research as if

someone were looking over your shoulder" (p. 46). In this case study, procedures were explained as explicitly as possible so that anyone could replicate the research and hopefully come to the same results. An audit trail of processes used throughout the study, including data collection and analysis processes, was maintained so that a third party could audit the research processes (Creswell & Poth, 2018; Yin, 2018). Appendices A through L contain documents that show the steps of research, including obtaining permissions and consent, questioning participants, analyzing data, and completing member checks.

Confirmability

Confirmability refers to the objectivity of research (Lincoln & Guba, 1985). Confirmability in this case study was achieved by collecting multiple sources of data across multiple sites, writing detailed field notes and reflexive journal entries, having a good quality recording device, transcribing the interviews, and maintaining an audit trail/case study database to document how data were obtained and how decisions were made in the process (Creswell & Poth, 2018; Yin, 2018). Confirmability was also increased by the member-check procedures that were built into data collection and data analysis methods for findings and interpretations. By building an explanation as a data analysis method, there were thick descriptions of themes, which also increased confirmability (Yin, 2018).

Ethical Considerations

Ethical matters should be considered throughout the qualitative research process (Creswell & Poth, 2018; Yin, 2018). The first ethical consideration in this case study was the fact that the researcher worked with human subjects. That led to the need to obtain IRB approval before beginning research to ensure that a plan was put in place to protect the privacy, confidentiality, and safety of the participants (Liberty University, n.d.). That plan included

informed consent, anonymity and confidentiality, protection of data, and ethical disclosure of comprehensive findings due to the possibility of siding with or against participants (Creswell & Poth, 2018).

Before collecting data for the proposed study, it is important to make sure that participants are fully informed of the procedures of the study and that their consent is given without coercion (Creswell & Poth, 2018; Miles et al., 2020; Yin, 2018). To address that ethical concern, recruitment information was created to explain the procedures and expectations of the study, and a consent form was obtained from each participant. It is important to protect participants from harm in a research study (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Miles et al., 2020; Yin, 2018). To protect confidentiality to avoid undue harm to participants due to their participation in this study, pseudonyms (numbers) were used for participants upon their entrance into the study, and interviews occurred via Zoom. In the one instance where I had to interview in my work location, I wore headphones, and I made the participant aware that because I was in my working environment, I would not use the name of the school district. Data were stored on a password-protected computer and password-protected thumb drives. When rich, thick descriptions of the process were written, it was important that the descriptions did not give away enough information to identify the participants. Drafts of the manuscript were edited to limit the chance of identification.

Bias may cause a researcher to side against participants (Creswell & Poth, 2018). In this study, my bias against specific teachers in the district who I believed did not provide an appropriate education for my son could have led me to see the program as not working adequately as a system. To avoid the possibility of bias for this reason, those teachers were excluded from the study. Member checks can be conducted by returning the interview transcripts

to participants, conducting member-check interviews, conducting member-check focus groups, and having members check the synthesized data (Birt et al., 2016). In this study, participants were asked to read transcripts to check for accuracy to increase the credibility of the data collected in the interviews. To maintain ethical disclosure of comprehensive findings due to the possibility of siding with or against participants, multiple perspectives reflective of a complex picture were presented as suggested by Creswell and Poth (2018) and Yin (2018).

Summary

This chapter discussed the specifics of the qualitative single-instrumental, embedded case study that focused on how the components of Eagle Public Schools' gifted program work together as a system. The chapter included information about the design of this qualitative research study; described procedures for obtaining approval to conduct the research, recruiting participants, collecting data, and analyzing the data; defined the researcher's role as a human instrument in this study; described some ways in which the study demonstrates its trustworthiness; and addressed ethical issues that were considered in the design of the study. It is through the careful planning and implementation of this study that enough information about how the components of the gifted program of Eagle Public Schools work together as a system was gleaned to give the district information to use if the district determines it important to improve the quality of the program for gifted learners.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this single-instrumental embedded critical case study was to describe how the gifted education processes work together as a system in the Eagle Public Schools district (a pseudonym used to protect confidentiality). Through analysis of the school district's Local Plan for the Education of the Gifted, individual interviews of participants, and focus group interviews, key themes emerged. This chapter provides information about the participants and reports the findings with a specific focus on the themes that emerged in the research.

Participants

At the start of the study, purposeful sampling was used to recruit teachers, gifted staff members, family members, and administrators of gifted learners who had at least 3 years of experience with gifted learners in Eagle Public Schools. The school district's supervisor of gifted and talented shared my recruitment letter (see Appendix C) and consent form (see Appendix D) via email with all staff currently servicing gifted learners and shared contact information with me for the parents in charge of the GTAC. Participants were required to submit a signed consent form before participating in the study, and appointments for interviews were made via email. As the study progressed, it became more difficult to find participants who met the criteria of the study, and I had to return to the IRB to gain approval (see Appendix K) to adjust the criteria to match the demographics of district employees, many of whom had worked with gifted learners in the district for less than 3 years. Though the criteria were adjusted to require that participants worked or lived with learners who had been identified as gifted in the district for only 1 year, recruitment of participants remained difficult, and I had to change my recruitment strategy. I was

permitted to email administrators and teachers directly and was able to use snowball sampling, which was included in my research proposal as another strategy for participant recruitment.

The 12 participants in this study included teachers, parents, an administrator, and participants who were both parents and teachers in the Eagle Public Schools district. While no gifted resource teachers participated in the study, teachers of gifted learners at elementary, middle, and high school levels were represented. The administrator who participated is currently an elementary administrator but has also been a high school administrator in the district. Three of the participants were members of the GTAC, a committee that works directly with the supervisor of the gifted and talented program in the school district. All schools in the district were represented in the participant sample.

Participants shared their experiences and thoughts through individual interviews and then in focus group interviews. After 7 months of recruiting and conducting individual interviews with the 12 participants, I scheduled focus group interviews. For focus group interviews, I sent out a link to a survey through email to determine the time that was best for most people and then sent emails informing participants of when the focus group interviews would occur. After conducting the individual and focus group interviews of the 12 participants, no new themes emerged, so I was certain that I had reached data saturation. Pseudonyms were used throughout the study, and when participants engaged in focus group interviews on Zoom, they were renamed before entering the room and they turned their cameras off to protect their anonymity.

After each interview, each participant was asked to participate in a member check by reading transcripts of the interviews to check for accuracy and respond to an email to confirm accuracy. All participants except for Heather completed a member check for their individual interviews. After each focus group, each participant completed member checks by reading

transcripts of the focus group interviews to check for accuracy and responding to an email to confirm accuracy. All participants confirmed the accuracy of the focus group interview transcripts.

Table 2

Participant Descriptions

Participant	Role(s)	Descriptive information	Method of data collection
Allison	Administrator	School administrator	Individual interview
Catherine	Teacher	Gifted-endorsed teacher	Individual interview
Charles	Parent	Parent of a gifted child; member of GTAC	Individual interview
Christina	Teacher	Teacher	Individual interview
Heather	Teacher	Teacher	Individual and focus group interview
James	Parent	Parent of a gifted child; member of GTAC	Individual and focus group interview
Jennifer	Parent	Parent of one gifted child and one potentially gifted child	Individual and focus group interview
Kelly	Parent	Parent of gifted children; school district employee	Individual and focus group interview
Mariella	Parent	Parent of gifted children; member of GTAC	Individual and focus group interview
Nicole	Parent	Parent of gifted children; has attended GTAC; former teacher	Individual and focus group interview
Samantha	Teacher	Gifted-endorsed teacher	Individual interview
Valentina	Parent/teacher	Parent of gifted children; former teacher in the school district who taught gifted children	Individual interview

Allison

Allison is an assistant principal who has experience in administration at various levels. Though she did not have experience identifying gifted learners and did not mention whether she had taught gifted learners herself, she has had experiences communicating information about the gifted program to teachers and parents, participating in professional development about gifted learners, budgeting for resources that meet the needs of gifted learners, and ensuring that

students are grouped properly so they can receive appropriate gifted services. Allison leads

multitiered systems of support meetings at her school and supports the identification of gifted

learners by encouraging teachers to look at individual student data. She stated that she

"sometimes will say to teachers, 'Hey, this referral date is coming up. What do you think about

this kid? This is what I'm seeing in this kid that would warrant a referral.'"

Catherine

Catherine is a teacher of an advanced class. She earned her gifted endorsement years ago

and has been an instrumental part in the identification of gifted learners as she has both referred

students for identification and scored packets that may lead to the identification of gifted learners

in Eagle Public Schools. Though Catherine is a proponent of gifted education, she is concerned

that some students may be identified as gifted learners too early. She stated:

> I'm very leery of identifying children too early. . . . Before I moved up to sixth grade, I
>
> taught kindergarten for one year and . . . one of the teachers already had kids that were
>
> gifted, and I was very suspicious about that whole process. . . . I feel that there's a big
>
> difference between having gifted tendencies and having early exposure. Our kids come
>
> from so many different backgrounds, and not everybody has Mom and Dad reading
>
> books to them and all these enriching experiences, so the identifying early bothers me.

Charles

Charles is a parent of two children who have taken part in the referral process for gifted

learners. He completed parent referrals for both of his children, one of whom was identified and

is currently receiving gifted services. He is also a member of the GTAC. Though Charles has not

taken part in any learning experiences about gifted education offered by the school district, he

has worked with his gifted child's medical team to learn about gifted students. He stated, "I did

have one of [my child's] medical team give me some material to read on gifted and talented individuals to potentially cope with the transition from the school to home environment and stuff like that." That is how he came to understand the possible frustrations that gifted children may feel when they learn at speeds that are quicker than others. He also learned that gifted learners are excited to be engaging in advanced learning.

Christina

Christina is an elementary school teacher. Though she has not been a teacher for long, she has had many experiences working with students who are gifted and has referred students for gifted services. She has also taken part in district-wide professional development on gifted learners, which she is enthusiastic about but struggles to find time to complete. She stated that there have been "opportunities to learn about gifted and talented, which is great, but at the same time, many of us don't really have the time to go into it."

Heather

Heather is a middle school teacher in the Eagle Public Schools district. She has been part of the process of selecting students for one of the gifted programs and has strong opinions about the identification criteria for gifted learners. She stated, "I think they are a little loose when they define gifted. . . . I know they keep lowering the standard, and . . . I think I probably come across maybe a handful of gifted students." Most notable about Heather is that she has taken part in multiple professional development opportunities. She strives to incorporate different elements of her professional development into her instruction no matter how much work it takes to do so. When speaking about how she incorporated some of her professional development into instruction, she stated, "They were really thinking like scientists, and that's why I like that kind

of NGSS [Next Generation Science Standards]-aligned lesson. I made it all myself, and it was a lot of work, but in the end, [it] was well worth it!"

James

James is the parent of a gifted learner. His son currently receives gifted services, and it seems to be something that he likes. James stated, "For my son, [the gifted program] is his favorite part of school, so it seems successful." James appreciates having a gifted program to meet the needs of gifted learners. He stated, "You can't teach the same way you would teach the rest of the class. Otherwise, there's no point of having the program." James is also a member of the GTAC, which he credits for helping him understand the components of the gifted program. He stated, "I definitely learned how we do it, what the process is. I would not have known that if I wasn't on the GTAC."

Jennifer

Jennifer is the mom of one child who is identified as a gifted learner and another who is potentially gifted. She is also the wife of a teacher. At the time of our interview, she was awaiting information about her second child's possible identification for gifted services. Communication was something that Jennifer referred to multiple times in her interviews. In particular, she appeared frustrated about having to wait to hear about the possible identification of her daughter. Jennifer stated:

> There's been a little bit of a lack of communication. We haven't received an update and it's been a few months now. . . . Even if the answer is that she's not identified, which is absolutely fine, you'd think that someone would give us an update.

Kelly

Kelly is the parent of children who have all gone through the gifted program in Eagle Public Schools. She is also an employee at one of the school district's elementary schools. When her children were young, Kelly's husband would participate in field trips with the gifted program, and Kelly would attend gifted meetings. Kelly has had many experiences with the program. She recalled being at one gifted and talented information meeting when the former supervisor of the gifted and talented program was talking about the referral process. She recounted, "[The former supervisor] was there and she said, 'GT [gifted and talented] is a special program. It's not just for the smart kids. We want the weird kids.' You don't say that!"

Mariella

Mariella is the mother of children who have been identified as gifted learners in Eagle Public Schools. She has also been a member of the GTAC and therefore has some knowledge of the program. She is most excited about the new talent development program that exposes all kindergarteners to advanced learning and may lead to possible referrals later on. When asked about that program, Mariella stated:

> I think it's phenomenal! I think that what [the supervisor] is doing is trying to address a systematic problem that is impacting gifted and talented programs across the nation everywhere. He's using the latest research and it's totally innovative. It's already starting to show an impact . . . [on] the racial disparity between the students in our population and the students in our gifted and talented program.

Nicole

Nicole is the parent of children who have been identified as gifted learners in Eagle Public Schools. One of her children is an alumnus of Eagle Public Schools, and her other child

still attends school in the district. Nicole is a trained educator, though she does not currently hold a teaching position. She has also attended the GTAC meetings, where she has learned a lot about the gifted program. In our interviews, it seemed that she was in favor of the direction in which the program is going under the current supervisor of the gifted and talented program, though she did appear to have concerns about the way gifted learners are viewed in middle and high school. She stated:

> I don't think that the kids in the GT [gifted and talented] program, especially at [the middle and high school], are really given much support outside of what their individual teachers can give them. They are sort of looked at as, "You're going to get an A," or, "You're going to pass the test," and that's the hardest part for me.

Samantha

Samantha is a gifted-endorsed teacher who has taught for many years in the Eagle Public Schools district and has had many experiences teaching and identifying gifted learners including by scoring portfolios. Samantha likes the recent changes in the gifted program because they allow the program to expand to more students. She stated, "They really are doing a good job . . . of expanding who we put in. They're not just all White children, and the majority of our population is not, so it's good that they're reaching out and they're looking for that."

Valentina

Valentina is a teacher who formerly taught gifted children in Eagle Public Schools. She is also the mother of gifted children. While teaching in Eagle Public Schools, Valentina took part in professional development experiences that helped her distinguish between a very intelligent student and a truly gifted student, which helped her when it came time for her to decide if her child was gifted. It is that experience and her experiences working in Title I schools with many

English learners that have led to her concern that there may be more that needs to be done for English learners, especially those who come from Hispanic families. She stated that when working in the school district, "I always worried—are we looking at our non-[English]-speakers if they're doing phenomenal things? Considering that . . . they're doing all that without the language. If they do phenomenal things, are we considering them?" She continued, "When I was working there, we talked about all the things that a typical Title I school [talked] about. I don't feel like we always reminded parents, especially Hispanic families, that maybe have no experience with it."

Results

The purpose of this single-instrumental embedded critical case study was to describe how the components of the gifted program work together as a system in the Eagle Public Schools district (a pseudonym used to protect anonymity). When conducting research, results are more credible and accurate when there are multiple sources of data (Yin, 2018). To better achieve credibility and accuracy, data were triangulated through document analysis, individual semistructured interviews, and focus group interviews. Themes and subthemes were determined from categorical aggregation of codes assigned to data collected from documents and transcripts of individual and focus-group interviews, which were member-checked by participants for accuracy. Except for one participant's individual interview, all interviews were confirmed to be accurate by the participants.

Table 3

Themes and Subthemes Found in Data

Theme	Subthemes in individual interviews	Subthemes in focus group interviews
Communication	Between the program and parents	Frequency of communication
	Between programs in different schools	Suggestions for improvements
	Between the program and staff	
Access to training	School district–provided training	Suggestions for improvements
	Finding training on their own	
Inclusion of historically excluded populations	Referral process	Training for working with gifted learners who are also English learners
	Identification process	

Communication

Communication was a topic that emerged in document analysis as well as in nearly every individual interview and the focus group interviews. Though the document provided by the gifted program mentioned multiple forms of communication across different components of the program, all participants who mentioned communication suggested that the district needed to improve in that area. Jennifer believes that there is "an overall lack of communication." Others referred to the frequency of communication, with participants wanting more or less of a certain kind of communication, or the timeliness of communication specific to one component of gifted education such as the communication of testing results in the identification of gifted students or more frequent communication about the specifics of what students are doing when they are being serviced. Participants noted specific instances when communication could have been better between the program and parents, among programs in different schools, and between the program and staff.

Participants shared ideas for how they thought communication could be improved in both individual and focus group interviews. Heather offered a solution to communication concerns by suggesting the use of one central web page or social media outlet. She stated, "I wish they would

have [a gifted-specific webpage] because then I could input things . . . that kids might be interested in doing. . . . If [parents] had a direct place to go, I think it would be much better." When Heather shared the idea in a focus group interview, Nicole agreed that having all the information on one website would be a great way for the district to communicate. She stated, "The district has tried probably a dozen different forms of communication, . . . but if they could [send] everyone to one main website that is kept current and updated frequently, I feel like it would be much more informative and helpful." In her individual interview, Allison suggested something similar in the form of a central information system:

> You almost need a central information system, where there can be training videos . . . and information on multiple intelligences with presentations about our identification process, diversity of the students we're trying to identify, what we're looking at as gifted. . . . You can probably Google all this stuff yourself, . . . but if the division had something central where parents could go in and learn, . . . that would be nice.

Communication Between the Program and Parents

Of particular interest to parents and teachers was how information about the program is relayed parents. When asked, most participants indicated they did not know about the new kindergarten program that uses a talent development approach involving gifted resource teachers coteaching with general educators. Those who did know about it credited the GTAC for sharing that information. The same was true about participants' understanding of teachers' opportunities for professional development. When asked about personal professional development or learning experiences about gifted learners, James stated, "I definitely learned how we do it, what the process is. I would not have known that if I wasn't on the Gifted and Talented Advisory Committee."

Participants mentioned newsletters, social media platforms, open houses, and the Remind app as avenues for communicating directly with resource teachers and providing feedback. Though many participants were unsure of how to give the program feedback outside of the occasional survey, most felt comfortable giving feedback whether it was solicited or not. Nicole felt confident in providing feedback to the program. She stated, "I'm also that parent, so if I have a question, I'm just going to find your email, and I'm going to email you, and I'm going ask my questions."

Multiple participants also mentioned wanting more information about the identification process and servicing of children. Charles, a parent whose daughter receives gifted services but whose son does not, would like to know "what made [his son] not qualify." At the time of her interview, Jennifer was waiting for information about whether her daughter had been identified as gifted. When speaking of the communication regarding her daughter's identification, she stated, "It's been a few months. And even if the answer is that she's not identified, which is absolutely fine, you'd think that someone would give us an update." Charles's and Jennifer's experiences are consistent with research that suggests that information about important aspects of gifted education such as identification processes becomes less available to parents and parents become less sought out for information as students progress further into school (Lockhart & Mun, 2020; Mun, Ezzani, & Yeung, 2021).

Communication Among Programs in Different Schools

Another subtheme that emerged about communication was how information was communicated from the program in one school to the program in another school. Jennifer, who has a child in one of the district's schools, would not have known about a meeting that shared information about how students are serviced in high school if she had not had friends who told

her. She stated, "I only knew about it because I have good friends who had kids that were in high school. Opportunities to learn more about the programs aren't always being communicated." Nicole mentioned some communication difficulties between the high school and the Governor's School, a school that high school students can attend for advanced studies for part of their school day, related to scheduling of activities and transportation. Nicole stated, "My daughter's senior field trip was planned for the same day as Governor's School graduation. . . . Another that happens is, if [a neighboring school district] doesn't have school, Governor's School happens, but no bus would come and pick up the kids."

Communication Between the Program and the Staff

The final subtheme within the communication theme is communication from the program to the staff. Participants who are staff members had varying views of communication between the program office and staff. Some stated that they were informed about things such as due dates for referrals, but they felt uninformed about other parts of the gifted program. Christina, a teacher of gifted learners, expressed that the program informs teachers of deadlines for referrals, but sometimes the communication about what happens afterward is not as transparent. She stated, "I have no idea what's happening, what they're doing. . . . I would love to know what they're doing during their time together." Heather, a teacher of advanced classes in the district, would like to know more about the identification process. She stated, "There is little discourse when it comes to me knowing how they identify giftedness." At the same time, whether asked to provide feedback or not, Heather also mentioned that she feels comfortable giving feedback because she is "very vocal with [her] supervisor." Allison, an administrator, stated, "I just have provided feedback. I haven't been asked for [feedback] specifically, but . . . I try to advocate for the kids."

Access to Training

Training was another theme that appeared throughout the data. Many of the participants, including parents and teachers who had already earned their gifted endorsement, were unaware of the district's current training expectations for the staff. Training is extremely important because teacher influence can contribute to underachievement in gifted learners (Lamanna et al., 2019). The district's Local Plan for the Education of the Gifted as well as interviews with a few teachers demonstrates that professional development is available to teachers from the school district, and even more opportunities are found by teachers willing to put the time in to look for it. Samantha recalled an opportunity to sign up for a course, but she was unable to take it because of other priorities. She stated, "When we pick our courses for PD [professional development], you can select that. We couldn't this year because [the school district] was doing some big thing that everybody had to do."

School District–Provided Training

Along with the professional development opportunities that Samantha referred to, it was found that the school district provides access to modules in Schoology, the learning management system that the school district uses for asynchronous learning. For some, time may be a concern because teachers have to complete the professional development on their own time. Christina stated, "I know [the program] has sent out different emails about opportunities to learn about gifted and talented, which is great, but at the same time many of us don't really have the time to get into it." She continued, "They have one [Schoology course] that's teaching gifted and advanced students. . . . Don't leave us to take the modules in our own time because, honestly, there's no time. . . . Pull the teachers that have these kids [for a professional development session]."

Some teachers who have been in the district for many years have been provided opportunities to work toward a gifted education endorsement. Samantha stated, "I got my endorsement in gifted [online] but that's just because I wanted it. That was offered to me through one of the people in Central Office who was in charge of the program at the time." Catherine also got the endorsement from a university.

Finding Training on Their Own

Some schools in the district chose to provide groups of teachers with specialized training about working with gifted learners. Allison spoke about taking her staff to Confratute, a gifted learning conference, at the University of Connecticut with Joseph Renzulli. She stated, "We have offered those trainings in the past and teachers have participated when they have gone. They've been able to choose classes that they're going to take the whole week." Some teachers, including Catherine, sought out a gifted endorsement as a way to become educated about how to teach gifted learners. Catherine stated, "I got the endorsement. I just did it online through [a state university]." Those who had not been given opportunities to get specialized training with a school or earn an endorsement in gifted education have found professional learning experiences about gifted learners on their own. Heather stated, "I have to [find professional development] myself. I wish the [school district] actually recognized the value of it."

Inclusion of Historically Excluded Populations

The inclusion of historically excluded populations emerged as a theme in the document analysis as well as the interviews. The documents referred to a focus on historically excluded populations in the referral and identification processes as well as in services and staff training. The school district's Local Plan for the Education of the Gifted begins by stating that the district wants to increase the identification of gifted and talented students among all ethnic, racial, and

socioeconomic groups." Recognition of past inequitable identification of historically excluded populations led to the school district's use of a talent development approach in kindergarten (STAR). This change is positive because talent development allows for a wider array of students to show that they exhibit gifted behaviors over time (Subotnik et al., 2020), as it emphasizes the developmental nature of talent and provides opportunities to nurture talents earlier (Olszewski-Kubilius & Thomson, 2015). There are no data published for the public to view at this time that show if the initiative has led to an increase in the identification of students from historically excluded populations in Eagle Public Schools' gifted program.

When participants mentioned historically excluded populations, they were typically referring to students whose first language is not English and were most concerned that families may not be aware of the gifted program or do not have experiences with gifted programs in their countries of origin that would allow them to help in the identification process of the students. Christina spoke from her experiences as an immigrant when she stated, "Many are not [aware], and I think that has to do a lot with the fact that [many people in the community] are immigrants and [gifted and talented] is not something that we see in other countries." These concerns are consistent with literature that suggests that culturally and linguistically diverse gifted learners may struggle with the school community's mindset and that their families may be unable to support their children in their gifted education because of perceived communication differences, lack of experience with gifted programming, lack of availability of support for caring for young children, or lack of transportation (Lockhart & Mun, 2020).

Referral Process

Some of the participants mentioned the referral process because they had been through the process and recognized that the demographics in the school district are rapidly changing, but

that any student can be gifted. Valentina demonstrated that understanding when she stated, "I'm not sure if they do as good a job of making sure everybody knows [the gifted program] is available and that it could be any student, even if they aren't a 100% speaking English student." Kelly agreed that information about the referral process may not be readily available. She stated, "[My husband and I] have always said that it needs to be brought out more because parents don't know about it. It's only through word of mouth or if the teacher is going to advocate for it."

The Identification Process

The school district's commitment to identifying gifted learners from historically excluded populations was recognized by a few participants. Mariella mentioned the talent development approach that the school district piloted this year. She stated,

> Since [the new supervisor] has been in charge and he started the STAR program where kindergarten and first grade are getting all these gifted resources, I think he's really focusing on trying to broaden that spectrum of who gets into the application process even.

Jennifer agreed when she stated, "They are trying to fix it, to branch out and include more kids that weren't included. . . . A lot of the kids they could identify tend to look like my kids [who are White]." These comments are consistent with the research that suggests that educators of gifted students should be trained to be equity-minded and culturally responsive to meet the needs of diverse gifted students (Ford et al., 2018, 2020) and to recognize giftedness (Bibir et al., 2021) in all gifted learners. For the district to be able to identify gifted learners from historically excluded populations, teachers and parents must have an understanding of how giftedness presents in learners from those populations.

Research Question Responses

The purpose of this single-instrumental embedded critical case study was to describe how the gifted education processes work together as a system in the Eagle Public Schools district (a pseudonym used to protect anonymity). A central research question and five subquestions were developed, and from those questions came individual interview questions (Appendix E) and initial focus group questions (Appendix F), the latter of which were adjusted based on the responses to the individual interview questions. Research questions and individual and focus group interview questions were aligned with each other. The alignment between research questions and interview questions can be found in Table 4. The answers to the research questions based on the data collected from document analysis, individual semistructured interviews, and focus group interviews are found below and are supported by in vivo quotes from participants.

Table 4

Alignment of Research Questions to Individual Interview and Focus Group Questions

Research question	Individual interview questions	Focus group interview questions
How do the components of Eagle Public Schools' gifted program work together as a system to support gifted learners?	All	All
What is the relationship between the procedures for identifying students as gifted learners and the services gifted learners receive in Eagle Public Schools?	2, 3, 4, 5, 7, 16	2
What is the relationship between professional development and procedures for identifying students as gifted learners in Eagle Public Schools?	2, 6, 8, 9, 10, 16	2, 3
What is the relationship between professional development and the services gifted students receive in Eagle Public Schools?	8, 9, 10,16	3
How does the gifted program of Eagle Public Schools solicit and use feedback from its stakeholders?	11, 12, 13, 15, 16	4, 5
What are stakeholders' overall perceptions of the efficacy of Eagle Public Schools' new gifted program?	14, 16	6

Central Research Question

The central research question asked, "How do the components of Eagle Public Schools' gifted program work together as a system to support gifted learners?" The Local Plan for the Education of the Gifted laid out the school district's plan for the referral, identification, placement, and servicing of gifted learners as well as parent notification and training opportunities for teachers of gifted learners. Though the components of the gifted program are laid out in the plan, the overall participant perception was that communication about the different components of the program could be improved. Jennifer stated, "Overall, there's a lack of communication." When asked how parents are included in the gifted program, Valentina spoke of a disconnect in communication and the importance of making parents feel like they are

included in the partnership: "I think getting parents involved is always hard, but I also know that when they get to a certain grade, there's a disconnect. Once my boys got into the [Integrated Math & Science] program I never heard from anyone." She continued, "Making sure parents know that the door is open and that they are part of that whole partnership which we tend not to present to parents [is important]." Though parents receiving less information about gifted education as students progress through schools is typical, parents help provide a well-rounded view of their children's giftedness (Lockhart & Mun, 2020) and should not be left out of the process.

Subquestion 1

Subquestion 1 asked, "What is the relationship between the procedures for identifying students as gifted learners and the services gifted learners receive in Eagle Public Schools?" The participants' perspective is that parents, teachers, and students complete a packet of information about a student that relates to the specific program, the information is brought to a committee, and the student is either identified or not identified for one of the programs. If the student is identified for services in a particular program within the district's gifted program at a particular grade level, the students are given the same services at that level. Heather summarized it well:

> At the elementary school, they do what's called pullout. They have a gifted resource teacher there, but once they are in middle school, unless they have really bad scores somewhere, they're automatically put into the IMS [Integrated Math & Science] program. . . . Then in high school, they can select whether they want to be in the integrated program throughout high school, and then the goal is for them to get into Governor's School.

Gifted learners' cognitive, physical, social, and emotional development often occurs in an asynchronous way, which can create some struggles for them (Jacobs & Eckert, 2017). The Local Plan for the Education of the Gifted corroborated what the participants perceived to be the case—that students are identified for a particular program and given services in that program. The Local Plan also explained that the gifted program uses a curriculum that addresses the unique needs and learning styles of each identified student, that the curriculum is differentiated, and that services are student-based, but there was no mention of addressing the physical, social, emotional, or environmental needs of gifted learners. When gifted learners' social and emotional characteristics are addressed, these students can reach their full potential (Brandišauskienė, 2019; Cavilla, 2019; Speirs Neumeister & Burney, 2019). The lack of that support may have contributed to an issue that Charles's daughter had when being pulled out for services during the day. He stated, "She felt a little alienated. . . . She did have a small case of bullying this year. I don't know if it was directly tied to it [the pullout], but she did comment to me that sometimes she didn't like the pullouts going on."

Subquestion 2

Subquestion 2 asked, "What is the relationship between professional development and procedures for identifying students as gifted learners in Eagle Public Schools?" Though the Local Plan for the Education of the Gifted described the state's expectation that each gifted program offer professional development about the identification of gifted learners, the section of the plan that was specific to Eagle Public Schools did not describe the training beyond stating that the first level of gifted learning training is required. Participants gave varied answers to questions related to professional development, but few participants were able to provide information about professional development opportunities that were specifically designed to

teach staff how to identify gifted learners. Valentina, a former teacher in the district and current parent of gifted learners, was able to answer the question based on her experiences many years ago in the district, but responses from other participants made it unclear as to whether those opportunities exist today. Valentina stated, "There were always opportunities to take professional development classes on gifted students. . . . I wanted to find ways to identify them with maybe ways I hadn't thought of yet."

Educators of gifted students must be trained to recognize giftedness (Bibir et al., 2021), including in diverse learners. Heather talked specifically about her desire for professional development about how to recognize giftedness in diverse learners:

> I think it would be wonderful if they offered professional learning opportunities on identification. . . . A lot of times because of our diverse city population, there's implicit biases. Some people think because our students come from low socioeconomic backgrounds, there's no way they can be smart. But if you could actually help the teachers recognize where giftedness is happening and the potential giftedness in that population, it would be very beneficial.

Subquestion 3

Subquestion 3 asked, "What is the relationship between professional development and the services gifted students receive in Eagle Public Schools?" The goal of professional development is to help teachers provide appropriate educational services for students (Gubbins & Hayden, 2020; Imbeau & Beasley, 2017). Quality professional development is also beneficial because teachers of gifted learners are often inhibited by lack of content knowledge, lack of knowledge about differentiation and modification of the curriculum, inadequate classroom management skills to address learner differences, and negative attitudes toward gifted learners (Benny &

Blonder, 2016). The absence of professional development in those areas can lead to poor services

for gifted learners. Just like with identification, there was mention of a Virginia requirement to

provide professional development that helps teachers understand different educational models,

teaching methods, strategies, and curriculum in the Local Plan for the Education of the Gifted,

but there was no specific mention of Eagle Public Schools providing that in their required

professional development. Participants in this study spoke mostly of working toward earning

gifted education endorsements as the source of their knowledge rather than specific district-wide

professional development about services for gifted learners. Though participants did not discuss

specifics about professional development related to services that gifted learners receive in the

school district, some participants mentioned collaboration with gifted resource teachers and

learning about how to support gifted learners. Campus- and grade-specific sessions are listed in

the local plan as options for professional development. Allison, a school administrator, spoke of

a former gifted resource teacher who worked with classroom teachers about specific gifted

learner needs. She stated,

> We had a really great gifted teacher . . . [who] was really good about talking to teachers,
>
> about how to do different teaching styles and different methods, . . . higher order and
>
> more challenging opportunities. She modeled some things and shared at grade level
>
> meetings.

Having gifted teachers who can provide professional development and help teachers learn how to

teach gifted learners is important because this support benefits all learners.

Subquestion 4

Subquestion 4 asked, "How does the gifted program of Eagle Public Schools solicit and

use feedback from its stakeholders?" The Local Plan for the Education of the Gifted indicated

that a survey would be sent out that addresses the effectiveness of the gifted program in terms of identification procedures, curriculum and instruction, teacher training, communication, and parent/community involvement. The plan also mentioned that results would be shared with the district administration and then presented at the first GTAC meeting. Many participants corroborated that surveys were sent in the past, but they were unsure if the survey was specific to the gifted program or if it applied to the district operations overall. Those who had attended GTAC meetings mentioned the meetings being an opportunity to provide feedback, but they also mentioned the meetings were not very well attended, which could explain why participants felt as if there were few opportunities to provide feedback and were not aware of components of the gifted program such as professional development. The response participants gave most often when asked about feedback was that parents or teachers reached out on their own when they had a concern. Nicole stated, "I've been offered the opportunity to attend the GT [Gifted and Talented] Advisory Committee meeting. I'm also that parent, so if I have a question, I'm just going to find your email and I'm going to email you."

Subquestion 5

Subquestion 5 asked, "What are stakeholders' overall perceptions of the efficacy of Eagle Public Schools' new gifted program?" Using a talent development approach to identifying gifted learners is positive because this approach allows for a wider array of students to show that they exhibit gifted behaviors over time (Subotnik et al., 2020) as it emphasizes the developmental nature of talent and provides opportunities to for talents to be nurtured earlier (Olszewski-Kubilius & Thomson, 2015). Though the new talent development approach to identifying gifted learners is mentioned in the Local Plan for the Education of the Gifted, few participants had any knowledge of it. Those who did know about the new approach were members of the GTAC,

which could be why they were aware of its existence. Members of the GTAC gave mixed reviews about the new approach. In response to a question that asked the participants to give their opinion about the new program, James, who admitted that he did not do research about talent development, said, "I know that we started it. That's about the extent of it. . . . My concern with starting in kindergarten is that you might start and that might be too early to make that assessment." Mariella spoke about the program's impact, saying,

It's already starting to show an impact [on] racial disparity between…our [overall] population and the students in our GT [gifted and talented] program. I feel like [the supervisor] addressed the problem not by looking for a solution, but [by making] systematic changes.

Summary

This chapter describes the 12 participants who were recruited for this study and shares the thematic findings that were triangulated from three data collection methods: document analysis, individual semistructured interviews, and focus group interviews. Through the collection of data and the analysis of those data, rich, thick descriptions were created and later used to form codes that were aggregated into themes and subthemes. The three main themes identified in this study were (a) communication, (b) access to training, and (c) the inclusion of historically excluded populations. Each of these themes was broken down further to answer the study's research question and subquestions.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this single-instrumental embedded critical case study is to describe how the components of the gifted program work together as a system in the Eagle Public Schools district (a pseudonym used to protect anonymity). In Chapter Five, I present the interpretation of the findings of the study. This chapter also presents implications for policy and practice as well as theoretical and methodological implications and limitations and delimitations of this study. The chapter ends with recommendations for future research.

Discussion

This section discusses the case study's findings in relation to the themes that were developed from the analysis of the data. Findings are interpreted based on empirical and theoretical sources as well as data collected from document analysis, individual semistructured interviews, and focus group interviews. Along with the interpretation and summary of thematic findings, discussed in this chapter are implications for policy and practice, theoretical and empirical implications, limitations and delimitations of the study, and recommendations for possibly future research.

Interpretation of Findings

After reading and analyzing documents related to the gifted program of Eagle Public Schools and conducting 12 individual semistructured interviews and two focus group interviews, I identified three major themes related to how the components of Eagle Public Schools' gifted program work together as a system. Those three major themes are communication, access to training, and the inclusion of historically excluded populations in gifted education processes.

Summary of Thematic Findings

Data can be analyzed to find multiple themes and subthemes. In this study, data were coded and analyzed for themes multiple times. A deeper dive into the major themes of communication, access to training, and the inclusion of historically excluded populations in gifted education processes revealed further themes related to systems in gifted education. First, it became clear that communication is vital in a system. Additionally, professional development prepares staff to create individualized learning environments that are the focus of systemic gifted education. Also, including historically excluded populations is a major goal of the district.

Communication is vital in a system. Systems theory posits that understanding the whole facilitates an understanding of individual components (Von Bertalanffy, 2015). One important concept in working systems is interdependence between the parts. While a few of the participants in the study had a clear understanding of most, if not all, of the components of Eagle Public Schools' gifted program, many other participants did not have a clear understanding of one or more of the components. Those who had the most understanding of program components were members of the GTAC, a group of parents who work closely with the supervisor of gifted and talented in the school district. The GTAC parents and supervisor of gifted and talented are interdependent in that the parents are provided with important information and the supervisor has a group of people to share ideas with and support him in writing the gifted annual report. The initial struggle to recruit participants due to teachers not having at least 3 years of experience teaching gifted learners in Eagle Public Schools may explain why teachers were not familiar with the program components and may suggest less interdependence between the program and the teachers.

Another important concept in systems theory is interconnectedness, which means that any change in one part of a system can affect other parts of the system (Ziegler & Phillipson, 2012). One clear example of systemic gifted education that is occurring in Eagle Public Schools is their STAR talent development program. The program was developed to "expose all kindergarteners to advanced learning." Samples of work produced by children who are engaging in advanced learning could be used as part of the traditional referral process for students. This program is a perfect example of systemic education because systemic education is based on developing talents in a coconstructive process (Ziegler & Phillipson, 2012); however, only a few of the participants in the study knew about the program. Participants in the study spoke of the need to improve communication in more than just the STAR program. They listed situations of miscommunication between the program and parents, among programs in the different schools, and between the program and staff. Though this apparent breakdown in communication about the STAR program as well as other topics can be considered negatively, it is positive in that it demonstrates the interconnectedness of parts of a system because stakeholders not knowing about things can affect other parts of the system.

Staff and parents see the value of professional development. Systemic gifted education focuses on individualized learning environments that emphasize interactions between people and their environment (Ziegler & Phillipson, 2012). Participants in the study believe that professional development experiences about how to relate to and instruct gifted learners from diverse cultural and educational backgrounds would be valuable, though many were unaware of the current training opportunities available in Eagle Public Schools. Some participants were willing to seek out their own professional development by way of a gifted endorsement, while

others independently found different programs to attend during their time away from school so they could learn how to create learning environments that would better suit their students.

The district is working toward its goal for inclusion in the gifted program. In data collected from all sources in this study, the desire to include students from historically excluded populations in all processes related to the gifted program was mentioned. The document I reviewed described an intention to provide access to advanced learning to historically excluded populations through the talent development approach. It also mentioned providing a summer workshop for students from historically excluded populations. Some participants described their excitement about the increased emphasis on identifying and servicing students from historically excluded populations, while others were not sure that information about the gifted program was being relayed to families of English learners. This is another example of the interconnectedness of parts of the system because students from historically excluded populations are part of the system, and if they are unaware of processes occurring within the system, they cannot have access to the entire system as intended.

Implications for Policy and Practice

Findings from this study may have implications for policy and practice on at least two fronts. The first implication relates to how Eagle Public Schools' gifted program includes students from historically excluded populations in advanced learning opportunities. The school district has committed to inclusion of students from different cultures in the program, and it has changed the identification procedures to allow for more opportunities for all students to take part in advanced learning. Through the use of the STAR talent development program, the district hopes to increase the number of students from historically excluded populations, which are largely represented in the community. The second implication relates to how various

stakeholders are informed the gifted program. Currently, information about the gifted program is being sent in various ways rather than through a uniform system of information sharing. It appears that parents who are members of the GTAC are more knowledgeable about happenings in the gifted program, but the meetings of the committee are not well attended, so the information is not being disseminated to many stakeholders. Having and heavily promoting the use of one website that houses all information related to gifted education would help ensure that stakeholders have access to information about the gifted program in Eagle Public Schools. That website should be accessible via computers and cell phones and should also provide opportunities for two-way communication so that stakeholders can ask questions and provide feedback about the program.

Implications for Policy

Findings from this study could impact policy related to access to gifted education for historically excluded populations. Currently, there are no national laws regulating gifted education. Schools in some areas of the country include gifted education in special education law, but in other areas of the country, there are no regulations regarding gifted education. Though there are no laws requiring gifted education on the national level, there are laws regarding equal access to education for students who are culturally and linguistically diverse. In all states, learners who are gifted should have legal protections like those afforded to students with disabilities and those who are culturally and linguistically diverse. Making gifted learning as much of a priority as equal access to the general curriculum for students who are culturally and linguistically diverse would show that the country values not only general curriculum but also advanced academics for all students.

Eagle Public Schools has committed to providing advanced academic experiences to students from historically excluded populations through their talent development program. The district has also ensured that English for speakers of other languages teachers are present at gifted eligibility meetings and has provided professional development opportunities to teachers who have gifted learners in their classrooms. If the school district mandates a course for all teachers that is designed specifically to explain how giftedness might present itself in students from historically excluded populations, teachers may become more aware of the district's commitment and be better prepared to refer students from those populations for gifted services. The district could also offer this professional development to other stakeholders, such as parents or administrators, who could also be better prepared to recognize giftedness in students from historically excluded populations. Stakeholders' ability to recognize giftedness in different populations could increase the representation of students from historically excluded populations in gifted programs.

Implications for Practice

By studying how the different components of Eagle Public Schools' gifted program work as a system, I was able to determine what is going well and what is not going well in the system from the perspective of the participants. Feedback is a large part of a system, and communication is part of that feedback. From this study, it was clear that communication about the program was a part of the system that the participants thought could be improved. Participants suggested creating and publicizing a central location for all communication regarding gifted education in Eagle Public Schools. Participants thought that having a central location where information about the program could be found would be helpful for staff and parents. Participants also felt that allowing stakeholders to submit messages on that centralized website if they had questions

or concerns would be a way to increase two-way communication. Parents and staff would only have to go to one place to find information about the gifted program rather than needing to look in multiple places or attend GTAC meetings.

A district-wide website could also be a place where opportunities for professional development about gifted learners could be posted or accessed. This would be particularly useful for staff who felt that they needed to independently research professional development opportunities as well as staff who have taught in the district for a while but need a refresher about district policies and procedures. Such a website could also be used to connect teachers who are new to teaching gifted learners with those who have taught for years and are willing to act as a mentor to newer teachers.

Theoretical and Empirical Implications

Systems theory (Von Bertalanffy, 2015) was developed to help solve organizational problems, as it was found that studying organizational problems can unify an organization. This study aimed to extend system theory research in that it put prior research on the need for systems theory integration in gifted education (Ziegler & Phillipson, 2012; Ziegler & Stoeger, 2017) into practice. The organization in this study is Eagle Public Schools' gifted program, the main function of which is to provide educational opportunities for gifted learners to allow them to meet their potential, as is the case of all gifted programs (Renzulli, 2012). Before this study, Eagle Public Schools' gifted program recognized a flaw due to the lack of identification of students from historically excluded populations for gifted services and implemented a talent development approach to possible identification for the program.

For a system to grow as a system, there must be an exchange of energy between the system and its environment, which is where feedback occurs (Von Bertalanffy, 2015). In this

study, inadequate feedback and communication among staff and parents was mentioned by participants as a possible flaw in the system. Access to professional development related to the identification and instruction of gifted learners was another potential flaw. By bringing this information and participants' suggestions for possible improvements to the attention of school administrators, there is a chance that Eagle Public Schools' gifted program can improve and that school districts can begin thinking about their gifted programs as systems. This research supports research on systems theory (Von Bertalanffy, 2015) and puts systems theory into practice as suggested by other research (Ziegler & Phillipson, 2012).

Limitations and Delimitations

One concern with case studies is that it may be difficult to generalize findings (Yin, 2018) due to possible delimitations and limitations of the research. Delimitations are decisions made by the researcher that limit or define the boundaries of the study. In contrast, limitations are weaknesses that may occur that cannot be controlled by the researcher.

One of the delimitations of this study was my choice of school districts. I chose Eagle Public Schools because of their new talent development program and my desire to understand how their program works. The use of this site caused issues when it came to recruiting participants because there was a smaller pool of participants to recruit from than there would be in a larger district. After months of trying to recruit participants for my case study, I was told by the school district that many teachers did not meet the requirement of having taught gifted learners for 3 years in the district. I returned to the IRB to modify the criterion of my study, but doing so pushed my research back so that it became close to the time staff would begin preparing students for state standardized tests. In a way, my choice of a site was both a delimitation and a limitation. Another delimitation was my choice to exclude questions about the new talent

development program from my list of focus group questions. I did so because most of the participants did not know about the program, and I did not think I would get any further information about the new program.

One limitation of this study was the number of participants who took part in the focus group interviews. While I spent months recruiting 12 participants for the interviews and sent out surveys to try to find the best time for the focus group interviews, circumstances outside of my control such as participant availability and lack of internet access limited the focus group interviews to only six participants. Not only was the number of participants for the focus groups a limitation, but the lack of diversity among the participants was also a limitation to getting the varied perspectives I was looking for. Ten of the 12 participants were women, and though a few participants mentioned concern for the equitable identification of diverse learners as gifted learners, only one participant identified themselves as an immigrant, so there appeared to be limited diversity among participants. I was also only able to interview one administrator despite emailing every principal and assistant principal in the district personally.

Other limitations included technology issues, lack of participant awareness about the new gifted program, and only being given access to one document to review. For a few interviews, there were technology issues with my recording device, but I had automatic transcription and handwritten notes to ensure the accuracy of the transcriptions. Member checks were also completed for interview transcripts. Most of the participants of the study did not seem to know about the new talent development program in the district. Whether that was due to communication about the program, the newness of the program, or a combination of both is yet to be determined, but because most of the participants did not know about the program, it was difficult for me to assess their overall perceptions of the program, which was one of the goals of

this research. I reached out to the supervisor of gifted and talented to ask for more documents to review but was only given access to one document due to district policies. The document was the local plan and it was quite extensive, so I do not think that being given access to only one document hindered my research.

While the transferability of naturalistic generalizations may be weakened by the limitations and delimitations of the study, people can learn from others' generalizations (Stake, 1995) and make naturalistic generalizations of their own if the process and the case are described well enough that the readers feel as though they are living vicariously through the description of the research. The results from this study can be transferred to other districts' gifted programs.

Recommendations for Future Research

Research that applies systems theory to gifted education was nonexistent. This study contributes to the research but was limited by the study sample and the timing of the study. Further research about the talent development approach of providing advanced learning opportunities to all students as a path to possible identification after the school district has had more time to implement it more fully would be beneficial to the school district. Reproducing this study in a district that has a larger available sample of teachers who have been teaching in the district for a longer period of time would further the understanding of the expectations of the program and how the different components of the program work. Expanding this research into other fields to see how the components of their programs work together as a system has the potential to help all fields make improvements within their systems as well.

Further research is needed on procedures for increased inclusion of historically excluded populations in school districts around the country, which includes twice- and thrice-exceptional students as well as English learners and students from low socioeconomic backgrounds. Part of

that research should focus on perceptions about gifted education from various cultures and non-gifted-endorsed educators' self-efficacy related to teaching gifted learners. Finally, further research is needed about parents receiving less information about gifted programs as students progress through school.

Conclusion

The purpose of this single-instrumental embedded critical case study was to describe how the components of the gifted program work together as a system in the Eagle Public Schools district (a pseudonym used to protect anonymity). The findings in the study were informed by systems theory (Von Bertalanffy, 2015), which posits that understanding of a whole allows an understanding of its components.

The goal of the study was to answer the central research question: How do the components of Eagle Public Schools' gifted program work together as a system to support gifted learners in reaching their full potential? Five subquestions helped answer the central research question. Those questions focused on how specific components of the gifted program work together in the school district. Data were collected from analysis of the district's local plan for gifted education; individual semistructured interviews of 12 participants, who were administrators, educators, or parents of gifted learners in the school district; and two focus group interviews.

The most significant finding of this research was that communication is a vital part of a system, and when it is lacking, as it was perceived by participants in the study to be, the system cannot function well across all its components. When teachers and parents do not understand how the different components of the gifted program operate or what the expectations of the program are, it is difficult for gifted learners to get the most out of the gifted program. There are

many research implications of this study, including the expansion of systems theory research across multiple fields as well as research about procedures about the inclusion of historically excluded populations in gifted education across the country, non-gifted-endorsed educators' perceptions of their self-efficacy in teaching gifted learners, and determining the impacts of parents receiving less information about gifted education as students progress in school on the students' school experiences.

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Appendix A

Institutional Review Board Approval Letter

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

June 16, 2022

Casey Ward
Rebecca Harrison

Re: IRB Exemption - IRB-FY21-22-1012 How Eagle Public Schools' Gifted Program Works as a System: A Case Study

Dear Casey Ward, Rebecca Harrison,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of

continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix B

Eagle Public Schools Approval Letter

August 3, 2022

Ms. Casey Ward
Doctoral Candidate
Liberty University
███████████

Dear Ms. Ward,

Thank you for sharing you research proposal titled "How Eagle Public Schools' Gifted Program Works as a System: A Case Study." The research seeks to understand how different variables work together within the gifted program of ███████████████████. Data collection will include semi-structured interviews, focus-groups, and document reviews. Participants will include teachers, staff, administrators, and parents who have at least three years' experience with the ██████ gifted program. The participants will be asked to respond, voluntarily, to an email soliciting their participation.

███████████████████ is interested in the outcomes of your research as it relates to systems theory, established processes, and the perceptions of our school community about our gifted programming. The central research question and subset of supporting questions seek to generate data aimed at analyzing relationships between forms, people, process, and student experience. The research seeks to understand the system and process related to identification of students for gifted education services. Importantly, the research proposal promises to protect the privacy and anonymity of ████████████████ our school community, and the participants by separating demographic and identifiable information from the data set.

████████████████████ will support the research proposed. In lieu of sharing email contact information directly with you ██████ will support your recruitment of educators and others for participation in the proposed research by sending the initial email from a central office email address. The email will include information about the study, contact information for Ms. Casey Ward, and consent forms. Further recruitment, following the procedures outlined in the proposal, may be done in person at the Gifted Advisory Committee meeting if necessary.

Sincerely,

███████████████

Director of Assessment and Accountability

Appendix C

Recruitment Email

Dear ███████████████████ Community Member:

As a doctoral student in the School of Education at Liberty University, I am conducting research as part of the requirements for a Doctor of Education degree. The purpose of my research is to describe how the different components of ██████████████████████ gifted program work together as a system, and I am writing to invite eligible participants to join my study. Participants must be educators, staff members, administrators, or parents/adult family members in ███████████████████████ for at least one year and have taught gifted learners, had/have gifted children who have participated in the gifted program, or had experience working in the gifted education office for at least one year.

Participants, if willing, will be asked to take part in a one-on-one interview about their experiences with the gifted program in the school district (60 minutes), take part in a focus group interview (60 minutes), and review transcripts/findings for accuracy and sign for that approval within an agreed upon timeframe (30 minutes). Individual interviews will be conducted on Zoom and recorded using Zoom's recording feature unless someone specifically requests an in-person interview, which will be recorded on a digital recording device. Focus group interviews will be conducted on Zoom and recorded using Zoom's recording feature. Names and other identifying information will be requested as part of this study, but participants' identifying information will remain confidential. To participate, participants must agree to be recorded for this study.

Participation in this study is voluntary. To participate, please contact me at ██████████ or email me at ██████████████ for more information.

A consent document is attached to this email. The consent document contains additional information about my research. If you choose to participate, you will need to sign the consent document and return it to me via email prior to the interview.

If you have further questions, please reach out to me at the above contact information.

Sincerely,

Casey Ward
Doctoral Candidate
███████████████

Appendix D

Consent Form

Title of the Project: How Eagle Public Schools' [pseudonym used to protect identity] Gifted Program Works as a System: A Case Study
Principal Investigator: Casey Ward, Doctoral Student, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a current educator, staff member, administrator, or parent/adult family member of a child(ren) in ███████ ███████ for at least one year and have taught gifted learners, had a gifted child(ren) who have participated in the gifted program, or had experience working in the gifted education office for at least one year. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the study about and why is it being done?

The purpose of the research is to describe how the different components of ███████ Schools' gifted program work together as a system. It is being done to add to the literature about systems theory in gifted education.

What will happen if you take part in this study?

If you agree to be in this study, you will be asked to do the following things:
1. Take part in a one-on-one interview on Zoom about your knowledge about and experiences related to the gifted program in ███████ Schools. The interview will be recorded using the Zoom record feature and transcribed. In-person interviews can be requested if necessary. In-person interviews will be recorded on a digital recording device. The interview should take about 60 minutes to complete.
2. Take part in a focus group interview on Zoom. Focus group interviews will also be recorded using Zoom's recording feature. The focus group interview should take about 60 minutes to complete.
3. Review transcripts/findings for accuracy and sign for that approval within an agreed upon timeframe. Reviewing transcripts should take about 30 minutes.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from participating in this study.

Benefits to society include shedding light on how the components of ███████ Schools' gifted program work together as a system. This could benefit society because programs may be sparked to explore the effectiveness of their gifted programs as systems and adjust programs, which can increase the effectiveness of those programs and increase the achievement of gifted learners.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. The researcher is, however, a mandatory reporter, so if she becomes privy to information that triggers the mandatory reporting requirements for child abuse, child neglect, elder abuse, or intent to harm self or others, she will need to report that information.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared. As a condition of the approval for this study, ██████████ Schools has required that the researcher share the findings. All personal identifiers will be removed in the final findings.

- Participant responses will be kept confidential through pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation. If participants choose to participate in virtual interviews through Zoom, they may choose to turn off their cameras to protect their visual identity. Focus group interviews will be conducted via Zoom. Participants are encouraged to take measures to protect their identity.
- Data will be stored on a password-protected computer and password-protected thumb drives and may be used in future presentations. Any paper copies of data will be stored in a locked filing cabinet. After three years, all electronic records will be deleted, and paper copies will be shredded.
- Interviews will be recorded and transcribed using the automatic transcription processes on Zoom if interviews are done virtually or they will be hand-transcribed on Microsoft Word if conducted in person. Recordings and transcriptions will be stored on a password protected computer for three years and then erased. Only the researcher will have access to these recordings. Notes from observations will be taken on the same password protected computer and will be stored for three years and then erased. Each participant will be given a chance to review, edit, and approve the transcript for accuracy prior to its being using in the study.
- While confidentiality can be maintained in individual interviews, it cannot be guaranteed for the focus group interviews as focus group members could possibly share information from the interviews with people outside of the focus groups despite being encouraged not to.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or ██████████ Schools. Should you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Casey Ward. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at ███████████████. You may also contact the researcher's faculty sponsor, Dr. Rebecca Harrison, at ██████████████████.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you acknowledge that you meet the inclusion criteria and are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio and video record me as part of my participation in this study.

_____   _____
Printed Subject Name   Email Address

_____   _____
Phone Number   Signature & Date

Standardized Open-Ended Interview Questions

1. Please describe your experiences in relation to the gifted program in Eagle Public Schools. (RQ 1)

2. What do you know about the procedures for identifying gifted learners in Eagle Public Schools? (RQ 1, RQ 2, RQ 3)

3. What experiences, if any, have you had with identifying gifted learners in Eagle Public Schools? (RQ 2)

4. How do you feel about the way that Eagle Public Schools identifies gifted learners? (RQ 2)

5. In what ways does the community's understanding of how to identify gifted learners help gifted learners? (RQ 2)

6. What do you know about the professional development opportunities that are available for learning about identification of gifted learners in Eagle Public Schools? (RQ 1, RQ 3)

7. Once a student is identified for gifted services in Eagle Public Schools, how are services determined? (RQ 1, RQ 2)

8. What professional development opportunities are available for learning about how to best teach and support gifted learners? (RQ 1, RQ 3, RQ 4)

9. Please describe any professional development or learning experiences you have had in relation to gifted learners. (RQ 1, RQ 3, RQ 4)

10. What benefits do you think that the professional development opportunities about learning how to best teach and support gifted learners have had on gifted learners in Eagle Public Schools? (RQ 3, RQ 4)

11. What are some things that the gifted program can do to include parents in their children's gifted experiences? (RQ 5)

12. Now, let me ask you about feedback, an essential component of working systems. What procedures do you know of are in place for soliciting feedback about the gifted program in Eagle Public Schools? (RQ 1, RQ 5)

13. What opportunities, if any, have you been given to provide feedback about the gifted program in Eagle Public Schools? (RQ 1, RQ 5)

14. What is your opinion about the quality of the new gifted program? (RQ 6)

15. The next question will ask you to put the previous ideas together. What suggestions do you have for Eagle Public Schools about the components of its gifted program working together as a system? (RQ 1, RQ 5)

16. We have covered a lot in this conversation and I appreciate your input. What else do you think is important for me to know about the gifted program? (RQ 1, RQ 2, RQ 3, RQ 4, RQ 5)

Appendix F

Focus Group Interview Questions

1. What are your first thoughts or feelings that come to mind when you think about the gifted program at Eagle Public Schools? (RQ 1)

2. If you could change one thing about the procedures for identifying gifted learners in Eagle Public Schools, what would it be? (RQ 1, RQ 2)

3. Please describe any professional development opportunities you think teachers of gifted learners would benefit from. (RQ 1, RQ 2, RQ 3)

4. What are some ways that you would like Eagle Public Schools to communicate information about the gifted program? (RQ 1, RQ 4)

5. If you could change one thing about Eagle Public Schools' ways of soliciting feedback from the community about the gifted program, what would it be? (RQ 1, RQ 5)

6. Is there anything else you would like to share about Eagle Public Schools' gifted program? (RQ 1, RQ 2, RQ 3, RQ 4, RQ 5, RQ 6)

Appendix G

Document Review Tables

Table G1

Analysis of Documents Reviewed

Document reviewed	Sample	Themes	Questions
Local Plan for the Education of the Gifted	**Part I, Section A** (pg. 4) "…committed to the identification of gifted and talented students among all ethnic, racial, and socioeconomic groups…talent development approach, in which supports are placed specifically for students of historically excluded populations."	historically excluded populations	How will you gather information regarding students' ethnic, racial, and socioeconomic group?
	Part I, Section B (pgs. 4 & 5) "…remarkable strength, or the potential for remarkable strength in both verbal and quantitative domains." "…remarkable strength, or the potential for remarkable strength in a single core, content area." "…demonstrate & will demonstrate triangulated strength in visual art aptitude…"	strength and potential	How is potential measured? How do you determine if a student will demonstrate strength?
	Part II, Section A (pg. 6) "…uniform screening policy with special emphasis on historically excluded populations…" "Consistent procedures and instruments that include multiple assessment tools…assessments in the student's native language whenever possible."	uniform screening policy; historically excluded populations	Is there professional development on how to refer and identify students from historically excluded populations?

Part II, Section B (pg. 6) "…mix of pullout and push-in services…" "…may not be appropriate for all students...For students in which pullout and push-in are deemed inappropriate service options, GIEPs will be implemented." "The parent/guardian, general education teacher(s), and possibly the student will meet with the GRT to determine the GIEP."	determining appropriate services; historically excluded populations; collaboration	Are Gifted Individual Education Plans only for students will special circumstances?
Part II, Section C (pg. 7) "In place of formal identification at the Kindergarten level, we utilize a talent develop approach in which all students are exposed to advanced/gifted curriculum. The GRT works closely with the kindergarten teachers, meeting periodically throughout the year to conduct classroom push-in lessons in which all students work through advanced activities." "…enrichment, extension, and enhancement lessons will be available and possibly accessible to all students as Gifted Resource teachers work together with general education teachers." "Once identified in grades 1 – 8, students and the GRT create and maintain a portfolio of student work throughout the program." "After identification, students in grades 9 – 12 select a GT high school pathway… determined by the students."	Talent development approach; collaboration; middle school portfolio; high school pathway	How are parents involved in the process after identification? Is there professional development for general educators or other educators who work with gifted students as to how to instruct students who are potentially gifted? What does the process for choosing a gifted pathway in high school entail?

Part II, Section D (pgs. 7 & 8) "All general education cluster teachers who teach GT students participate in the division GT Training course…focus on research-based, best practice information currently in the field on working with gifted and advanced students…addressing equity and identification. All teachers will have access to participate in this training course." "GRTs will meet periodically as a professional learning community to ensure vertical alignment and high-quality instruction…" "The GRT will meet and plan regularly with general education PLCs."	collaboration; access to training; ensure vertical alignment and high-quality instruction	Who puts the training of general education cluster teachers on? Are ESOL teachers and special educators included in the training and the PLCs?
Part II, Section E (pg. 8) "…the division will continue to review its [referral] process and make modifications to ensure equitable access…" "Relevant, current research will be reviewed annually to incorporate recent information into the identification process and the revision/selection of instruments." "Giving all students opportunities for advancement allows more inclusivity and attention to historically excluded groups." "A summer enrichment camp, specifically targeting historically	annual review of referral process; annual review of identification process; opportunities for historically-excluded groups; summer enrichment camp	Who is responsible for the annual review? What does the process entail? Will the talent and development portion of the program expand past Kindergarten? What is the procedure for keeping work samples for possible identification?

excluded elementary student groups, will be developments to help diminish the excellence gap and grow talent."

Part II, Section F (pgs. 8 & 9) "A parent-led GT Advisory Committee assists in the dissemination of GT information." "An e-mail list of [stakeholders] will be compiled…district social media blasts" "A seasonal newsletter detailing activities of GT students at different levels is sent via e-mail. A hard copy is available for families who do not have internet." "…workshops and conferences…disseminated via e-mail. Hard copies of the information will be available for families who do not have internet access." "A summer workshop targeting parents of historically excluded populations will be created and implemented."	communication; parent-led GTAC; information disseminated to stakeholders; seasonal newsletter; workshops and conferences sent through email; summer workshop for historically-excluded groups	What are the topics included in the summer workshop for parents? In what format is the workshop presented (in-person, virtually, multiple opportunities)? How are parents informed of this opportunity?
Part III, Section A, Subsections 1 & 2 (pgs. 10 -12)		
"…has developed a talent development program to expose all kindergarteners to advanced learning. Samples of student work may be collected to include with traditional referrals later on."	talent development; characteristics of gifted learners reviewed; lesson resources shared; historically-excluded students; ESOL teachers share information; NNAT3; school diagnosticians	Do the review of characteristics of gifted learners and the sharing of lesson resources include teachers who work with students in special populations (i.e.

"…the GRT reviews characteristics of gifted learners with each Kindergarten teacher in advance of the beginning of the lessons."

"Lesson resources and gifted/advanced curriculum is shared with general education teachers in grades K-12."

"The GRT confers with classroom teachers, as well as collects evidence, to add names of students who showed potential as the lesson was presented. At the end of each grade, the names of historically excluded students who were noted through the lessons are added to a talent development pool for further review. Parents of these students will be invited to a workshop for historically excluded students…"

"ESOL teachers work with gifted education staff to identify students who are demonstrating behaviors that are different from other students of their same age and environment. All new ELs to the division are given the NNAT3 as a screening device."

"ESOL teachers contact gifted education staff at the school site for any new student screened for ESOL but found ineligible/testing too high for services."

"…special education diagnosticians and school psychologists provide information to the GT supervisor regarding students they assess

share students who score over 120 points; collaboration

ESOL teachers and Special Educators)?

Are teachers made aware of who the students from historically excluded groups before the lessons or after?

who have a single score on the individualized assessment that exceeds 120 points."

Part III, Section A, Subsection 3 (pg. 12)

"8th grade honors art teachers hand out to all art students information on the GT Art program at the high school level. Students submit intent to apply forms for the GT Art, and Art teachers touch base personally with all students intending to apply to discuss GT Art eligibility procedures… Art teachers will also fill out a checklist of gifted behaviors."	Collaboration; application; checklist of gifted behaviors	Is there professional development about the checklist? Do teachers speak to students who may not have thought about applying, but may be gifted?

Part III, Section B, Subsections 1 & 2 (pgs. 12 – 15)

"Students may be referred for the gifted program in grade 1 – 8 by a member of the school staff, an administrator, a parent, another student, community members, or by the student him/herself. Referrals are available…" "A pre-referral grade-level team meeting with administration…GRTs begin by going over typical GT behaviors to include those of historically excluded students." "School counselors, administrators, and enrollment officials at each school received a letter annually from the GT supervisor to be provided to parents/guardians who transfer [into the division] with students	referral procedures – referral by staff, admin, parent, other student, community member, themselves; letter provided to parents of transfer students who have been found eligible; may appeal decision; fall and spring referral cycles	How are parents notified about the website with referral information? Can Kindergarten students be referred outside of the talent development process? What efforts are made to contact parents for permission? Can a child be screened in the spring if permission

who have already been found eligible for the gifted program."		deadline is missed in the fall?
"Parents of students who have been found ineligible, whose status has been appealed and has been found ineligible by the [GT Appeals] Committee must meet with the GT Supervisor to review existing student data before a second referral will be accepted…may only be referred twice…may not be evaluated more than once in a 12-month period."		
"Fall (Open 1 – 12) Referral Due Date: 1st week of October, Parent Permission Due Date: 2nd week of October…Spring (Open 1 – 12) Referral Due Date: 1st week of February, Parent Permission Due Date: 2nd week of February."		
Part III, Section B, Subsection 3 (pg. 15) "8th grade honors art teachers hand out to all art students information on the GT Art program at the high school level. Information regarding these programs along with procedures is also posted on the division website."	referral procedures – Honors Art teachers hand out information; posted on division website	Why is information about Gifted Visual Art Referrals not included in this plan?
Part III, Section C, Subsection 1 (pgs. 16 – 19) "1. Assessment of appropriate student products, performance, or portfolio. 2. Record of observation of in-class behavior. 3. Appropriate rating scales, checklists, or questionnaires. 4. Individual interview. 5a.	multiple forms of assessment; assessed by GT Resource teachers, SIGS	Are ESOL teachers and Special Educators included in SIGS? What does the training consist of

Individual or group-administered nationally norm-referenced aptitude test(s)…and/or 5b. Individual or group-administered, nationally norm-referenced achievement test(s)."

"All items are assessed by a trained committee composed of GT resource teachers. Each committee uses the same assessment guidelines to review the portfolio and to reach a consensus decision from below average to superior."

"The Scales for Identifying Gifted Students (SIGS) is a normed referenced comprehensive observation tool to identify gifted students. Each content area teacher is responsible for filling out the appropriate SIGS form category."

"VPA – Visual Arts 1. Assessment of appropriate student products, performance, or portfolio. 2. Record of observation or in-class behavior. 3. Appropriate rating scales, checklists, or questionnaires."

"GT Visual Art identification is based on scores as recorded on the GT Art matrix…The portfolio is assessed by art teachers from grades K-12. Criteria include…above average in intelligence."

Part III, Section D, Subsection 1 (pgs. 21 - 22)

for reviewing portfolios?

Why is there no interview included in the Visual Art identification procedures?

How is above average in intelligence determined (no tests are included in procedures)?

"Identification/Placement Committee…General Intellectual Aptitude…3 Gifted Education Resource Teacher(s), 1 Gifted Education Coordinator; 2 Other(s) Specify: ESOL teachers and Special Education teacher when necessary."	placement procedures; identification/placement committee	Why are general educators not involved in the identification/ placement committees?
"Specific Academic Aptitude – English, History and Social Studies, Mathematics, and Science…3 Gifted Education Resource Teacher(s), 1 Gifted Education Coordinator; 2 Other(s) Specify: ESOL teachers and Special Education teacher when necessary."		
"VPA – Visual Arts…1 Gifted Education Coordinator. 5 Other(s) Specify: Art Teachers K-12		
Part III, Section D, Subsection 3 (pgs. 27 & 28) "General Intellectual Aptitude… grades 1 – 4 have access to cluster services…aligned with specific strengths of the identified services…students may have a GIEP created and implemented as a service plan option."	varied student-based services; cluster services aligned with strengths; differentiated curriculum and instruction in all content areas; IMS; IH; pull-out/push-in/Gifted IEP; most accelerated art classes	How is determination of services communicated to parents?
"In [grades 5 and 6] students are placed in cluster classrooms according to their academic strengths…at least [1 or 2 teams] differentiated curriculum and instruction in all content areas."		If the student does not choose IMS or IH in middle school, what happens?
"Options of services [in middle school] include Integrated Mathematics and Science (IMS) as well as Integrated Humanities		Why are there a different number of teams that differentiate curriculum at different intermediate schools?

(IH) I and II. Both these programs are accelerated, integrated problem-based learning courses for students who exhibit profound strength in mathematics and science or in social studies and language arts…Additional options of services…GIEP… grade acceleration."

"Services are student based, so there is not one size fits all service option. All students have access to one of the following forms of service; pullout, push-in, or GIEP."
"Students identified for GT art are offered participation beginning in grade nine in the most accelerated art classes at [the high school]…"

Part IV (pgs. 29 & 30)
"GT informational meetings are held upon request by parents, students, and staff. Information is shared on the division GT page…"

"Parents of students who have been referred…are provided with written information regarding that referral."

"…parents/guardians of students who have been found eligible are provided written information about the services that are recommended…"

"…parents/guardians of those students found ineligible are notified in writing of the decision of the committee and their right to appeal. An appeals form and

| | notification procedures | How are parents informed about information about requesting a GT informational meeting being on the GT page?

What are the options for families who don't have technology?

What are the options for those who speak languages other than English?

Are the appeals form and information about |

narrative of the appeals process are provided to the parents/guardians, along with an invitation to the parents/guardians to meet with the GT Supervisor to discuss the data collected as part of the eligibility process…"

"…written appeal form within thirty days of the date of the eligibility letter from the division…division appeals committee will be provided…no members of the previous eligibility committee…GT supervisor serves only as the liaison to the appeals committee, without voting privileges…members with experience in working with gifted students…have professional training and/or the endorsement in gifted education…decision within ten instructional days."

Part V (pg. 32)
"…no changes in services will be made without direct communication with the parent/guardian."

changes in services

"Parents/guardians and all other division staff directly involved with the intellectual, academic, and social needs of the student will be involved in a discussion regarding the need for a change in service options…"

"[The division] does not initiate the complete removal of identified students from its services. Parents who wish to discuss removal of the student

the appeals process automatically sent?

Does the appeals committee include general educators?

Are all of the people who attend the discussion regarding a change in services involved in determining the services initially?

from services may contact the building administrator or the GT Supervisor…"

"If a parent exits a student from gifted services, the student remains eligible for reinstatement of services."

Part VI, Section A, Subsection A (pgs. 34 - 37)

"All kindergarten students are served through the kindergarten STAR talent development program…"

services options

Are homeroom teachers in GT cluster groups required to be trained at the division training session?

How are parents notified about high school pathways?

"In grades one and two, STAR identified students are placed in a designated cluster at each grade…daily instructional opportunities… differentiate and accelerate instruction for these students in their core class strength areas…gifted resource teacher also continues to provide general education enrichment lessons throughout the school year."

"In grades three and four, all identified students are placed in a designated cluster at each grade…daily instructional opportunities…differentiate and accelerate instruction for these students…pull-out sessions directly with the gifted resource teacher and intellectual peers weekly or biweekly…project-based learning."

"An alternative service option that students may participate in is GIEPs."

"In grades five and six students are clustered into designated GT homerooms…may also attend pull-out time with intellectual peers for one class period per meek…project-based learning…GIEPs…Instruction in grades five and six is presented in team-teaching format."

"Beginning at the end of the 6th grade year, all students may apply to be selected for the middle school IH (Integrated Humanities) program. Students who are currently taking the math 6 advanced course may apply for the middle school IMS (Integrated Math/Science) program."

"Middle school identified students who do not go into either IMS or IH will have an GIEP that follows them throughout middle school."

"Beginning at the end of the 8th grade year, students currently enrolled in either program can choose to stay in the program or exit it. Students not currently enrolled in either program may be eligible to apply to the high school programs…"

"High school identified students who do not go into either IMS or IH may choose a different high school GT pathway…"

"Beginning at the end of the 6th grade year, students may apply to an Honors Art program at [the middle school]. In 8th grade, students may apply to the GT Art

program, which now starts at
[the high school].”

Part VI, Section A, Subsection E (pgs. 41 - 42)

“…[the division] has been charged by its superintendent and the [school] board to prepare its students with those skills necessary for success in the 21st Century…intellectual and academic growth are fostered in [the gifted program] through the use of diverse instructional strategies… develop, implement, and assess their own development in these process skills…GT instructional standards a) Critical thinking skills b) Creative & divergent thinking skills c) Independent research d) Intellectual integrity skills.”	21st century skills; diverse instructional strategies; GT instructional standards	How do these skills relate to what is expected of general education students? How are the skills integrated into/differentiated for in general education services?

Part VI, Section A, Subsection F (pg. 43)

“Monitoring the intellectual growth of identified students is a dynamic process involving the student, specific classroom teachers, GT resource teachers, and parents.”	collaboration	

Table G2

Document Analysis Second Round

Codes	Categories	Themes
"historically excluded populations" "strength and potential (verbal and quantitative domains)" "uniform screening policy"	**Historically-excluded populations**: referral, identification, services, dissemination of information	historically-excluded populations talent development
"historically excluded populations" "determining appropriate services" "historically excluded populations" "talent development approach" "collaboration" "middle school portfolio" "high school pathway" "collaboration" "collaboration" "access to training" "ensure vertical alignment and high-quality instruction" "annual review of referral process" "annual review of identification process" "opportunities for historically excluded groups" "summer enrichment camp" "Parent-led GTAC" "information disseminated to stakeholders" "seasonal newsletter" "workshops and conferences sent through email" "summer workshop for historically excluded groups" "talent development" "characteristics of gifted learners reviewed" "lesson resources shared"	**Collaboration**: determining services, identification, instruction (talent development), resources, referral, disseminating information, monitoring growth, vertical alignment **Identification**: access to training, annual review of identification process, identification/placement committees, assessed by GT Resource teachers, uniform screening policy, portfolio, can be appealed, multiple forms of assessment **Referrals**: talent development approach; annual review of referral process; characteristics of gifted learners reviewed; checklist of gifted behaviors; referral by staff, admin, parent, other student, community member, themselves; fall and spring referral cycles **Communication**: GTAC, email list, seasonal newsletter, notification of workshops and conferences sent via email, ESOL teachers share information about ineligible	collaboration communication services

"historically-excluded students"
"ESOL teachers share information"
"NNAT3"
"school diagnosticians share students who scored over 120 points"
"collaboration"
"Collaboration"
"application"
"checklist of gifted behaviors"
"referral by staff, admin, parent, other student, community member, themselves"
"letter provided to parents of transfer students who have been found eligible"
"may appeal decision"
"fall and spring referral cycles"
"Honors Art Teachers hand out information"
"[info about GT Art] posted on division website"
"multiple forms of assessment"
"assessed by GT Resources teachers"
"identification/placement committees"
"varied student-based services"
"cluster services aligned with strengths"
"differentiated curriculum and instruction in all content areas"
"IMS"
"IH"
"pull-out/push-in/Gifted IEP"
"most accelerated art classes"
"notification procedures"
"changes in services"
"service options"
"STAR talent development program"
"21st century skills"
"diverse instructional strategies"
"GT instructional standards"
"collaboration"

students, school diagnosticians share NNAT3 results for those who scored over 120 points, Honors Art teachers share information with students about GT Art, GT Supervisor shares Transfer letter with appropriate staff to share with parents, information about GT Art on website, GT information meetings by request, information on website, written information about referral shared with parents, written information about services recommended shared with parents, written information about ineligibility and right to appeal shared with parents, direct communication about changes in services,

Services: varied student-based services, summer enrichment camp, cluster services aligned with strengths, differentiated curriculum and instruction in all content areas, IMS, IH, pull-out/push-in/Gifted IEP, most accelerated art classes, 21st century skills, diverse instructional strategies, GT Instructional Standards, STAR Talent Development Program

Appendix H

Analysis of Individual Interview Data

Table H1

Analysis of Individual Interview Data

Question	Codes	Themes
1	"ample experience" teaching gifted learners - parent of gifted children "gifted and talented advisory president, vice-president, or secretary since the committee started with bylaws" - teacher and parent of gifted learners "special way of learning" "never felt like I did as much for my gifted students as I could have" "getting more than just what was in the classroom" - Son tested but didn't get in "watch program" - Son got in. "It's not like the GT I grew up with." "focused on metacognitive skills" - Parent of 5 gifted children - bad experience with GT Teacher - half day pull out program - self-centered in school - Parent of gifted child "DOOR's assessment" "pullout program" "advanced math" "IMS program" "Governor's School" "advanced but not gifted" "research class" "GTAC" - transition from elementary through high school "teaching 19 years" "varied supports"	participant roles opinions about the program components

- "flyer from the PTO"
- Parent of gifted student, one student who did not meet criteria
- "GTAC meetings"
- Assistant principal in high school and elementary school
- "communicating information to teachers and parents"
- "allocate the right amount of resources"
- grouping students
- "teaching the Advanced Sixth Grade Math Course"
- "endorsed in GT"
- middle school teacher
- grant writer
- parent of gifted learner and potentially gifted learner
- "lack of communication"
- "lack of cohesion"
- "good experience overall"

2
- "Observe them"   components
- Communicate with the gifted resource teacher
                                    opinions
- "Testing"
- "deadline"
                                    communication
- "exception"
- "skipped a grade"
                                    special considerations
- "I know a lot"
- parents and teachers
- parents "putting things in"
- "interviews"
- "projects"
- "changed significantly"
- "testing"
- "further review"
- "parents sign acceptance"
- "portfolio"
- Teachers bring them up to the gifted teachers
- "Testing over a period of time"
- "discuss results"
- "parent sign off"
- "teachers can recommend students"
- "test"

- "portfolio"
- "self-nominate"
- "screening process"
- Parent referral
- "Naglieri"
- "referred by the teacher"
- "parents had to agree"
- teacher told her she could refer her daughter for GT program
- "go to a meeting"
- "DOOR's assessment"
- "home-based project"
- acceptance letter
- "no idea what her scores were on any of those things"
- "I put in my referral"
- "above average, not gifted"
- "reapply"
- "more subject-specific instead of overall"
- "GT Newsletter", "I guess she's part of the program now"
- teachers, parents, students can recommend
- "portfolio"
- "judged and done the evaluation of [portfolios]"
- "referral" by GT teacher, teacher, administrator, parent
- parental consent
- "different identification criteria"
- "remain in program unless you opt out"
- "referral time"
- "parents and teachers can make referrals"
- "twice exceptional"
- "assessment"
- "group of people rate student products"
- "decision communicated with parents and teachers"
- "all second graders are screened with CogAT"
- Parents and teachers can refer students
- "brought up students"
- "scoring of packets"
- "loose when they define gifted"
- "Naglieri"

- "they keep lowering the standard"
- "teacher recommendations"
- "parent referrals"
- "combination of how they're doing in school"
- "looking for how kids think"
- "test scores"
- parent/teacher referrals
- different foci in program

3

- Identified two students in 1st grade and 1 in pre-K
- "All my kids have been identified"
- "counseled other parents on the process"
- identified some students
- children were identified
- Son = identified
- identifying children
- "extra step because of identifying ourselves"
- "It's changed over the years."
- "evaluate portfolios"
- "identified students"
- parent of one identified gifted learner and one who did not qualify
- lack of communication of results of testing
- MTSS work process
- "talk about students individually"
- "brought students up"
- "scored packets"
- "responsible for selecting students in IMS program"
- "audition process"
- "lack of communication"
- "everyone is overloaded and overworked"
- "it's a little bit…like a mystery"

roles

opinions

4

- "involved"
- "really makes you think"
- "Really great right now"
- "STAR Program"
- "broaden the perspective of who gets into the application process"
- "good sense for what is going on at those kids' levels"

overall impressions

historically-excluded populations

communication

suggestions

- "They do a pretty good job with it.
- Worried about English learners, but think they did a good job with it
- "The way we're doing it now is better."
- "it needs to be brought out more"
- "parents just don't know about it"
- "could be more transparent"
- not reaching Hispanic/Latino population
- "teachers don't have time to handhold every parent"
- "transparency on how kids are identified"
- "looking for children you might not normally find"
- "good job of expanding who we put in"
- "fairly balanced"
- "more staff, more kids"
- "improvements lately"
- "diversify the number of students"
- "wider lens to look at giftedness"
- "leery of identifying children too early"
- "should be treated like a form of special education"
- scheduling sometimes leads to students being labeled
- "need to be a little more stringent in their ability to identify gifted students"
- "disservice to…truly gifted"
- "broader, more inclusive program (race/language)"

5
- many not aware
- "important that teachers understand how to identify gifted learners"
- "I'm not sure if they do a good job of making sure everybody knows what is available…"
- "process is good"
- "important that the community understands how to identify"
- GT teacher table at Teacher Conferences
- "one more thing on [teachers'] plates"
- clear communication of program
- enough staff to teach classes
- "we publicize it enough"

communication

historically-excluded populations

benefits

opinions

suggestions

- "newsletter"
- "notifies parents or people that you can recommend your child"
- more students identified
- interaction with students on their levels
- "some parents feel like they would be imposing to ask"
- "talked about GT at PEP
- Some parents/teachers know, others don't
- Hispanic students' parents don't understand
- "our GT Program should reflect our demographics"
- "I don't have that community feel of how they respond to the GT programs"
- "lack of communication"
- "allow parents to ask the question if they feel like their kids should be identified"
- "more diverse"

6

"emails about opportunities" - Schoology course - limited time - not widespread - annual training "tuition reimbursement?" "Ample opportunities for people who want it." "I don't know anything about that." "I can't say that I know much about it. I'm sorry." "I would just do professional development if I had to." "materials on how to deal with your GT learner" "I don't know about anything" - other priorities this year "took my own courses through JMU" "I'm not sure I know that one" - vision behind the program and what we were looking for at leadership retreat - School-based meeting "TAG" "Confratute" "I'm not sure."	district-offered professional development school-offered professional development individually sought out professional development unsure

- "I don't know"
- "professional development is through my own doing"
- "I don't know."

7
- move from general to "strong subject areas"
- not really sure
- "grade and what they've qualified for – GIA or SSA"
- "modules from William & Mary"
- "individualized plan"
- "certain period of time a week"
- Elementary - meet with teacher on certain days
- Services line up with humanities and arts
- Middle School tracks
- High School Honors Classes
- "went off the State testing"
- "top stanine"
- "They had to be GT across the board."
- "all receive the same GT services"
- "depend on their identified area"
- "pull-out program"
- "try to challenge them"
- "services determined by school budget"
- "teachers set up agenda or schedule"
- "I haven't been a part of that process."
- "I don't know."
- Elementary – pull out
- Middle School – automatically put into IMS
- High School – goal is Governor's School
- "I don't know"
- "set curriculum"

subject area/grade level determined

same for everyone

determined by other factors

unsure

8
- different Schoology courses
- "on our own time"
- Cluster teachers that "really knew how to provide services to my kids"
- "retention of these amazing teachers"
- "co-teach with the gifted teacher"
- "I don't know."
- "I really don't [know]"
- "I don't know of any current ones"
- Class if you're working with gifted students

district-offered professional development

school-offered professional development

individually sought out professional development

unsure

- "I did my own."
- "No clue"
- "Confratute"
- "model some things" (GT Resource Teacher)
- "Schoology coursework"
- "National STEM Scholarship Program"
- "Northrop Grumman Foundation Teachers Fellowship Program"
- "Externships"
- "had to apply to them"
- "On the Farm STEM"
- "Material Science at the University of Michigan"
- "certificate programs"
- "I don' know"

suggestions/opinions

9
- "experience more than anything else"
- desire for PD
- "in gifted and talented program"
- "read about gifted children"
- "classes helped me understand the kids themselves"
- "GTAC"
- "I really haven't"
- "GT field trips"
- "GTAC"
- "class with [a well-respected teacher and researcher]"
- "same kind of PD once a year"
- "I took my own courses."
- "I have done my own research."
- "Confratute"
- "behaviors tend to decrease"
- Need social support
- "passionate about learning"
- "develop a skill set and career-mindedness"
- "I got the endorsement."
- "scoring packets"
- "better person, better teacher"
- "National STEM Scholarship Program"
- "Northrop Grumman Foundation Teachers Fellowship Program"
- "Externships"
- "had to apply to them"

professional development experiences outside of school district

professional development experiences within the school district

opinions about professional development

- "On the Farm STEM"
- "Material Science at the University of Michigan
- "relate to my classes"
- "integrate Math and Science"
- "support system"

| 10 | "support them how they deserve" "PD about identification has the biggest impact" "makes the teacher a better teacher" Training = more effective program students and teachers benefit from PD PD about kids of different backgrounds More information to elementary schools about identification "teacher has done a ton of stuff on her own" "tells [students] what happens next" (Math Teacher) "very, very useful" "understanding the temperament and the emotions" "correctly assist them in their development" "behaviors tend to decrease" Need social support "passionate about learning" "develop a skill set and career-mindedness" "better person, better teacher" "grant writing" "really opened my eyes" "have to do it myself" "wish the city actually recognized the value of it" "more education, the better" "not a lot of support" "totally overwhelmed and unprepared" | benefits for students

benefits for teachers

benefits for the program

overall benefits |
| 11 | parent sessions to learn how to support students "People come to the exposé" "disconnect" "never heard from anyone" "communication with the community is always lacking everywhere" | events

communication

not needed

opinions |

- having connections
- should be a "partnership"
- "newsletter"
- "Remind"
- "YouTube Channel"
- "newsletter"
- "GTAC"
- "GT information letters"
- "meetings"
- "I've been removed since [intermediate school]"
- "meetings on how to help the gifted students"
- "hard to get parents to do anything nowadays"
- more important in elementary school
- "as involved as I want to, or as my child lets me"
- End of year presentation
- Beginning of the year in addition to Back-to-School Night
- "good feedback once in a while"
- "getting parents involved in sharing what their areas of expertise are"
- "highlighting children's work"
- "more frequent communications"
- "summary of when they're switching models"
- "teachers are busy"
- "central information system"
- "web page"
- Nothing at this time
- "make them more aware"
- "specific web page for gifted program"
- "communication is pretty bad"
- social media presence"
- "more communication"
- "reports" about what they did

12
- "district-wide email"
- "no idea what's happening"
- "parent survey
- "parent feedback is solicited at GTAC" meetings

surveys

communication

events

- "I don't think I get anything specific from the gifted department and I haven't in a while."
- Position in place to "help connect the pieces"
- "I don't hear from her" (GT liaison)
- "GTAC"
- "Quarterly newsletter"
- "Remind"
- "Trying to reach everybody"
- "Contact GT Teacher or director of the gifted program directly"
- "GT Coordinator at school"
- "I get emails"
- "email [the current director of the gifted program] and the GT [teacher]"
- "GTAC"
- "surveys used to be done"
- "open house"
- "Remind tool"
- "survey"
- "I don't know"
- "newsletter"
- "GT Symposium"
- "used to do a progress report"
- "parent nights"
- "no common method"
- "survey"

people

unsure

experiences

13
- "no idea what they do"
- "I write the report"
- "I've been given a lot of opportunities… because I'm on this committee."
- "they see me as a partner"
- "GTAC"
- "Remind is…significant feedback mechanism"
- "meet with GT Teachers [in elementary] to get feedback"
- "Once we got to middle school, it wasn't a priority."
- "GTAC"
- "I'm *that* parent"
- "[none] other than talking to the GT Teacher"

Gifted and Talented Advisory Committee

from district

from gifted teacher

on my own

unsure

- "Open house"
- "quarterly session" (GTAC meetings)
- "I haven't been asked for it, specifically"
- "recommendations when they're moving up to [the middle school].
- "pretty vocal with my supervisor"
- "current admin is not receptive" (in specific building)
- "survey"

14	- "I don't know"	unsure
	- "address a systematic problem that is impacting gifted and talented programs across the nation"	could be good
	- "innovative"	could be bad
	- "impact"	
	- "racial disparity" (lessen)	
	- "I don't know what the new program is."	
	- "We started it"	
	- identifying in K might be too early	
	- may have limited space later	
	- "I do not really know anything."	
	- "I don't know what that is."	
	- "Everybody has a talent and we should identify it"	
	- "Gifted kids have to have a separate gifted time."	
	- "I'm not sure."	
	- "not aware"	
	- "I don't know anything about it."	
	- "I had no idea."	
	- "I don't know"	
	- "if you miss a benchmark, you miss a lot"	

15	- dedicated time for in-person PD	better professional development
	- "resources"	
	- "include us more"	
	- "works pretty well"	better communication
	- "not clear how to get good feedback"	
	- "could do better with student feedback"	better identification processes
	- "better job at identification"	
	- services provided could be expanded for GT Art	better services/delivery of services
	- You can't change everything all at once."	

- "continuing to include all students"
- "continuing PD"
- "meetings to explain the difference between gifted and intelligent"
- "support for classroom teachers"
- Worried about no Honors classes
- "more cross-campus involvement"
- "cohort mentality"
- "mentorship program"
- "It sounds like it should work much better than it did in the past"
- "teachers didn't really talk"
- support at high school
- lack of communication between high school and Governor's school
- "disconnect between elementary, middle, and high school"
- None
- more information about testing results (share with parents)
- "change up times of quarterly meetings"
- "more communication of upcoming meetings"
- "staffing issue"
- "reconvening every 3 years or so"
- "GT Teacher simple report"
- "more communication from elementary to middle school" about identification
- "take the parent out of [identification] and look exclusively at the kid"
- "same group of teachers"
- "collaborative team for identifying giftedness"
- "problem with teacher retention"
- "more professional development"
- "collaborate with other school districts"
- "substitute coverage issues" (for PD)
- "communication"
- "roundtables"

better feedback

better support

positive feedback

16
- "They look forward to it."
- "great teacher"
- "racial disparity" (lessened it)
- changed to full-time position

overall comments

more support

- "twice-exceptional" students
- Newcomers
- Son's favorite part of the day
- "beneficial to have GT Program"
- "getting the word out is important"
- "program has evolved"
- not much support outside of individual teachers
- "our teachers are overworked and under a lot of stress"
- role of new instructional facilitators (what is it?)
- "look into different cultures"
- "more field trips"
- "critical aspect of school"
- "alienation"
- "bullying"
- "during Encore"
- "addressing students' needs"
- None
- "summer course to fill gaps" (for students who come into gifted at various points)
- "work in progress"
- "disconnect"
- "great vision"
- "continue to improve communication"
- "roundtable"
- "things in advance"
- "parent outreach position"

staff

student experiences

program has evolved

suggestions

Appendix I

Analysis of Focus Group Data

Table I1

Analysis of Focus Group Data

Question	Codes	Themes
1	"reason I keep my kids in public school" "very happy to have my child in the program" "beneficial to have" "something for the kids to expand the regular classroom experience on" "very helpful" "communication could be greatly improved" "close knit" "adding more and more kids" "changes to advanced curriculum" "standard for identification" (needs to have) "honors instead of true GT-type of program" "a bit too large" "standards…not as rigorous as it should be when identifying gifted kids"	overall thoughts identification communication
2	"I would change the way they identify for the Gifted Art Program" - Rolling admissions won't work - STAR program is "a move in the right direction in terms of alignment with the research about GT." "very big changes in the selection process" (they have made) - give it time "more than just two windows" (for admission) "rolling process" "rolling identification" "lack of communication about identification process" "better communication about the program" "better communication to know what resources are available" - lack of communication from program to parents, Central Office GT to the buildings - clarity on what gifted truly means "increase standards of identifying those who are truly gifted" "more specialized program for truly gifted students"	identification communication support overall thoughts

	• "more things that support gifted learners, interest them, explore creativity and innovativeness" • Admin "don't really invest a lot of time and effort because [gifted students] are making proper scores." • "it's a constant battle"	
3	• "retain good teachers" • "encourage…teachers to get their endorsement in GT" • "learning strategies" • "I don't know" • "expanding on the assignments or tiered learning" • diversity training for identification • "I'm not familiar with a lot of what is out there professional-development-wise for gifted teachers." • "giving teachers time to work amongst themselves" • "figure out how to make the program better on a daily basis in your classroom" • "professional learning opportunities on identification" • "help the teachers recognize where giftedness is happening and the potential giftedness in that population [low socio-economic]" • "how to provide services…especially when dealing with diverse backgrounds" • "twice exceptional students" • more focus on professional development	overall thoughts about professional development kinds of professional development needed unsure
4	• varied communication quality • "very little of that ever includes anything about GT" • "newsletter" • Remind group • "better if all GT Teachers used Remind and gave…updates" • "That would make me feel more connected to my child's education in GT." • evaluation process communication • "I think the school is trying, but it's not focused on what's important to me." • "smaller meetings trying to get more people to connect with parents" • need to be clear to parents about services • "program doesn't give itself enough credit for evolving and changing and then needing to share what it's going to look like every year." • More often communication • "weekly summary of that they're working on" • "GT Parents Night…at the beginning of the year"	events varied methods of communication need for increased/better communication

- "solicit some people for the advisory committee so we get more involvement there
- "brochure on the gifted and talented program"
- "important to have good representation when a lot of parents are in the school"
- more people invited to GT monthly meeting
- "increased communication"
- "lack of cohesion from the different levels"
- "one central location"
- "kept current"
- "I can make the effort to go find the website instead of scrolling through the entirety of the Internet to find it."
- "communication is lacking"
- "constant changes"
- "simple website"
- "Whatever you want to seek as a teacher or parent, or stakeholder, you can look at it."
- "vertical alignment is not strong"

5
- "I think, in a sense, there's a lack of communication all the way through the chain."
- Two-way communication (want)
- "less surveys, more interpersonal communication."
- change in Parent Teacher Nights
- "Having that time where you're just 15 min to sit down once or twice a year during the school year with the gifted and talented teacher that your child has would be very helpful."
- "get back to old school…to get feedback"
- "never hear the results (of surveys)"
- "ask for more feedback"
- "let us know what they're doing with that feedback"
- "We need to solicit feedback."
- Survey with a place to add feedback/concerns
- "ask both the parents and students at…a year-end conference meeting"
- "survey"
- "I don't think we do enough to solicit feedback"
- "We should have a growth mindset in this kind of program."

overall thoughts

surveys

events

two-way communication

6
- equal weight to programs
- supports to make students successful
- supports for cluster teachers to be able to differentiate
- "integration with the regular education"
- "more advanced tailored education in certain subjects"

communication

support

administration

- "partnership with the GT Teacher"
- "communication and trying to get more information out there about the GT program"
- "communication"
- More access to GTAC
- "doesn't include a lot of info that is GT-specific"
- "something similar to Governor's School for the non-math and science kids"
- "well intended"
- "second thought after preparing for gen ed or for special ed"
- "GT teachers are recreating the wheel."
- "It changes a lot."
- "They don't worry about [GT kids] because they're going to pass."
- "The program needs more structure and more acceptance."
- "You just keep confusing me and my kid when we're trying to figure out what class we're supposed to take next, or what's important."
- "Research class is great"
- Lots of turnover
- "good intentions"
- "a lot of room for improvement"
- "constantly evolving so the consistency is not necessarily there"
- Increased expectations
- "There needs to be more direction and structure."
- "ever-changing admin"
- "disconnect between rigor in middle school and high school"
- Need for "vertical alignment"

programming

overall thoughts of program

Appendix J

Data Analysis

Table J1

Analysis Across All Forms of Data Collection

Theme	Number of Mentions in Document Analysis	Number of Mentions in Individual Interviews	Number of Mentions in Focus Group Interviews	Total Number of Mentions in Data Collection
access to training	1	13	9	23
collaboration	5	2	1	8
communication	15	30	15	60
historically-excluded populations	6	10	1	17
services	2	3	4	9
talent development approach	2	4	1	7

Table J2

Themes and Subthemes Across All Forms of Data Collection

Theme	Subthemes in Document Analysis	Subthemes in Individual Interviews	Subthemes in Focus Group Interviews
communication	GTAC receives information letters	lack of communication between schools lack of clear communication between the program and schools lack of communication between program and parents	too many surveys too little communication about resources, events, between building, from central office GT to buildings, to those who are not in on GTAC improvements – central website, monthly information about what students are doing in classes/when they are changing to new topics, more interpersonal forms of communication
access to training	division training (best practices, addressing equity	division training (modules) training on teachers' own time	suggestions: training in working with ESOL students who are gifted; instructional design to have more challenging work, tiered learning
historically-excluded populations	identification referral services training	identification referral process (two languages) communication of events	not a lot of focus on PD training in working with ESOL students who are gifted

Appendix K

Institutional Review Board Approval of Study Revision

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

January 16, 2023

Casey Ward
Rebecca Harrison

Re: Modification - IRB-FY21-22-1012 How Eagle Public Schools' Gifted Program Works as a System: A Case Study

Dear Casey Ward, Rebecca Harrison,

The Liberty University Institutional Review Board (IRB) has rendered the decision below for IRB-FY21-22-1012 How Eagle Public Schools' Gifted Program Works as a System: A Case Study.

Decision: Exempt - Limited IRB

Your request to revise your participant criteria has been approved. Thank you for submitting your revised study documents for our review and documentation. Your revised, stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study in Cayuse IRB. Your stamped consent form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Thank you for complying with the IRB's requirements for making changes to your approved study. Please do not hesitate to contact us with any questions.

We wish you well as you continue with your research.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix L

Member Check Documentation

Table L 1

Member Checks

Participant	Individual Interview Date	Individual Interview Member-Check Date	Focus Group Interview Date	Focus Group Interview Member-Check Date
1	11/29/22	01/02/23	n/a	n/a
2	02/13/23	02/20/23	05/08/23	05/22/23
3	02/27/23	03/18/23	n/a	n/a
4	03/06/23	03/12/23	05/08/23	05/26/23
5	03/21/23	04/26/23	05/08/23	05/04/23
6	04/13/23	04/17/23	05/11/23	05/23/23
7	04/20/23	04/26/23	n/a	n/a
8	04/27/23	05/04/23	n/a	n/a
9	04/28/23	05/01/23	n/a	n/a
10	05/03/23	05/21/23	n/a	n/a
11	05/03/23	email not returned	05/11/23	05/22/23
12	05/05/23	05/08/23	05/08/23	05/24/23