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Does the Input Equal the Outcome for Students with Emotional and Behavioral Disabilities?

Brigid Eileen Bright

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A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

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This Dissertation has been approved as partial fulfillment

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Kathy Grover
Dr. Kathy Grover, Dissertation Chair — 6.24.2021 Date

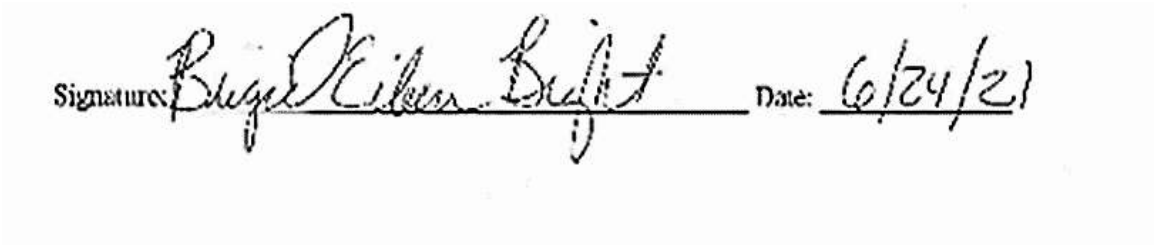
Sherry DeVore
Dr. Sherry DeVore, Committee Member — 6/24/2021 Date

Stewart Pratt
Dr. Stewart Pratt, Committee Member — 6/24/2021 Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

Full Legal Name: Brigid Eileen Bright



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Abstract

Students with emotional and behavioral disabilities experience poor post-secondary outcomes despite the existence of research-based best practices to improve outcomes (Freeman et al., 2019; Mitchel et al., 2019). Research signifies this population as under-served and under-identified (Barnett, 2012). Additionally, funding best practices indicate student outcomes should be considered when allocating resources (Chartrand, 2019). The purpose of this mixed methods study was to consider both inputs and outcomes for graduates with emotional and behavioral disabilities (EBD) and graduates with significant cognitive impairments (SCI) in a rural northwest Arkansas district and the fiscal allocation for both populations. A comparison of quantitative post-secondary outcome data informed the creation of qualitative interview questions. Interviews were conducted with both district and state-level professionals. Analysis of interview responses revealed themes of needs-based support and systemic work. The findings of this study revealed a significant discrepancy does not exist between post-secondary outcomes for graduates with EBD and graduates with SCI. However, graduates with EBD performed poorly when compared to other graduates with IEPs. Data also revealed District A expended more resources for students with SCI. The conclusions of this study surrounding equity and adequacy of services across disability categories and the tracking of post-secondary outcomes have important implications for district and state-level leadership.

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Chapter One: Introduction

Students with emotional or behavioral disabilities struggle to realize success in the public-school system (Freeman et al., 2019; Mitchell et al., 2019; Smith et al., 2011). Research has shown that students with behavioral needs are twice as likely to drop out of school as non-disabled peers (Smith et al., 2011, p. 186). In 2019, only 12.2% of students with disabilities in Arkansas scored ready or exceeding in math and 7.2% in English Language Arts (Bureau of Legislative Research, 2020, p. 9).

However, Arkansas does not publicly report data to compare how students with emotional or behavioral disabilities perform after graduation compared to other high needs students (Bureau of Legislative Research, 2020). Currently, postsecondary data are collected per district every six years (Fields & Boaz, 2021). This study was designed to compare postsecondary outcomes of and fiscal supports provided for students with emotional or behavioral disabilities and students with significant cognitive impairments from District A, located in rural Northwest Arkansas.

In this chapter, the background of the study and conceptual framework are presented. Next, the statement of the problem is described. The purpose of the study, specific research questions, and significance of the study are provided in detail as well as definitions of key terms. Delimitations, limitations, and assumptions are identified.

Background of the Study

The 1954 *Brown v. the Board of Education* decision, which determined "in the field of public education the doctrine separate but equal has no place," was focused on anti-discrimination based on race (Yell, 2019, p. 1). This standard was applied to subsequent legal arguments regarding the segregation of students with disabilities as a population who experienced almost complete exclusion from public education (Yell,

2019). Congress followed up 19 years later with the federal civil rights legislation, Section 504 of the Rehabilitation Act of 1973, which mandated:

> No otherwise qualified individual with a disability in the United States, as defined in section 705(20) of this title, shall, solely by reason of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance…" (U.S. Department of Education, 2010, p. 1)

Two years later, Congress passed the Education for All Handicapped Children Act of 1975 (EAHCA) or Public Law 94-142, which entitles students with disabilities to a free and appropriate public education (Freeman et al., 2019). Additionally, the EAHCA scripted a process for identifying students with disabilities, access to special education services in the least restrictive environment, due process protections and procedures, and provision of federal funds to school districts' implementation of special education services (Freeman et al., 2019). The EAHCA was reauthorized in 1990 and retitled the Individuals with Disabilities Education Act (Freeman et al., 2019). Ultimately, the EAHCA provided access to education for students with disabilities, and the IDEA further ensures "students with disabilities receive beneficial and meaningful educational programs" (Freeman et al., 2019, p. 44).

In 1982, the Supreme Court considered the *Board of Education of the Hendrick Hudson Central School District v. Rowley* (Center for Education & Employment Law, 2020). The Supreme Court found *Rowley* had received a free and appropriate public education because the individualized education plan provided some educational benefit (Center for Education & Employment Law, 2020). The Supreme Court again considered

a special education case in 2017 with *Endrew F. v. Douglas County School District*, RE-1, 137 S.Ct.988, which clarified *Rowley's* intent (Center for Education & Employment Law, 2020). The Center for Education and Employment Law stated in the Students with Disabilities and Special Education Law (2020) Manual:

> In *Endrew F*., the Court held IDEA [Individuals with Disabilities Act] requires "an educational program reasonably calculated to enable a child to make progress appropriate in light of the child's circumstances." The Court rejected the Tenth Circuit's finding that *Rowley* set a minimal FAPE [Free Appropriate Public Education] standard for assessing the progress of students who are not fully integrated into regular classrooms. (p. 2)

The district's failure to adequately address problem behaviors was specifically referenced in the *EndrewF.* decision (Yell, 2019).

Just as *Rowley* and *Endrew F.* seem to convolute the provision of FAPE, so do the IDEA and the Every Student Succeeds Act (ESSA) further complicate the expectation of special education services (Baker et al., 2015; National Council on Disability, 2018). Whereas the IDEA is designed to ensure access to a FAPE for students to make meaningful progress, the ESSA's purpose is "to provide all children with significant opportunity to receive a fair, equitable, and high-quality education and to close achievement gaps" (National Council on Disability, 2018, p. 14). Baker et al. (2015) characterized the conversion of these two federal laws as "have[ing] ostensibly different and conflicting goals" (p. 5).

In 2014, the Office of Special Education Programs shifted from a compliance monitoring model to a result-driven accountability model focused on student outcomes

(Delisle & Yudin, 2014). The transition to results-driven accountability has become the focus for states to meet higher expectations for student growth and outcomes (Delisle & Yudin, 2014). The Arkansas Department of Education (ADE) (2021) monitors student postsecondary outcomes annually through sample-size data mining (Fields & Boaz, 2021). As a result, specific statewide district data are not available (ADE, 2021). Currently, there is no official system for districts to track postsecondary outcomes for graduates in Arkansas (ADE, 2021).

Conceptual Framework

Historically, research revealed students with emotional and behavioral disabilities experience poor postsecondary outcomes compared to their non-disabled peers (Mitchell et al., 2019). Mitchell et al. (2019) indicated specific systems of supports, implemented with fidelity, can improve outcomes for students with emotional and behavioral disabilities. When considering the next steps for quality allocation of school funds, Martin et al. (2018) stated:

> Student achievement and outcomes matter. Any approach to supporting school finance reform should ensure that money supports the resources, programs, and services that all students need to be prepared to fully participate in the workforce and their community… States should use these outcomes, rather than dollars or other inputs, to evaluate if schools are providing all students with a high-quality education. (p. 2)

Ultimately, school resources should be allocated to support students with the most substantial needs, and data should be used to "identify inequities in current resource distribution as well as student achievement gaps" (Willis et al., 2019, p. 3). Barnett

(2012) found, “Children and youth with emotional and behavioral disorders are considered the most under-identified and underserved of all the disability groups” (p. 21). In *Resource Allocation Strategies to Support the Four Domains for Rapid School Improvement,* Willis et al. (2019) reported, “When thinking about equitable distribution of resources, it is important to understand equitable does not mean equal” (p. 2). The conceptual framework employed is the practice of outcome-based allocation of appropriate resources to provide an adequate and equitable education for all students (Martin et al., 2018; Willis et al., 2019). Furthermore, the conceptual framework was considered because the provision of appropriate fiscal supports should indicate positive postsecondary outcomes for graduates.

Statement of the Problem

Students with emotional and behavioral needs are at a greater risk for negative outcomes such as dropout and incarceration (Freeman et al., 2019). Lloyd et al. shared, “Leaders in the field have asserted that the number of students receiving special education services in the emotional disturbance category is substantially discrepant from the number of students who likely need services…which may imply under-identification in schools” (p. 86). Parents and advocacy groups have long been touted for their critical role in special education legislation and reform (McCann & Libassi, 2014). It begs the question: Does under-identified student populations such as EBD suffer from a lack of advocacy?

In contrast, “many school districts have experienced significant increases in the number of medically involved students who require nursing and other health-related care” (Berman & Urion, 2021, p. 2). In Arkansas, students who are an undue expense to

districts (greater than $15,000 annually) can be considered for high-cost occurrence reimbursement from the state (Foley, 2018, p. 6). Students who meet the criteria for district reimbursement form the costliest of the low-incident student subpopulations and typically have significant cognitive impairments, high staffing needs, and require medical supports (Foley, 2018). Currently, data are not reported by the ADE to show how districts allocate funds to support the subpopulations of special education (Bureau of Legislative Research, 2020). In this study, postsecondary outcomes and district resources used to support significant cognitive impairment and emotional or behavioral disordered populations were compared for District A.

Purpose of the Study

The purpose of this study was to determine if students with emotional and behavioral disabilities experience discrepant postsecondary outcomes when compared to students receiving special education services who do not have emotional and behavioral disabilities. Students identified under the IDEA, including students with significant behavioral or mental health needs, struggle to realize success in Arkansas public schools (Bureau of Legislative Research, 2020). Considering postsecondary outcomes for students with specific disability categories, one can evaluate if a particular disability category is under-served (Bureau of Legislative Research, 2020).

Another component of this study was to consider the allocation of district funds for students with emotional and behavioral disabilities compared to the allocation of funds for students with significant cognitive impairments. Catastrophic reimbursement records, Title VIB yearly allocations, and per-pupil Annual Daily Membership were

considered. Additionally, a summary of the varied funding approaches by state is provided (Baker et al., 2015).

Research Questions and Hypotheses

The following research questions will guide this study:

1. To what extent do students with emotional and behavioral disorders access higher education or workforce participation?
2. To what extent do students with significant cognitive impairment access higher education or workforce participation?
3. What is the statistical difference between postsecondary outcomes of students with emotional or behavioral disabilities and students with significant cognitive impairments?

$H3_0$: There is no statistically significant difference between postsecondary outcomes of students with emotional or behavioral disabilities and students with significant cognitive impairments.

$H3_a$: There is a statistically significant difference between postsecondary outcomes of students with emotional or behavioral disabilities and students with significant cognitive impairments.

4. How do district fiscal supports compare for students with emotional or behavioral disabilities and students with significant cognitive disabilities?

Significance of the Study

Simpson et al. (2011) posited, “Just as surely as there is evidence that EBD [emotional or behavioral disorder] is a harmful, insidious, and underserved disability is certitude that effective educational programming is a successful route to EBD prevention

and amelioration" (p. 230). It is well-documented that students with emotional or behavioral disabilities experience a higher rate of expulsion, exclusion from general education, dropout rate, and incarceration (Smith et al., 2011). Smith et al. (2011) found:

> Due to the challenging behaviors students with E/BD [emotional or behavioral disorder] display, they are less likely to be educated in less restrictive environments. Currently, only slightly over a third of students with E/BD spend more than 80% of their time inside the regular education class, as compared with over half of students with other disabilities. (p. 185)

However, this is a population with typical intellectual ability who should be able to realize success with appropriate supports (Simpson et al., 2011).

The allocation of school district funds or supports should be data-driven and based upon needs (Lynch, 2011). States across the nation address special education fund allocation differently (Baker et al., 2015). A benefit of capturing District A fiscal data, and postsecondary outcomes data, is the information could be used to determine the appropriate and equitable allocation of funds (Lynch, 2011). Chartrand (2019) stated, "Funding models can unite special education and accountability if inputs and outputs are connected and attention is placed on essential outcomes" (p. 18).

While IDEA Part B funds and state funds allocated to districts have some restrictions on how they are used. Lynch stated:

> It is critical for resource allocation practices to reflect an understanding of the imperative to eliminate existing inequities and close the achievement gap… Allocating and developing resources to support improvement in teaching and learning is critical to school reform efforts. (p. 1)

This study has the potential to impact the field of special education significantly. The comparison results regarding the equitable allocation of funds, based upon student need, could guide the future allocation of funds and supports for students with emotional and behavioral disabilities, not only in District A but in other school districts as well.

Definition of Key Terms

The following key terms are defined:

Emotional and Behavioral Disorders (EBD)

For the purpose of this study, students with emotional and behavioral disorders are defined as students identified under the disability category of emotional disturbance as defined by the ADE Rules and Regulations (ADE, 2021). Additionally, students identified under the disability category of Other Health Impairment with a diagnosis of mood disorder, oppositional defiant disorder, explosive behavior disorder, and students with an active behavior plan upon graduation will be considered students with behavioral disorders (ADE, 2021).

Emotional Disturbance

Emotional disturbance is one of the disability categories recognized under the IDEA (1990). According to the ADE Rules and Regulations (2021), students with emotional disturbance exhibit one or more of the following characteristics:

> An inability to learn that cannot be explained by intellectual, sensory or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears with personal or school problems. (p. 1)

High-Cost Occurrence Reimbursement

The Arkansas Department of Education (ADE, 2015) allows districts to apply for catastrophic reimbursement for students that cost the district over $15,000 to educate and are inclusive of low incident populations (p. 8). Typically, candidates for catastrophic reimbursement have significant cognitive impairments, require intensive supports, and may be medically fragile (Foley, 2018).

Individualized Education Plan (IEP)

An IEP is a document required under the IDEA (2004) to outline the educational plan for students with disabilities. The IEPs may include, but are not limited to: academic/behavioral goals and objectives, accommodations, modifications, special factors related to assistive technology, transition plans, and a summary of the student's present level of functioning (ADE, 2021)

Individuals with Disabilities Education Act (IDEA)

The IDEA (2004) is a federal law that provides mandates to public schools on the provision of special education services to students with disabilities.

Maintenance of Effort (MOE)

Maintenance of Effort is the rule indicating a district "may not reduce the amount of local, or State and local, funds that it spends for the education of children with disabilities below the amount it spent for the preceding fiscal year (Office of Special Education Programs [OSEP], 2015).

Significant Cognitive Disability

Individuals with significant cognitive disabilities are individuals who require "repeated, extensive, direct, individualized instruction and substantial supports" to achieve (Young & Stripling, 2019, p. 4).

Title VIB Funds

Federal funds are allocated to districts for the provision of special education services (ADE, 2015). These funds are safeguarded through detailed restrictions (ADE, 2015).

Delimitations, Limitations, and Assumptions

The scope of the study was bounded by the following delimitations:

Time Frame

Secondary data were obtained from District A in the spring of 2021. After secondary data were obtained and reviewed, the invitation to participate in the study (see Appendix A) was distributed to select district and state employees with knowledge of special education programming and resources in District A. Interviews were conducted within one month.

Location of the Study

The study took place at the administration building of District A, located in Arkansas.

Sample

The study consisted of secondary data from 2014–2019 graduates identified under IDEA from District A identified as emotionally and behaviorally disabled and significantly cognitively impaired.

Criteria

To qualify for this study, data were from 2014–2019 graduates identified under IDEA from District A.

The following limitations were identified:

Sample Demographics

The research was conducted in one rural school district in Arkansas.

Instrument

Another limitation of the study is instrumentation. The interview questions were developed by the researcher.

The following assumptions were accepted:

1. The responses of the participants were offered honestly and willingly.
2. The sample was presentative of students with emotional and behavioral disabilities.

Summary

Based on civil rights legislation and fine-tuned through the Individuals with Disabilities Education Act, all students with disabilities have the right to a free and appropriate public education (IDEA, 2004). How a free and appropriate public education is defined has been vetted by court cases from *Rowley* to *Endrew F.* (Yell, 2019). The most recent standard mandates students with disabilities must make more than de minimus progress in light of their current situation (Yell, 2019). The purpose of this study was to consider the current postsecondary circumstances and fiscal supports for students with emotional and behavioral disabilities compared to students with significant cognitive impairments in District A.

The Chapter One introduction included the background and conceptual framework of the study. The statement of the problem, purpose, research questions, and

significance of the study were described. Next, definitions of key terms pertinent to the study were provided. Finally, delimitations, limitations, and assumptions were noted.

In Chapter Two, a review of literature includes a comparison of historical research and practice for individuals with emotional and behavioral disabilities. The under-identification of individuals with EBD is considered. A comparison of research-based effective practices is described. Lastly, funding sources for the education of students with EBD are reviewed.

Chapter Two: Review of Literature

Landmark legislation from the EAHCA and IDEA defined requirements for public school special education services and mandated equal educational access for all (Yell, 2019). Court cases, from *Rowley* to *Endrew F.*, have further shaped the interpretation of the IDEA, building upon the standard of equal access to include the importance of student outcomes for students with disabilities (Yell, 2019). Likewise, the OSEP has become increasingly focused on student outcomes since the Dear Colleague Letter was submitted regarding results-driven accountability (Delisle & Yudin, 2014).

Despite an emphasis on student outcomes, students with emotional and behavioral disabilities continue to experience poor outcomes compared to non-disabled and disabled peers (Mitchell et al., 2019). Additionally, despite research suggesting fiscal resources should be allocated based, in part, on student outcomes, Arkansas does not currently track funds allocated to support subpopulations in special education (Baker et al., 2015; Bureau of Legislative Research, 2020). The purpose of this study was to compare postsecondary outcomes and fiscal supports of District A students with emotional and behavioral disabilities and significant cognitive impairments.

In this chapter, a synthesis of an exhaustive review of literature related to students with emotional and behavioral disabilities is shared. The conceptual framework through which this study was viewed is detailed. A comparison of historical research and practice for students with emotional and behavioral disabilities is considered. The subsequent under-identification of individuals with EBD and the most effective practices for working with this population are described. Lastly, funding sources and practices for supporting this population are considered.

Conceptual Framework

Best practices in school finance dictate the greatest supports should be allocated to students or settings in the greatest need (Willis et al., 2019). Additionally, Martin et al. (2018) stated, “money matters for student achievement,” and directed funds should be aimed towards the implementation of evidence-based interventions (p. 1). Further, leaders in education must examine how fund allocation manifests into improved outcomes (Lynch, 2011).

Students with EBD are believed to be underserved and under-identified compared to other disabilities categories (Barnett, 2012). Additionally, students with EBD consistently experience poor postsecondary outcomes compared to non-disabled peers (Smith et al., 2011). Mitchell et al. (2019) found, “Unfortunately, widespread implementation of effective interventions to prevent the development of ED or ameliorate the problems of these students when they first appear has not been achieved” (p. 78).

Therefore, this study’s conceptual framework was to consider if outcome-based fund allocation exists in District A. The comparison of two high needs populations could provide further data on resource equity. This critical advocacy research may bring to light practices or policies that need to be revised (Shields, 2016).

Comparison of Historical Research and Practice for Students with EBD

Since 1991, with the publication of “Problems and Promises in Special Education and Related Services for Children and Youth with Emotional or Behavioral Disorders,” the field of special education became cognizant of poor postsecondary outcomes for students with emotional and behavioral disabilities (Peacock Hill Working Group, 1991). Specifically, students with EBD experience dropout and incarceration rates of greater

than 40% and poor employment outcomes (Mitchell et al., 2019, p. 71). Freeman et al. (2019) stated:

> Furthermore, in 2013–2014, of those [students with EBD] exiting school, 54.7% graduated with a high-school diploma, whereas 35.2% dropped out, a rate substantially larger than the dropout percentage associated with any other disability…. Although students with disabilities in general experience challenges with postsecondary employment, independent living, and incarceration, students with EBD fare much worse and are more likely to be incarcerated. (p. 1)

Ultimately, results for students with emotional and behavioral disabilities have not markedly improved since the Peacock Working Group first released their research and suggestions for improving outcomes (Freeman et al., 2019).

In 2003, Landrum et al. indicated individuals with EBD exhibit behavioral "excesses (too much negative behavior) and deficits (not enough appropriate behavior)" (p. 149). To address these behaviors, data should be collected on antecedent, behavior, and consequences to discover the function of the behavior (Landrum et al., 2003; Lewis et al., 2004). After a review of the challenges of serving students with EBD, Smith et al. (2011) concluded, "While we may have made significant gains in our understanding of evidence-based practices, the predictable application of such practices still seems elusive and as a result this population is still at-risk" (p. 192).

In a 2011 article, Simpson et al. offered, "comprehensive and systematic models for advancing the use of maximally effective methods with learners with EBD are unavailable" (p. 232). However, according to the Peacock Hill Working Group, the

implementation of specific strategies, not programs, will effectively support students with EBD and improve postsecondary outcomes (as cited in Mitchell et al., 2019):

> In summarizing essential features of a strong implementation framework in which to embed evidence-based practices, the group listed the following minimal requirements for successful interventions and supports:
>
> - Systematic delivery and application of interventions coupled with data-based decision-making about impact and effect
> - Ongoing monitoring of academic and behavioral performance
> - Provision of substantial opportunity to practice newly learned skills across relevant settings
> - Intervention programs and practices matched with type and intensity of the problem
> - Consideration for a multifaceted treatment approach (e.g., social skills instruction paired with academic-skill boosting or remediation, medications, and family supports);
> - Planning that specifically addressed transfer of skills across settings and maintenance of effort over time
> - Understanding that long-term interventions may be required. (p. 71)

Lack of early intervention, poor implementation of effective strategies and programming, and lack of highly trained staff willing to work with this significant population were

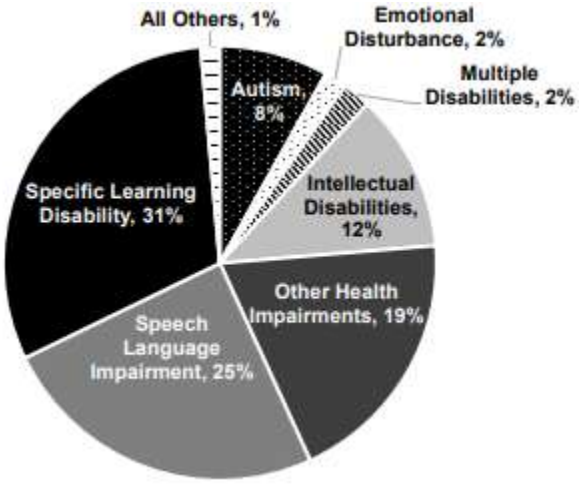
identified as possible barriers to more positive postsecondary outcomes (Mitchell et al., 2019).

Under Identification

The IDEA (2004) obligated districts to seek students who may have a disability actively; this process is referred to as Child Find. Screening instruments, staff/community professional development, parent/teacher/physician reports, and academic/behavioral data are examples of Child Find activities or data points (ADE, 2021). In Arkansas, there are 12 disability categories under which students may qualify for special education services: autism, deaf-blindness, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, specific learning disability, speech or language impairment, traumatic brain injury, visual impairment, other health impairment (OHI), and emotional disturbance (ED) (Bureau of Legislative Research, 2020). In 2017, of all students in the nation identified under IDEA, 6% were identified as emotionally disturbed (Samuels, 2018, p. 1). In contrast, the percentage identified as emotionally disturbed in Arkansas is 2% (Bureau of Legislative Research, 2020, p. 5). Figure 1 represents the breakdown of disability categories population in Arkansas (Bureau of Legislative Research, 2020).

Figure 1

Percentage of Students Identified by Disability Categories in Arkansas



Note. All others denote deaf-blindness, deaf/hearing impairment, orthopedic impairment, traumatic brain injury, and visual impairment. From "Special Education Funding and Expenditures" by the Bureau of Legislative Research, 2020, p. 4 (https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf). In the public domain.

Arkansas' largest disability categories are specific learning disability, followed by speech-language impairment and other health impairment (Bureau of Legislative Research, 2020).

Arkansas requires specific components to be present for students to qualify under ED (ADE, 2021):

- Social History
- Individual Intelligence
- Individual Achievement
- Adaptive Behavior

- Communication Abilities
- Other
    - Clinical diagnosis of emotional disturbance by a licensed psychologist or psychiatrist (Required)
    - Behavioral observation in a variety of settings (Required) During the observation, attention should be given to noting specific behaviors and their frequency, duration and intensity. Other variables which should be considered in making an observation are the setting in which the behavior occurs, the stimulus for behavior, the sequences of behavior, the time the behavior occurs and the effects of the behavior on the student and others.
    - Learning processes (Required-each suspected deficit must be assessed)
        - Visual perception
        - Auditory perception
        - Perceptual-motor development
    - Specific subject areas (Required-each are of suspected deficit must be assessed) (p. 4)

Arkansas' requirements exceed the IDEA requirements with the addition of a clinical diagnosis of emotional disturbance by a licensed psychologist or psychiatrist (ADE, 2021; IDEA, 2004). Lloyd et al. (2019) indicated, "only a small proportion of students with EBD are receiving special education services in the emotional disturbance category, which may imply under-identification in school" (p. 86).

For a national comparison, Figure 2 provides the percentage of students identified by disability category in Arkansas compared to the national percentage according to

2015-16 data (Bureau of Legislative Research, 2020). Arkansas exceeds the national percentage in identification of students with multiple disabilities, intellectual disabilities, and speech language impairments. Data from Figure 2 again denotes Arkansas' low percentage of students identified with emotional disturbance (Bureau of Legislative Research, 2020).

Figure 2

Percentage of Students with Disabilities by Disability Type, Ages 6-21

Disability	% of Students with Disabilities		% of All Students	
	Arkansas	Nation	Arkansas	Nation
Autism	7.6%	9.8%	1.00%	1.27%
Deaf-Blindness	0.0%	0.0%	0.00%	0.00%
Emotional Disturbance	1.6%	5.7%	0.21%	0.73%
Hearing Impaired	0.8%	1.1%	0.10%	0.14%
Multiple Disabilities	**2.4%**	2.1%	**0.32%**	0.28%
Intellectual Disabilities	**11.2%**	7.1%	**1.46%**	0.91%
Orthopedic Impairment	0.3%	0.6%	0.04%	0.08%
Speech or Language Impairments	**22.4%**	17.2%	**2.93%**	2.22%
Specific Learning Disabilities	33.1%	39.6%	4.33%	5.11%
Traumatic Brain Injury	0.3%	0.4%	0.03%	0.06%
Vision Impairment	0.4%	0.4%	0.05%	0.05%
Other Health Impairments	**19.8%**	15.8%	**2.59%**	2.04%

Note. From "Special Education Funding and Expenditures" by the Bureau of Legislative Research, 2020, p. 6 (https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf). In the public domain.

Kauffman et al. (2007) stated, "…there is clear cut evidence that children and youth with EBD remain an under-identified and under-served group" (p. 44). As this disability category relates to mental health, Salle et al. (2018) offered, "approximately 20% of adolescents have a diagnosable mental health disorder, but 70% of these youth are left untreated" (p. 385). Despite an increased number of students accessing special

education, the number of students qualifying under emotional disturbance has declined 21% in the last 10 years (Powerschool, 2019, p. 1). However, there is evidence that students may be receiving special education services under other disability categories due to comorbidity (Lloyd et al., 2019).

Effective Practices

Historically, intervention programming for students with EBD has focused on maladaptive behavior as a defining characteristic of EBD (Wiley et al., 2008). However, as federal policy shifted focus to high-level achievement for all students, academic interventions have become a focus for students with EBD (Wiley et al., 2008). The focus on student achievement was echoed in *Endrew F. v. Douglas County School District*, a Supreme Court decision that required students to make more than minimal progress (Yell, 2019). Despite the evidence of the importance of student outcomes, Simpson et al. (2011) stated:

> There is little reason to believe that most students identified with EBD are currently receiving an education based on effective methods and that all educators who work with these learners are well prepared to use strategies, curricula, and procedures that are associated with the best outcomes. (p. 231)

In fact, Lewis et al. (2004) signaled the need for a "unified framework of best practices" for teachers to use with EBD students (p. 255). Lloyd et al. (2019) stated, "First, there remains a significant research-to-practice gap in special education, which has been well documented for several decades" (p. 88).

Tiered Support and Wrap-around Services

In reviewing the literature of effective practices for individuals with EBD, multi-tiered systems of support and wrap-around services are frequently cited (D'Angelo et al., 2018, Freemen et al., 2019; Lewis et al., 2004; Mitchell et al., 2019). Multi-Tiered Systems of support (MTSS) offered an approach to behavior with school-wide frameworks as a baseline, universal screening measures, and targeted interventions for individuals in need (Mitchell et al., 2019). Freeman et al. (2019) indicated, "[The] ESSA [Every Student Succeeds Act] may help prioritize and incentivize important professional development related to MTSS [Multi-Tiered Systems of Support] model" (p. 104).

Students with EBD require a holistic approach to improve outcomes (Algozzine et al., 2001; Landrum et al., 2003). Besides highly qualified staff, Simpson et al. (2011) indicated the following effective practice components are necessary, "effective behavior management systems, utilitarian environmental supports, valid social skill programs, proven academic support systems, effectual parent & family involvement programs, and coordinated community support mechanisms" (p. 234). These practices were echoed by Lewis et al. (2004) with the addition of teacher/praise reinforcement, high levels of student engagement, and behavior interventions based on functional behavior assessment data. Access to mental health, parental engagement, and streamlining services likewise were identified as practices to improve outcomes for students with EBD (D'Angelo et al., 2018).

Highly Trained Staff

Hattie's (2018) research has revealed the number one indicator of student performance is teacher efficacy or how well the teacher believes in successful student outcomes. Simpson et al. (2011) argued, "…teachers do not always use effective interventions" and cited intervention integrity as a leading issue for poor outcomes (p. 152). The Peacock Working Group (1991) found a lack of highly trained staff, failure to utilize best practices, disagreement in the field on best practices for EBD, lack of systemic support, and the associated cost of wrap-around services were related to poor outcomes for students identified as EBD. As recently as 2019, research revealed special education teachers rarely implement evidence-based practices for students with EBD (Lloyd et al., 2019).

Simpson et al. (2011) identified "qualified and committed professionals" as the primary indicator of outcomes for students with EBD (p. 32). However, special education teacher shortages have left schools "with no choice but to hire unqualified teachers to fill these vacancies" (Sutcher et al., 2016, p. 10). In Arkansas, the number of special education licensed teachers certified to teach ED dropped from 50 in 2016 to two in 2019 (Bureau of Legislative Research, 2020, p. 30). This drop is due in part to the ADE expanding certification and offering a number of new programs to entice professionals into the field (Bureau of Legislative Research, 2020). Figure 3 contains the number of special education licensed professionals in the state of Arkansas from 2016–2019 (Bureau of Legislative Research, 2020).

Figure 3

Number of Special Education Teacher Licenses, 2016-2019

All Special Education Licenses	2016	2017	2018	2019
Emotionally Disturbed (K-12)	50	46	43	2
Learning Disabilities (K-12)	7	8	8	0
Mentally Retarded (K-12)	18	16	15	1
Physically Handicapped (K-12)	24	24	21	0
Visually Impaired (7-12)	1	1	-	1
Special Ed Inst Specialist (4-12)	5,563	5,394	5,193	5,093
Special Ed Ech Inst Specialist (P-4)	5,948	5,753	5,549	5,447
Special Ed Visual Specialist (P-4)	88	84	79	77
Special Ed Visual Specialist (4-12)	111	107	103	101
Early Childhood Spec Edu (PK-4)	4	3	1	1
Special Ed Hearing Specialist (P-4)	130	125	119	119
Special Ed Hearing Specialist (4-12)	129	124	118	118
Severely/Emotionally Disturbed (K-12)	1	1	1	0
Mod/Prof Handicapped K-12 (K-12)	1	1	1	0
Mildly Handicapped K-12 (K-12)	14	14	14	0
Early Childhood/Special Ed Integrated (B-K)	4	18	36	63
Special Education (K-12)	355	565	931	1,368
Sp Ed Visual (K-12)	14	15	16	21
Sp Ed Hearing (K-12)	11	16	16	16
Age 3-4 Special Ed Endorsement (age 3-4)	2	8	11	14
Dyslexia Ancillary	N/A	N/A	4	50
Dyslexia Endorsement (K-12)	N/A	80	159	239
Special Education Resource ELA (7-12)	0	1	11	16
Special Education Resource Math (7-12)	0	1	4	8
Special Education Resource Science (7-12)	0	1	4	6
Special Education Resource Elementary (K-6)	0	4	19	31
Total	**12,459**	**12,410**	**12,476**	**12,793**

Note. From "Special Education Funding and Expenditures" by Bureau of Legislative Research, 2020, p.30 (https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf). In the public domain.

There are more master-level special education teachers indicated as instructional specialists than bachelor-level special education (K-12) (Bureau of Legislative Research, 2020). However, data also demonstrates master-level certified instructors are declining from 2016-2019 (Bureau of Legislative Research, 2020). In contrast, bachelor-level special education certification increased from 355 in 2016 to 931 in 2019 (Bureau of Legislative Research, 2020).

To improve outcomes, teachers must implement instructional and behavioral best practices for students with EBD (Lewis et al., 2004; Simpson et al., 2011). With 47% of students with EBD spending greater than 80% of the instructional day in general education, highly qualified staff must include both general and special educators (Mitchell et al., 2019, p. 73). Simpson et al. (2011) stated:

> There is little reason to believe that most students identified with EBD are currently receiving an education based on effective methods and that all educators who work with these learners are well prepared to use strategies, curricula, and procedures that are associated with best outcomes. (p. 231)

In fact, low implementation rates of "basic effective instruction practices such as attention signals, prior-knowledge supports, previews, instructor modeling, student modeling, organizational prompts, specific praise, and ratio of positive to negative interactions" (Mitchell et al., 2019, p. 73).

High-Leverage Practices

To further support the development of highly-trained teachers, the Council for Exceptional Children (CEC) partnered with the CEEDAR Center in 2017 to produce *High Leverage Practices in Special Education* (McLeskey et al., 2017). The CEC High Leverage Practices (HLP) align with the work of Mitchell et al. (2019) and were designed to support special educators and improve outcomes for students with disabilities (McLeskey et al., 2017).

The work identified 22 high leverage practices in special education and are broken into four sub-categories of collaboration, assessment, social emotional learning, and instruction (McLeskey et al., 2017). High leverage practices regarding collaboration are provided in Table 1.

Table 1

Council for Exceptional Children High Leverage Practices Regarding Collaboration

	Collaboration
HLP 1	Collaborate with professionals to increase student success
HLP 2	Organize and facilitate effective meetings with professionals and families
HLP 3	Collaborate with families to support student learning and secure needed services

Note. HLP Mean High Leverage Practice. From" High-Leverage Practices in Special Education." *Council for Exceptional Children & CEEDAR Center*, 2017, pp. 17–18.

Effective collaboration among special education professionals and families should be directed toward developing the individualized education plan with "clearly specified outcomes" and communication of progress towards agreed-upon outcomes (McLeskey et

al., 2017 p. 15). This concept is also represented in the Professional Learning Communities work of DuFour et al. (2016), which identified "a collaborative culture and collective responsibility" as one of the "three big ideas" that encompass PLC practice (p. 11). The next set of HLPs focuses on the importance of formal and informal assessment (McLeskey et al., 2017). Assessment is used to determine special education eligibility and provide guidance to IEP committees to develop appropriate services (ADE, 2021; McLeskey et al., 2017). Table 2 contains the HLPs in the area of assessment.

Table 2

Council for Exceptional Children High Leverage Practices Regarding Assessment

	Assessment
HLP 4	Use multiple sources of information to develop a comprehensive understanding of a student's strengths and needs
HLP 5	Interpret and communicate assessment information with stakeholders to collaboratively design and implement educational programs
HLP 6	Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes

Note. HLP Mean High Leverage Practice. From" High-Leverage Practices in Special Education." *Council for Exceptional Children & CEEDAR Center*, 2017, pp. 19–20.

Assessments from varied sources provide necessary data to determine if the specialized program and instruction are effective (McLeskey et al., 2017). Again, this aligns with the work of PLC, which identifies evidence of student learning as being results-oriented and is the third component of the three-prong model (DuFour et al., 2016). Mitchell et al. (2019) agreed and noted the importance of data-based decision-

making. Additionally, (Mitchell et al., 2019) called for universal screening to "identify those with and at risk for emotional and behavioral challenges" (p. 79).

The next set of HLPs regards social, emotional, and behavioral best practices that benefit not only students with EBD but also all learners (McLeskey et al., 2017). The explicit instruction of social skills is an essential component of improving outcomes for students with EBD (Mitchell et al. 2019, McLeskey et al., 2017). Figure 3 outlines each of the HLPs regarding social, emotional, and behavioral best practices (McLeskey, 2017).

Table 3

Council for Exceptional Children High Leverage Practices Regarding Social, Emotional, and Behavioral Practices

	Social/Emotional/Behavioral Practices
HLP 7	Establish a consistent, organized, and respectful learning environment
HLP 8	Provide positive and constructive feedback to guide students' learning and behavior
HLP 9	Teach social behaviors
HLP 10	Conduct functional behavior assessments to develop individual student behavior support plans

Note. HLP Mean High Leverage Practice. From "High-Leverage Practices in Special Education." *Council for Exceptional Children & CEEDAR Center*, 2017, pp. 20–21.

Assessment from varied sources provides the data to determine whether the specialized program and instruction are effective (McLeskey et al., 2017). HLP 10 specifically references functional behavior assessment to be conducted to develop behavior plans which is also a recommendation of Lewis et al. (2004) to improve student outcomes.

The final group of HLPs contains the most standards (McLeskey et al., 2017). CEC establishes 12 HLPs in the area of instruction. This is a slight departure from the first of the PLC big ideas which place the focus on student learning (DuFour et al., 2016). Table 4 provides a summary for each HLP item (McLeskey et al., 2017).

Table 4

Council for Exceptional Children High Leverage Practices Regarding Instruction

	Instruction
HLP 11	Identify and prioritize long- and short-term learning goals
HLP 12	Systemically design instruction toward a specific learning goal
HLP 13	Adapt curriculum tasks and materials for specific learning goals
HLP 14	Teach cognitive and metacognitive strategies to support learning and independence
HLP 15	Provide scaffolded supports
HLP 16	Use explicit instruction
HLP 17	Use flexible grouping
HLP 18	Use strategies to promote active student engagement
HLP 19	Use assistive and instructional technologies
HLP 20	Provide intensive instruction
HLP 21	Teach students to maintain and generalize new learning across time and settings
HLP 22	Provide positive and constructive feedback to guide students' learning and behavior

Note. HLP Mean High Leverage Practice. From" High-Leverage Practices in Special Education*."* *Council for Exceptional Children & CEEDAR Center*, 2017, pp. 22–25.

According to McLeskey et al. (2017), "Effective special education teachers base their instruction and support of students with disabilities on the best available evidence…." (p. 17), which aligns with the practice of continuous professional growth that is a hallmark of the PLC process (DuFour et al., 2016).

Initiatives in Arkansas

To improve educational practices in Arkansas, the DESE has implemented several initiatives to support educators and students (ADE, 2021). To share expectations for all students in Arkansas, the Lenses of Learning was created (ADE, 2021). Additionally, the DESE is committed to Professional Learning Communities (PLC) practices (ADE, 2021). Specific to mental health supports, Arkansas also has new initiatives through the Advancing Wellness And Resiliency in Education (AWARE) State Education Agency Grant (AWARE, 2021).

Lenses of Learning

The Lenses of Learning framework articulates the Division of Learning Services' vision surrounding teaching and learning (ADE, 2021). This vision stated:

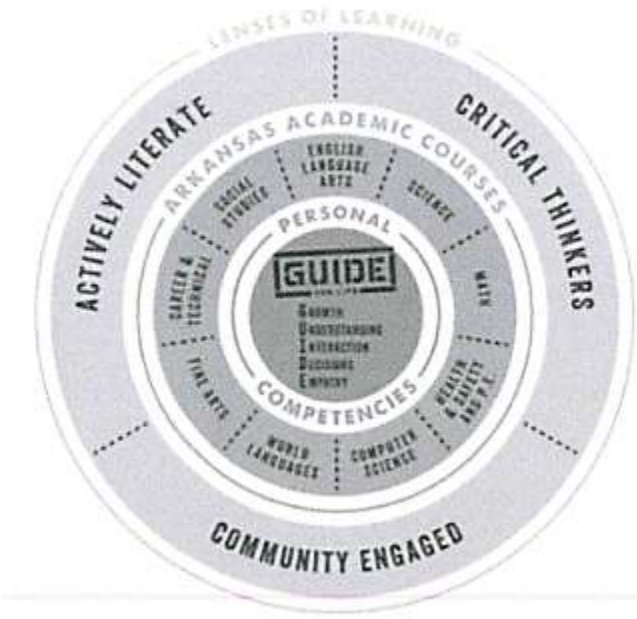
> [The] DESE is committed to students exhibiting evidence of learning through three lenses of application: actively literate, critical thinkers, and engaged in the community. [The] DESE developed Arkansas Academic Standards and courses that outline the academic expectations in the state. The vision for teaching and learning is centered around the personal competencies referenced as the G.U.I.D.E for Life. (ADE, 2021 p. 1)

Figure 4 is the graphic representation of the Lenses of Learning. The outer rings contain broad concepts that are then funneled through academic coursework and arrive at the core, a secondary, student-specific framework called G.U.I.D.E. for Life. The application

of this framework focused on educating the whole child has resulted in individual schools creating district-specific models for learning (ADE, 2021).

Figure 4

Arkansas DESE Lenses of Learning Framework



Note. From the Arkansas Department of Elementary and Secondary Education website, 2021 (https://dese.ade.arkansas.gov/Offices/learning-services)

The G.U.I.D.E for Life is grounded by core principles identified to promote soft skills for students that will equal positive life-long outcomes (ADE, 2021). These principles include “Growth. (manage yourself), Understanding. (know yourself), Interaction. (build relationships), Decisions. (make responsible choices), Empathy (be aware of others)” (ADE, 2021, p. 1). This social, emotional learning guidance document

provides grade span specific, and age-appropriate, goals for students in each of the five domains (ADE, 2021).

Professional Learning Communities

The DESE began the Professional Learning Communities at Work Project in 2017 to positively impact education in Arkansas (ADE, 2021). According to *A Child's Best Hope: The Arkansas PLC Story*, this three-year project was initiated to educate all children, break through constraints of systemic poverty, and improve Arkansas' educational system (Narisi et al., 2021). Initially, a three-year cohort of schools was created and expanded (ADE, 2021). Goals for the first-year cohort included learning about PLCs and beginning implementation (Narisi et al., 2021). Second-year cohort goals were to develop further and refine PLC practices (Narisi et al., 2021). Lastly, the third-year cohort was focused on sustaining the PLCs (Narisi et al., 2021).

Five cohorts have been created to date, and over 60 schools in Arkansas have participated in the PLC at Work Project (ADE, 2021). Upon selection into a cohort, schools receive 50 days of free professional development and on-site support from Solution Tree certified PLC coaches (ADE, 2021). According to an independent research firm, Education Northwest, the PLCs at Work Project has improved student achievement in mathematics on statewide assessments (Solution Tree, 2021).

This growth in student achievement is occurring all over the nation (Solution Tree, 2021). Sanger Unified School District in California increased its academic performance index by 120 points over seven years (Solution Tree, 2021). Likewise, in Louisville, Kentucky, Seneca High School went from the 5th percentile of schools in the

state to the 42nd percentile (Solution Tree, 2021). These gains were achieved after the successful implementation of PLC in their schools (Solution Tree, 2021).

In addition to the three big ideas of PLC, another theme of the process is a collaborative culture that is loose and tight (DuFour et al., 2016). In this practice, teachers may have autonomy in teaching strategies but must be unwavering in other areas (DuFour et al., 2016). Examples of elements of PLC that are tight include collaborative work as a team to achieve a "guaranteed and viable curriculum," development of common formative assessments, collecting and utilizing evidence of student learning to inform practice, and development of systemic interventions (DuFour et al., 2016, p. 14).

Advancing Wellness and Resiliency in Education (AWARE)

The AWARE program has three identified goals to promote mental health in Arkansas. The first goal is to increase services for children (AWARE, 2021). Services increased may include additional coordinated referrals between schools and agencies, mental health services or programs, and follow-up care (AWARE, 2021). The second goal of the AWARE program focuses on engagement amongst stakeholder groups (Kindall, 2021-present).). Specifically, the program set out to:

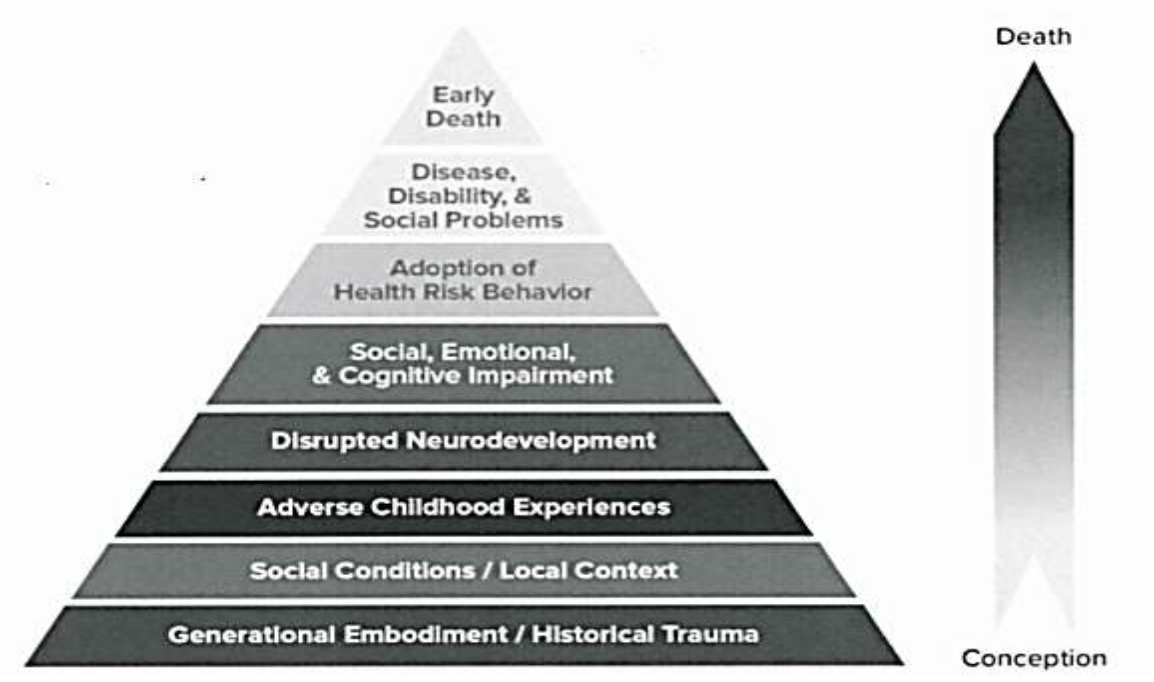
> Increase outreach and engagement among youth, families, schools, and communities in an effort to increase awareness, mental health identification, and implementation of services and programs. (AWARE, 2021 p. 1)

The final goal of the AWARE program is to create systemic supports to provide mental health and behavioral care that will be sustainable once Substance Abuse and Mental Health Services Administration grant funding ceases (AWARE, 2021).

The AWARE program provides training across the state of Arkansas and conducts podcasts and lists resources to promote the goals of the program (AWARE, 2021). The personal competencies and building of social skills identified in the G.U.I.D.E for Life curriculum are promoted by the AWARE program (Jobe, 2021-present). Additionally, the AWARE program provides a focus and resources for mental health first aid, trauma-informed practices, school climate, and adverse childhood experiences (AWARE, 2021). In Figure 5, the negative impact of adverse childhood experiences on individual wellness across life span is described (Center for Disease Control and Prevention, 2021).

Figure 5

Mechanism by which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan



Note. From the Cuyahoga County Board of Health website, 2021. (https://www.cdc.gov/violenceprevention/aces/about.html) In the public domain.

Additionally, the AWARE program is committed to the progress of Multi-Tiered Systems of Supports (MTSS) in Arkansas (Kindall, 2021-present). The AWARE program has challenged schools at the close of the 20-21 school year to consider MTSS on the local level for both academic and behavior supports (Kindall, 2021-present). Additionally, further initiatives surrounding MTSS on the local and state level are currently in development (Kindall, 2021-present).

Special Education Funding

As early as 1965, with the passing of the Elementary and Secondary Education Act, Congress allowed for limited funding for special education under "educationally deprived" populations (Congressional Research Service, 2019, p. 6). In 1969, the law was amended to include The Handicapped Act, which allocated funds for students with disabilities based on state population (McCann & Libassi, 2014). In 1975, with the passage of the Education for All Handicapped Children Act (EAHC), Congress guaranteed access to public education for students with disabilities (McCann & Libassi, 2014). When the EAHC was passed, the projected cost of educating a student with disabilities was twice as much as a typical student (McCann & Libassi, 2014). It was also determined that 40% of the excess cost of special education should be provided through federal funds (Congressional Research Service, 2019, p. 9). However, Congress has never provided full funding for special education as promised in 1975 or in subsequent IDEA reauthorizations despite parent and organizational advocacy (CASE, 2021; Zerrer, 2016). The IDEA requires the provision of a free and appropriate public education

(FAPE) to all children with disabilities from ages 3–21in the least restrictive environment (Congressional Research Center, 2019). Baker et al. (2015) further stated:

> Localized multi-disciplinary teams were charged with developing programs of education to meet the obligation of FAPE without regard to the cost of these services, thus creating a fiscal burden shared by federal, state, and local educational authorities. While disability advocates continued to apply pressure for more and better services to students with disabilities, means to fund these services in a balanced manner created significant challenges for policy makers. (p. 1)

A great variance of programming needs exists for the provision of a FAPE to all individuals with disabilities (ADE, 2021). Federal IDEA mandates a FAPE be delivered to students "without regard to the cost of these services thus creating a fiscal burden shared by federal, state, and local educational authorities" (Baker et al., 2015, p. 1). McCann & Libassi (2014) offered, "Providing FAPE to many children with disabilities is costly, often requiring equipment, training for teachers, and facilities distinct from the needs of mainstream students" (p. 2).

Special education funding in Arkansas is based on per-student foundation funding, with high-cost funding available on a reimbursement basis (Bureau of Legislative Research, 2020). Currently, Arkansas special education services are funded 29% from federal funds and 71% from state and local funds (Bureau of Legislative Research, 2020, p. 16). Besides student Annual Daily Membership and Title VIB federal

dollars, funding sources that may also be used for students with disabilities include Title II and Medicaid funds (Foley, 2018).

In Arkansas, districts can seek reimbursement for students who are deemed an undue expense (Foley, 2018). Historically, district expenditures for high-cost students have exceeded the reimbursement funding (Bureau of Legislative Research, 2020). Figure 5 breaks down the percentage of expenditures from funding sources in Arkansas. According to Figure 6, state and local funding represents over 65% of special education expenditures for districts across Arkansas. While federal IDEA funding represents approximately 23% of funding (Bureau of Legislative Research), 2020. Additionally, Medicaid funds represent roughly 6% of overall funding (Bureau of Legislative Research, 2020).

Although Arkansas does not track expenditures by disability category, expenditures are tracked by functions (Bureau of Legislative Research, 2020). Information gathered is broken down into three categories that are portrayed in Figure 6. Instructional expenditures, health expenditures, and other expenditures are detailed.

Figure 6

Federal and State Special Education Funding Behaviors from 2018-2019

Funding Type	Description	Expenditures	
		Districts	Charters
State and Local			
Foundation funding, local funds, and activity funds	Foundation funding, additional local millage transferred for salaries or operations, and local funds raised by event ticket sales, concessions, etc.	**65.30%**	**55.73%**
Isolated, Student Growth, Declining Enrollment	State isolated or special needs isolated funding, student growth, and declining enrollment.	0.28%	0.18%
Categorical funds	State National School Lunch, English Language Learner, and Professional Development Categorical Funds.	0.73%	0.19%
Special Education Services	State funding designed to help districts and charters pay for special education supervisors and extended-year services for students with disabilities.	0.64%	0.30%
Residential Treatment and Juvenile Detention Centers	State funding for special education provided to students in residential treatment centers, youth shelters, and juvenile detention centers.	1.19%	0.00%
Early childhood special education	State funding for preschool special education services and educational service centers.	0.63%	0.52%
Catastrophic Loss (or High-Cost Occurrence)	State funding designed to reimburse districts for special education student with unusually high needs.	2.50%	0.78%
Other State Funding	Includes but is not limited to funding from the Arkansas School Recognition Program, Professional Quality Enhancement Teacher & Administrator Induction Program (PATHWISE).	0.01%	0.02%
Federal			
IDEA	Federal funding provided to help state meet the excess costs of providing education and services to students with disabilities.	**22.55%**	**37.79%**
IDEA Early-Childhood		0.22%	0.67%
Medicaid	Medicaid reimbursement for services districts provided to Medicaid-eligible students.	5.90%	3.82%
Medicaid Pre-K		0.005%	0.00%
Other federal funding	Includes but is not limited to Title 1 funds, State Improvement Grant, Improving Teach Quality Assessment Grant, Title VI-SRSA- Small Rural School.	0.05%	0.000%
Total		**$458,484,846**	**$8,760,229**

Note. From the "Special Education Funding and Expenditures" by the Bureau of Legislative Research (2020), p 17. (https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf). In the public domain.

As indicated in Figure 7 the greatest expenditure type that occurred were for resource room supports and self-contained classrooms (Bureau of Legislative Research, 2020). Of health expenditures, speech language therapy represents the largest category (Bureau of Legislative Research, 2020).

Figure 7

Special Education Expenditures in Arkansas by Type of Expenditure 2018-2019

Service Type	Description	Expenditures	
		Districts	Charters
Instructional Expenditures			
Itinerant Instruction (excluding itinerant speech pathologist)	Instruction provided by an educator serving more than one school, in their homes or in hospital.	1.84%	0.18%
Resource Room	Education provided by a resource teacher who works with students who are assigned to regular classrooms more than half of the school day.	**32.66%**	**59.48%**
Special Class (Self-Contained Class)	Education provided to students assigned to a special class for at least half of the school day. Student to teacher ratios range from 1:15 to 1:6.	**25.54%**	1.45%
Residential/ Private	Education provided to students in residential facilities, separate day schools or by other private agencies.	2.14%	0.0%
Co-Teaching	Education provided by both a special education teacher and a non-special education teacher in the same class.	1.88%	0.00%
Pre-School	Education provided to preschool students.	1.36%	0.00%
SPED director	Supervisor of special education services	6.83%	4.13%
Co-Ordinated early intervening services	For students in K-12, with a particular emphasis on K-3, who have not been identified as needing special education or related services but who need additional academic and behavioral support to succeed in a general education environment.	0.09%	0.00%
Instructional Staff Support Services	Instructional service improvements, academic student assessment, instructional technology, educational media services, and other support services.	1.58%	0.55%
Other Instructional Programs	Regular K-12 instructional programs, career education programs, compensatory education programs, and other instructional programs.	0.10%	0.00%
Health Expenditures			
Student Support Services	Social Work, Guidance Counseling, and other student support services	0.12%	2.63%
Nurses	Activities associated with nursing, such as health inspection, treatment of minor injuries and referrals for other health services	0.43%	0.02%
Psychological testing and other psychological services	Psychological services supervision, psychological counseling, psychological testing, psychotherapy, behavior support specialist, and other psychological services.	3.84%	2.14%
Speech therapy and audiology services (including itinerant speech pathologist)	Activities that identify, assess, and treat children with speech, hearing and language impairments.	11.65%	**18.25%**
Physical and occupational therapy	Services provided by a qualified physical therapist directed toward improving, developing or restoring function impaired or loss through illness, injury or deprivation.	5.74%	9.23%
School-based mental health	Mental health services performed by qualified mental health professionals in the school setting	0.16%	0.00%
Medicaid Match	To be reimbursed by Medicaid for these services, districts and charters agree to pay a Medicaid match payment, or a percentage of the services, in order to keep the state Medicaid budget neutral.	1.93%	1.64%
Dyslexia interventionist/ therapist and specialist	Dyslexia interventionist/therapist works directly with the student, and the specialist does not.	0.05%	0.10%
Other Health Services	Health services supervision, medical, dental, and other health services	0.10%	0.04%
Other Expenditures			
Transportation	Activities concerned with conveying students to and from school, as provided by state and federal law. This includes trips between home and school and trips to school activities.	1.81%	0.00%
Other Expenditures	Includes operation of buildings, security services, additional supporting services, and other uses.	0.15%	0.17%
Total		**$458,454,846**	**$8,760,229**

Note. From the "Special Education Funding and Expenditures" by the Bureau of Legislative Research, 2020 p. 18. (https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf) In the public domain.

Federal Funds

When Congress passed the IDEA in 1974, full funding or 40% of the average per pupil expenditure for special education was promised (McCann & Libassi, 2014, p.7). Currently, federal funding falls short of the promised amount, with only 13% appropriated for IDEA (CASE, 2021, p. 1). To improve outcomes for students with disabilities and implement IDEA, fully funding IDEA is necessary (CASE, 2021). Shortfalls in federal funding ultimately must be covered by state and local funds (CASE, 2021).

The IDEA funding for special education is separated into three distinct areas: Part B, Part C, and Part D funding (Congressional Research Services, 2019). The Congressional Research Center (2021) stated:

> The largest part of the IDEA is Part B, Assistance for Education of All Children with Disabilities, which covers special education for children and youth with disabilities between the ages of 3 and 21. Approximately 95% of total IDEA appropriations fund the two Part B programs—the Section 611, grants-to-states program and the Section 619, preschool grants program. Part B was funded at $12.8 billion in FY2019, and in the 2017–18 school year, approximately 7 million children ages 3–21 received educational services under it. (p. 1)

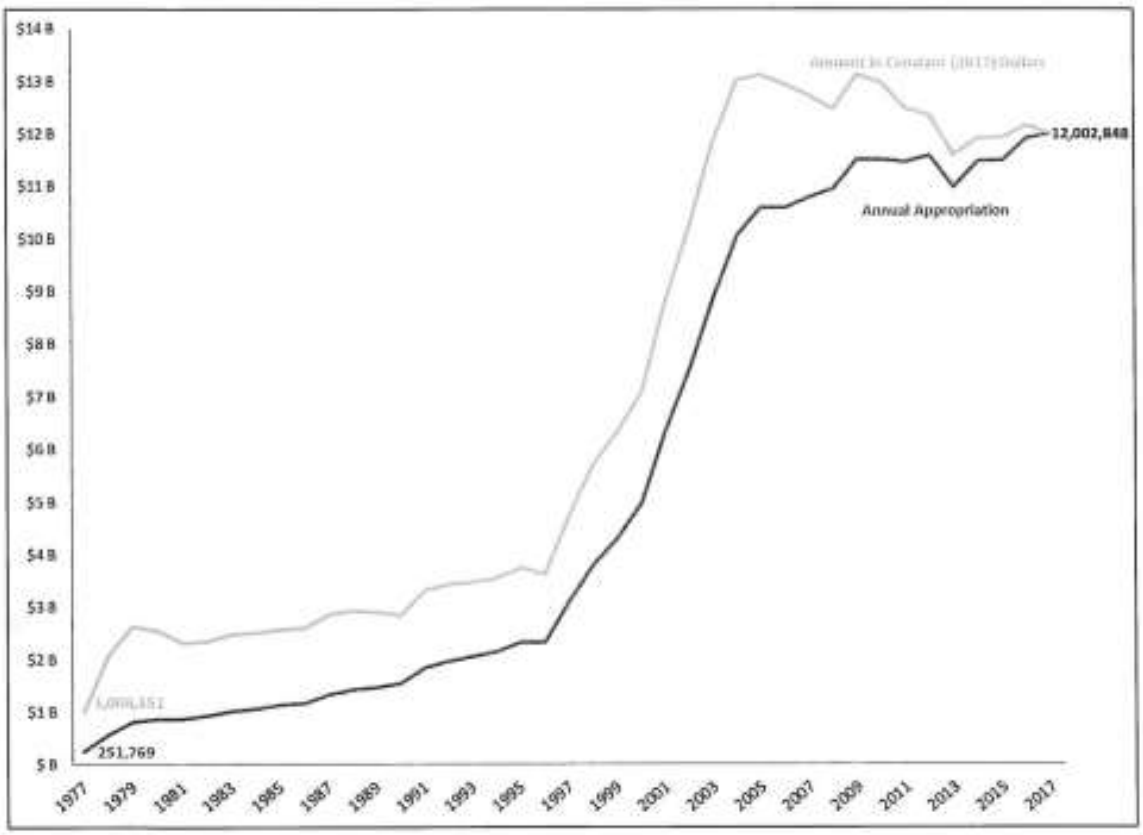
In addition to the funding matrix, Part B of the IDEA also outlines requirements that must be met to receive federal funds (IDEA, 2004). Child Find, IEPs, and procedural safeguards to "protect the rights of parents and children with disabilities" are also defined in Part B (Congressional Research Services, 2019, p. 3).

The IDEA Part C funding provides grant money to states for purveying special education and related services to infants and toddlers (IDEA, 2004). Instead of IEPs, services for eligible children are outlined through individualized family service plans (Congressional Research Services, 2019). The IDEA also mandated the smooth transition of children from Part C to Part B prior to the child's third birthday (IDEA, 2004).

The IDEA Part D encompasses discretionary grants to drive research on best practices in the field of special education (Freeman et al., 2019). Technical assistance centers are supported by Part D funds as well, including the National Center on Intensive Interventions, the Collaboration for Effective Educator Development and Reform, and the Technical Resource Center on Positive Behavioral Interventions and Supports (Freeman et al., 2019). Figure 8 from "The Individuals with Disabilities Education Act (IDEA) Funding: A Primer" further reveals the historical funding of IDEA (Congressional Research Service, 2019).

Figure 8

IDEA Part B, Grants to States Funding by Billions, FY1997-FY2017



Note. From "The Individuals with Disabilities Education Act (IDEA) Funding: A Primer," *Congressional Research Service*, 2019, p. 5. (https://fas.org/sgp/crs/misc/R44624.pdf) In the public domain.

Medicaid Funding

Medicaid reimbursement funds are available to school districts for the provision of "sustainable, medically necessary supports for students to have every opportunity to be academically successful" (Division of Elementary and Secondary Education [DESE], 2021, p. 3). Therefore, districts are allowed to bill Medicaid for the following services: occupational therapy, physical therapy, speech therapy services, hearing/vision screening, audiology services, personal care services, and mental health services (DESE, 2021).

In Arkansas, districts are obligated to pay Medicaid Match or roughly 30% of Medicaid reimbursement back to the state (DESE, 2021, p. 1). Additionally, through the Arkansas Medicaid Administrative Claiming program, districts are given reimbursement funds for administrative activities associated with Medicaid (DESE, 2021). A Random Moment Time Study system was utilized in the calculation of approved administrative activities and ultimate fund distribution (DESE, 2021)

State and Local Funding

Federal, state, and local dollars combine to support the provision of FAPE (McCann & Libassi, 2014). Despite following the same federal IDEA mandates, how states fiscally support students with disabilities varies greatly (Education Commission of the States, 2021). Schools are required to report maintenance of effort for students in special education (OSEP, 2015). Maintenance of effort requires districts to maintain the previous year's level of funding for special education services unless certain criteria to decrease funds are approved (OSEP, 2015). Baker et al. (2015) stated, "[I]t is ultimately a state responsibility to ensure that general and special education funding is adequate and equitably distributed across school districts, schools, and children statewide" (p. 14).

However, not all states fund special education in the same way (Baker et al., 2015; Congressional Research Service, 2019). As state dollars represent nearly half of all special education funding, the implication of how states disperse support is important (McCann & Libassi, 2014, p. 12). The New American Policy Brief on Federal Funding for Students with Disabilities defined the different state formulas for distribution of special education funds as:

- Pupil weights: Each special education student is assigned a weight based on the severity of the disability, and funding from the state is allocated by student.
- Flat grant: The state establishes a fixed amount per special education student and allocates funding based on the number of children enrolled in special education
- Census-based: The state establishes a fixed amount, but allocates funding based on the total number of children enrolled in the district, not the number of special education students
- Resource-based: The state calculates the resource needs (for example, teachers or classroom space needed) of student based on their disabilities, and awards based on the weights of special education enrolled students.
- Percentage reimbursement: School districts are reimbursed for their special education expenditures, either as the full cost of providing services or as some reduced percentage.
- Variable block grant: funding is provided, at least in part, in accordance with set base year funding, expenditures, or enrollment, sometimes with room for growth in enrollment or revenue (McCann & Libassi, 2014, p. 12).

In Figure 9, each state's funding formula with relative strengths and weaknesses is itemized (Baker et al., 2015).

Figure 9

Summary of Funding Approaches

Formula Type	States	Strengths	Weaknesses
Weighted Pupil (varied weights)	Arizona, Colorado, Florida, Georgia, Indiana, Iowa, Kentucky, New Mexico, Ohio, Oklahoma, South Carolina, Texas	Ability to target additional resources to districts serving children in need, and to vary those resources by need levels.	May influence not only aggregate identification rates, but severity of classifications. Even more problematic if separate weights tied to placement type. (see Parrish et al., 1994, 2000)
Weighted Pupil (single weight, or flat grant per SE pupil)	Louisiana, Maine, New Hampshire, New York, North Carolina, Oregon, Washington	Simplicity. Ability to target additional aid to districts serving greater shares of children in need.	Insensitive to differences in concentration of disabilities by severity.
Resource Based	Delaware, Kansas, Mississippi, Nevada, Tennessee, Virginia	Ability to target additional aid to districts serving greater shares of children in need.	If based on fixed sum (typical), may lead to spreading resources to thin across districts/services/children
Percentage Reimbursement	Michigan, Minnesota, Nebraska, Wisconsin, Wyoming	Less encroachment (Baker, 2003) Ability to target additional aid to districts serving greater shares of children in need.	Potentially cumbersome compliance procedures of accounting for allowable expenses. If based on fixed sum (typical), may lead to spreading resources to thin across districts/services/children
Census-Based	Alabama, California, Idaho, Massachusetts, Montana, New Jersey, Pennsylvania	Reduces incentive to mis-classify or over-classify (Parrish, 1994)	Potential to deprive districts with uncontrollably high disability rates of necessary resources (Baker and Ramsey, 2010)
Combination	Alaska, Illinois, Maryland, South Dakota, Vermont		
No separate special education formula	Arkansas, Connecticut, Hawaii, Missouri*, North Dakota, Rhode Island, West Virginia		

Note. From "Financing Education for Children with Special Needs" by B. D. Baker, P. C. Green, and M. J. Ramsey, 2015, p. 20)

High-Cost Occurrence Funding

As discussed in the prior section, Arkansas has no separate special education formula (Baker et al., 2015). However, Arkansas allows for high-cost occurrence reimbursement for special education students who are considered "unduly expensive, extraordinary, or beyond the normal or routine special education services" to districts (DESE, 2020, p. 4). Typically, students who are the high needs, low incident population encompass students with significant cognitive disabilities, multiple disabilities, and medical care (Foley, 2018).

For fiscal year 2021, the DESE Special Education Unit allocated $13,020,000 for high-cost occurrence funding (DESE, 2020, p. 4). If approved, high-cost reimbursement is provided as follows:

- The district is responsible for 100% of the first $15,000
- Reimbursement of High-Cost claims after offsets:
    - 100% > $15,000 to $65,000
    - 80% > $65,000 up to a cap of $100,00 reimbursed
- Reimbursement for High-Cost claim amounts will be prorated if total requests for reimbursement exceed the amount of funds available in the High-Cost Occurrence fund. (DESE, 2020, p. 5)

Offsets included Title VIB funds, Medicaid reimbursement, and other third-party funds (DESE, 2020). Strict guidelines for allowable expenses are detailed and clearly state that typical staffing and provision of special education services are not allowable (DESE, 2020). Figure 10 demonstrates the new funding formula, put in place for school year

2019–2020, was projected to increase eligibility for students with the greatest need *(*Bureau of Legislative Research, 2020*).*

Figure 10

Changes in High-Cost Occurrence Funding Calculation in Arkansas

Previous Rules			New Rules		
	$100,000 cost	$16,000 cost		$100,000 cost	$16,000 cost
First $15,000	100% of $15,000 = $15,000	100% of $15,000 = $15,000	First $15,000	$0	$0
$15,000 - $50,000	80% of $35,000 = $28,000	80% of $1,000 = $800	$15,000 - $65,000	100% of $50,000 = $50,000	100% of $1,000 = $1,000
$50,000 - $100,000	50% of $50,000 = $25,000		$65,000 - $100,000	80% of $35,000 = $28,000	
Total Amount Eligible	**$68,000**	**$15,800**	**Total Amount Eligible**	**$78,000**	**$1,000**
Percentage Eligible	**68%**	**98.80%**	**Percentage Eligible**	**78%**	**0.06%**

Note. From the "Special Education Funding and Expenditures" by the Bureau of Legislative Research, 2020, p. 23 (https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf) In the public domain.

According to the Bureau of Legislative Research (2020), the number of high-cost occurrence claims more than doubled from 2013 to 2014. This spike was the cause of the funding calculation change (Bureau of Legislative Research, 2020). Figure 11 provides the amount of funding provided per student from 2015 to 2019 and shows an increase in the number of students accessing high-cost occurrence funding during those years (Bureau of Legislative Research, 2020). However, there is a decrease in funding per student from 2018 to 2019 (Bureau of Legislative Research, 2020).

Figure 11

Special Education High-Cost Occurrence Funding

	Number of Students	Number of Districts/ Charters	Funding Per Student	Total Eligible Amount	Maximum Amt. of Reimburse-ment	Total Funding Provided	Percent of Approved Funds Received	Total Eligible Amt. Not Funded
2015	1,005	153	$10,816	$30.4 million	$22.7 million	$10.9 million	47.894%	$19.5 million
2016	1,142	159	$9,632	$29.2 million	$26.7 million	$11 million	41.1917%	$18.2 million
2017	1,303	164	$8,442	$32.5 million	$29.9 million	$11 million	36.8183%	$21.5 million
2018	1,357	168	$9,579	$34.2 million	$31.3 million	$13 million	41.5097%	$21.2 million
2019	1,442	164	$9,029	$37.0 million	$33.9 million	$13.02 million	38.4568%	$24.0 million

Note. From the "Special Education Funding and Expenditures" by the Bureau of Legislative Research, 2020 p. 24 (https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf) In the public domain.

Equity and Adequacy

Equity in education is the concept that each school district would have the same resources for students (Kauffman, 2004). According to Baker et al. (2015), "Educational adequacy concerns the level of educational outcomes that should be attainable either by all children in a state in the aggregate or by children according to their individual needs and school setting" (p. 4). Courts have defined adequate education funding as "funding sufficient to produce adequate student outcomes" (Baker et al., 2015, p. 7).

Baker et al. (2015) posited to best advocate for equal opportunities for students with disabilities across disability categories, the cost of services calculated to yield clearly defined outcomes should be factored. This is not the current practice as studies on

expenditures of existing services fail to consider if those programs produce adequate student outcomes (Baker et al., 2015). Equity is also a consideration as McCann & Libassi (2014) stated, the "cost of providing special education services may vary depending on the child's disability" (p. 16).

Funding Issues

The current federal funding formula for special education is designed to provide resources to individuals with disabilities without incentivizing special education placement (McCann & Libassi, 2014). The School Superintendents Association article, "The Misdiagnosis of Special Education Costs," argued policymakers favor disincentivizing special education placements to address the rising costs of providing special education and minimize the risk of over-identification (Berman & Urion, 2021). It is true; more students are qualifying for special education services than ever before, accounting for 14% of public school students (Powerschool, 2019, p. 1). However, Berman and Urion (2021) stated:

> The root causes of these increases were factors beyond the control of schools, such as advances in medical technology, the deinstitutionalization of children with special needs, and privatization of services…. Because the increases in special education enrollments reflects real increases in the needs of children in the overall population, the solutions recommended by policymakers only exacerbate the problem by making funding to serve these children more difficult to access. (p. 2)

Chartrand (2019) cited increased special education numbers and advocacy by parents of children with special needs as direct factors of increased budgetary needs.

Summary

Guidance on best practices for students with EBD has been available for 20 years (Algozzine et al., 2001). Through the years, researchers have offered additional instructional and behavioral practices, which led to a discussion in the field regarding best practices (D'Angelo et al., 2018; DuFour et al., 2016; McLeskey et al., 2017; Landrum et al., 2003; Simpson et al., 2011; Smith et al., 2011). The review of literature revealed highly qualified staff and providing interventions with fidelity is key to student success (Simpson et al., 2011). The Council for Exceptional Children's high leverage practices in special education were shared in comparison to the work of DuFour et al. (2016) Professional Learning Communities (DuFour et al., 2016; McLeskey et al., 2017). Current initiatives in Arkansas were detailed (ADE, 2021; AWARE, 2021; McLeskey, 2019; Narisi et al., 2021).

In Chapter Three, the problem and purpose are revisited. The research questions, hypotheses, and research design are described. The population and sample of District A, as well as instrumentation, are shared for this mixed methods study. The reliability and validity of the instruments are outlined. A description of data collection, data analysis, and ethical considerations for the study are provided.

Chapter Three: Methodology

Individuals with EBD experience poor postsecondary outcomes, as evidenced by both a one-third employment rate and a 20% enrollment rate in postsecondary education (Smith et al., 2011, p. 186). Arkansas does not currently publicly report data regarding how students with emotional or behavioral disabilities perform after graduation compared to other high-needs populations (ADE, 2021). This study consists of a mixed methods design combining quantitative and qualitative data to analyze postsecondary outcomes and district fiscal supports for District A graduates with emotional and behavioral disabilities and significant cognitive impairments.

In this chapter, the problem and purpose of the study are defined, and research questions are identified. Specifics regarding research design, population and sample, instrumentation, and data collection are explained. Procedures for data analysis and ethical considerations are also identified.

Problem and Purpose Overview

The purpose of this study was to determine if students with emotional and behavioral disabilities experience discrepant postsecondary outcomes when compared to special education students who do not have emotional and behavioral disabilities. Students identified under IDEA, including students with significant behavioral or mental health needs, struggle to realize success in Arkansas public schools (Bureau of Legislative Research, 2020). By considering postsecondary outcomes for students with specific disability categories, it may be determined if a particular disability category is being under-served.

Another component of this study was to consider the allocation of district funds for students with emotional and behavioral disabilities compared to the allocation of funds for students with significant cognitive impairments. Lynch (2011) stated, “It is critical for resource allocation practices to reflect an understanding of the imperative to eliminate existing inequities” (p. 2). Martin et al. (2018) claimed, “Outcomes-based accountability should serve as a check on school funding systems” (p. 2).

Research Questions and Hypotheses

The following research questions guided this study:

1. To what extent do students with emotional and behavioral disorders access higher education or workforce participation?

2. To what extent do students with significant cognitive impairment access higher education or workforce participation?

3. What is the statistical difference between postsecondary outcomes of students with emotional or behavioral disabilities and students with significant cognitive impairments?

$H3_0$: There is no statistically significant difference between postsecondary outcomes of students with emotional or behavioral disabilities and students with significant cognitive impairments.

$H3_a$: There is a statistically significant difference between postsecondary outcomes of students with emotional or behavioral disabilities and students with significant cognitive impairments.

4. How do district fiscal supports compare for students with emotional and behavioral disabilities and students with significant cognitive disabilities?

Research Design

The mixed methods design is utilized when considering quantitative and qualitative methods to provide answers to the research questions (Schoonenboom & Johnson, 2017). According to Fraenkel et al. (2019), analyzing secondary data can provide comparisons between data sets. The relationship between data sets can be further investigated in depth through qualitative interview methods (Fraenkel et al., 2019).

Schoonenboom and Johnson (2017) explained the explanatory mixed methods design has "a first phase of quantitative data collection and analysis is followed by the collection of qualitative data, which are used to explain the initial quantitative results" (p. 117). Specifically, the explanatory design was utilized by first gathering quantitative data to determine the current reality for postsecondary outcomes of District A. Then, qualitative data were gathered from interviews with staff from District A and Arkansas DESE. Fraenkel et al. (2019) posited this blended method supports the clarity of research results and findings.

Population and Sample

From 2014–2019 District A averaged a total student population of 2,700 and 300 students with disabilities per year as defined by the IDEA (ADE Data Center, 2021). The population for this study's quantitative research was the 47 District A graduates from 2014–2019 identified under the IDEA as students with disabilities. All graduates with IEPs from 2014–2019 were included in the population. Graduates with emotional or behavioral disabilities and graduates with significant cognitive disabilities from this population comprised the sample from which secondary data were analyzed.

Interview participants were recruited from high school teachers, high school administrators, district administrators, and DESE staff. Interviews were conducted to gain a deeper understanding of the quantitative data (Fraenkel et al., 2019). The interviewees were asked open-ended questions to provide clarity regarding fund and resource allocation, student programming, and outside resources available to graduates served from 2014–2019.

Instrumentation

To best compare District A's postsecondary outcomes for the defined populations with district expenditures, a mixed methods design was utilized (Frankel et al., 2019). Quantitative data were collected from the following state-approved instruments: ADE Student Folder Checklist, state-level reports, high-cost occurrence data, and Arkansas Transition Survey Post-Secondary Outcomes Survey. High-cost occurrence data provided fiscal data for students with significant cognitive disabilities. Lastly, fiscal and state-level reports provided district fiscal data regarding per-pupil expenditures.

Smith et al. (2011) studied the negative impact of school programming on outcomes for students with EBD. Additionally, special education has numerous court cases in which districts were found liable for a lack of appropriate programming (Warner et al., 2020). Questions for interviews were designed to elicit input regarding District A's programming and resource allocation related to postsecondary outcomes. Preliminary interview questions were revised after consideration of the quantitative data. The format of the interview questions was open-ended and was comprised of the probe, follow-up,

and exit questions (Prasad & Garcia, 2017). Questions were limited in number to encourage maximum participation (Thomas & Thomas, 2021).

Reliability

Creswell and Creswell (2018) indicated, "…reliability, refers to the consistency or repeatability of an instrument" (p. 154). Each quantitative tool is an existing instrument developed by the ADE, an affiliated professional agency, or a database maintained by the ADE, which is used routinely for program approval. Therefore, the measures were deemed reliable.

An instrument is determined to be reliable because it will provide "consistent results" (Frankel et al., 2019, p. 112). For this study, the interview questions were conducted individually in accordance with COVID guidelines. The interview questions were field-tested individually with staff outside District A on three separate occasions before administering the questions. Interview processes were standardized for the sessions, thus increasing the reliability of results (Frankel et al., 2019). The interview responses were recorded, notes were taken during the sessions, and recordings were transcribed (Creswell & Creswell, 2018). Responses were reviewed and coded for similar themes.

Validity

File monitoring data, Eschool data, COGNOS fiscal data, catastrophic occurrence data, and postsecondary outcome phone survey results were selected as instruments to provide data to draw comparisons between postsecondary outcomes and fiscal support for individuals with EBD and individuals with significant cognitive impairments. File monitoring data and Eschool reports were used to determine which graduates were

identified as EBD and significantly cognitively impaired. District fiscal records and catastrophic fiscal data provided data regarding per-pupil expenditure. Lastly, phone survey results supplied postsecondary outcomes data for District A graduates. By utilizing existing instruments from the ADE, which have been found to provide the data the instruments were designed to collect, in accordance with federal reporting criteria, validity was achieved (ADE, 2021).

Interview participants were recruited from the population of District A teachers and administrators working with students with IEPs. The interview questions were field-tested to verify the instrument elicited the type of responses for which it was designed (Fraenkel et al., 2019). Interview sessions were recorded and transcribed to ensure the accuracy of the data. Participants were asked to review transcripts and this act of member checking increases the validity of the qualitative research (Fraenkel et al., 2019).

Data Collection

Due to the explanatory design guiding this study, collecting the quantitative data was followed by collecting the qualitative data (Fraenkel et al., 2019). This blended method supported a deeper understanding of research results and findings (Schoonenboom & Johnson, 2017). Fraenkel et al. (2019) stated, “mixed-methods research allows us to explore relationships between variables in depth” (p. 504).

Quantitative Data Collection

District A’s due process specialists provided postsecondary data for IEP graduates from 2014–2019 upon request. District A compiled a spreadsheet categorizing IEP graduates from 2014–2019 as graduates with emotional and behavioral disabilities, significant cognitive disabilities, and other IEP graduates. Graduate postsecondary goals

and phone survey data were provided on the spreadsheet as well. Graduates' personally identifiable information was deidentified by assigning each graduate a code.

Additionally, District A reported financial records from Title VIB per-pupil allocations, annual daily membership, maintenance of effort, and catastrophic reimbursement records for IEP graduates from 2014–2019 in spreadsheet format. These records identified the per-pupil fiscal support for IEP graduates and students with significant cognitive disabilities. Catastrophic reimbursement records were the only fiscal records above that contain student names. District staff deidentified all personally identifiable information by assigning the corresponding code provided in the first spreadsheet.

Qualitative Data Collection

Due to the COVID-19 pandemic, interviews were conducted in compliance with the Center for Disease Control guidelines. Interview participants were given the option to conduct interviews either in-person following appropriate COVID-19 precautions or via Zoom. Four participants attended the interview in person, and four participants attended via Zoom. Interview responses were recorded, transcribed, and coded. Participants were made aware that no personally identifiable information would be reported or shared.

Data Analysis

Data analysis for this explanatory design, mixed method study occurred sequentially. First quantitative data obtained from District A were analyzed and reported to determine postsecondary outcomes for students and fiscal supports provided to each population. By analyzing these data, the research questions were answered.

Creswell and Creswell (2018) indicated frequencies are commonly reported descriptive statistics. Therefore, quantitative data obtained from the post-school outcomes survey and file monitoring were analyzed utilizing frequencies and percentages. The 47 graduates identified with disabilities under the IDEA from 2014–2019 composed the sample. This is an appropriate statistical method to utilize as the frequencies and percentages obtained revealed to what extent the two identified groups of students with disabilities accessed higher education or workforce participation. The frequencies and percentages of the secondary data were reported in the form of comparison graphs. Postsecondary outcomes were analyzed using descriptive statistics and independent *t*-tests to compare the responses of students with emotional and behavioral disabilities, students with significant cognitive disabilities, and IEP graduates.

Qualitative data obtained from interviews were collected via audio recording. Interview questions were designed to provide more in-depth information regarding district and state-level supports to promote graduates' achievement of postsecondary outcomes. As recommended by Breen (2006), responses were reviewed, transcribed, coded, and categorized utilizing open and axial measures.

Ethical Considerations

Important ethical considerations include participant anonymity and free will participation (Fraenkel et al., 2019). Secondary data provided by District A were deidentified, thereby ensuring anonymity. Interview participation was strictly voluntary. Additionally, participant anonymity was maintained by assigning each participant a numerical code to deidentify identifiable information.

Paper records were stored in a secured, locked location with controlled access and will be destroyed after three years. Digital data were stored on a password-protected device to ensure confidentiality. Records of data collected digitally will be deleted after three years.

Summary

In this chapter, the mixed methods study designed to answer questions regarding specific postsecondary outcomes for two groups of students and fiscal supports utilized to support both populations were presented. The study was based on the conceptual framework outlined in Chapter One. The quantitative and qualitative research design was described to obtain descriptive secondary data from graduates and interview response data to better understand the secondary data (Schoonenboom & Johnson, 2017). Also, the instrumentation, data collection and analysis procedures, and ethical considerations were described.

Chapter Four contains a review of the problem and purpose of the study. All of the data collected are analyzed and presented. Secondary data are presented first as they relate to each research question. Responses to the qualitative instrument are presented and analyzed.

Chapter Four: Analysis of Data

Lloyd et al. (2019) documented the need for more work to improve outcomes for students with emotional and behavioral disabilities. It is well-documented students with EBD experience poor post-secondary outcomes (Freeman et al., 2019; Lloyd et al., 2019; Mitchell et al., 2019). Schools should consider outcomes, including post-secondary outcomes, when determining needs and ultimate fiscal allocations (Baker et al., 2015; Lynch, 2011; Martin et al., 2018). The purpose of this study is to consider post-secondary outcomes and the supports provided for students with EBD compared to all IEP students and students with significant cognitive impairments in District A.

In this chapter, the secondary data provided by District A are presented and analyzed. The data from post-secondary outcomes surveys are presented. District A IEP graduate post-secondary outcomes from 2014–2019 are presented. The first data set includes the participation rate for the surveys for students with EBD, significant cognitive impairments, and all other students with individualized education plans. Next, the results of post-secondary outcome surveys are presented. The third data set presented is the fiscal data regarding District A's resource support for students with EBD, significant cognitive disabilities, and all other students with IEPs.

Next, qualitative data from District A and state-level interviews are presented. To further inform secondary data from District A, interview questions were developed to describe current district and state-level supports for students with EBD, significant cognitive impairment, and all students with IEPs. Four District A interviews and four state-level interviews were conducted, and responses were coded for themes. Interview themes are presented by question and in response to the research questions.

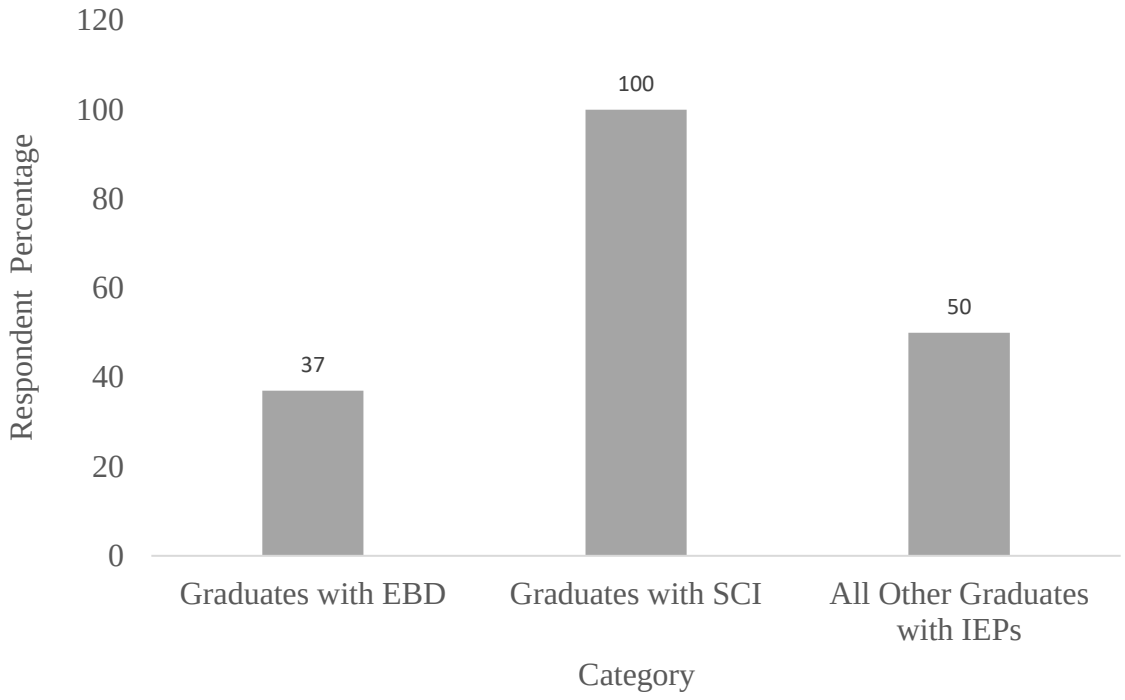
Data Analysis

Quantitative Data Post-Secondary Outcomes

The following secondary data were collected from post-secondary surveys conducted by District A for IEP graduates from 2014–2019. As shown in Figure 12, 37% of graduates with EBD responded to the survey, 100% of graduates with SCI responded to the survey, and 50% of all other graduates with other disability categories responded to the survey.

Figure 12

District A Respondents by Category

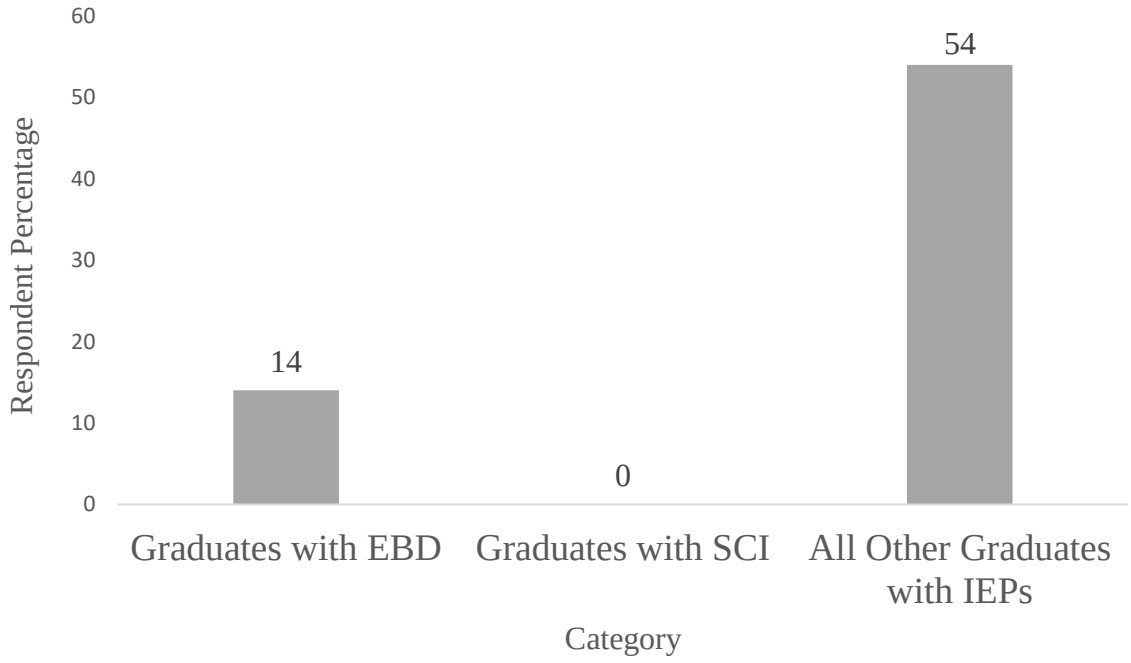


Note. Graduates with EBD *N* = 7, Graduates with SCI *N* = 2, and All Other Graduates with IEPs. *N* = 13.

As shown in Figure 13, the data reflect the percentage of graduates with EBD, SCI, and all other disability categories who accessed higher education after high school. Fifty-four percent of graduates with IEPs accessed higher education, while only 14% of graduates with EBD accessed higher education. In District A, graduates with EBD accessed higher education at a lower rate when compared to graduates with IEPs. Graduates with SCI did not access higher education.

Figure 13

Percentage of Graduates Accessing Higher Education



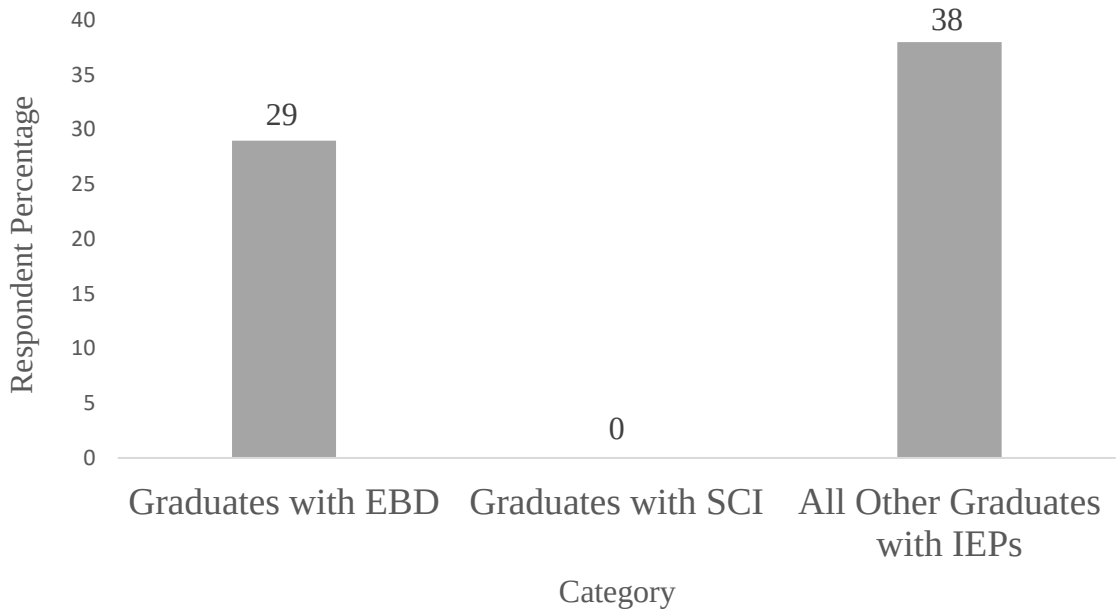
Note. Graduates with EBD *N* = 7, Graduates with SCI *N* = 2, and All Other Graduates with IEPs. *N* = 13.

As shown in Figure 14, the data reflect the percentage of graduates with EBD, SCI, and all other IEP graduates who accessed the workforce after graduation. Twenty-nine percent of graduates with EBD accessed the workforce, while 38% of all other

graduates with IEPs accessed the workforce. Graduates with SCI did not access the workforce.

Figure 14

Percentage of Graduates Accessing Workforce



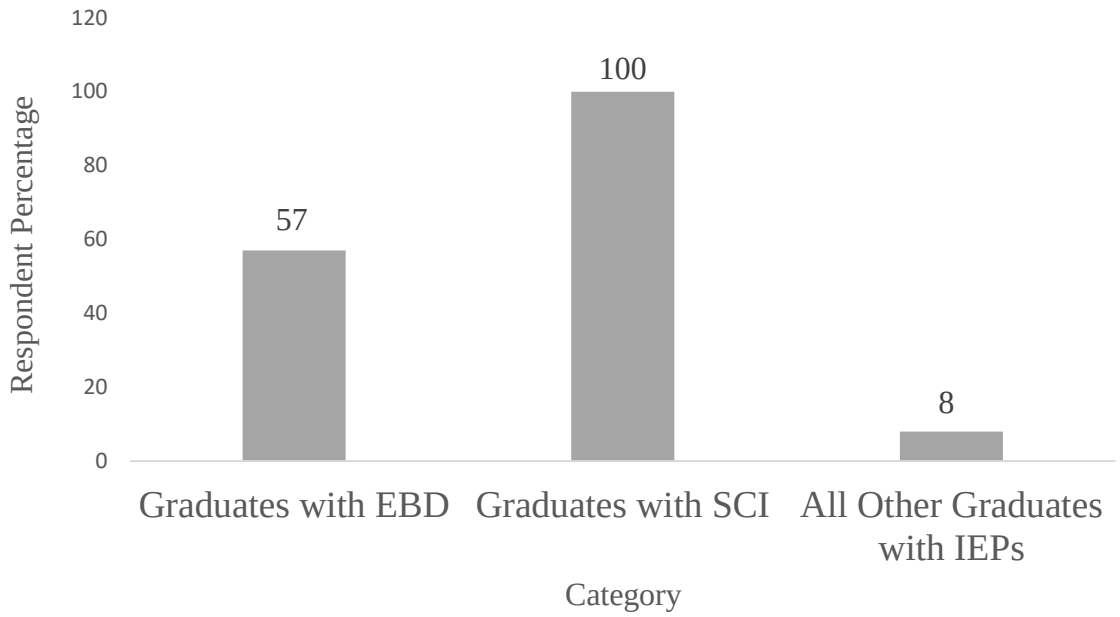
Note. Graduates with EBD *N* = 7, Graduates with SCI *N* = 2, and All Other Graduates with IEPs. *N* = 13.

Figure 15 represents the portion of graduates who indicated they had not accessed higher education or the workforce. One hundred percent of respondents with SCI indicated they were neither employed nor had they accessed higher education. Fifty-seven percent of graduates with EBD indicated the same, while 8% of all other graduates with IEPs are unemployed and did not access higher education. Figures 4 and 5 relate to research questions one and two, *To what extent do students with emotional and behavioral disorders access higher education or workforce participation?* and *To what*

extent do students with significant cognitive disorders access higher education or workforce participation?.

Figure 15

Percentage of Graduates Unemployed and Not Accessing Higher Education



Note. Graduates with EBD *N* = 7, Graduates with SCI *N* = 2, and All Other Graduates with IEPs. *N* = 13.

To consider research question three, *What is the statistical difference between post-secondary outcomes of students with emotional and behavioral disabilities and students with significant cognitive impairments?*, a *t*-test was administered. Results from the *t*-test were used to determine if the post-secondary outcomes for graduates with EBD were statistically different from post-secondary outcomes for graduates with SCI. Results of the *t*-test are reported in Figure 16. With a chosen level of significance of .05, a significant difference would exist if the *P* (*T* < = *t*) one tail score is greater than .050

(Fraenkel et al., 2019). The results indicate $p = .052$; therefore, there was no statistically significant difference.

Figure 16

t-Test: Two-Sample Assuming Unequal Variances

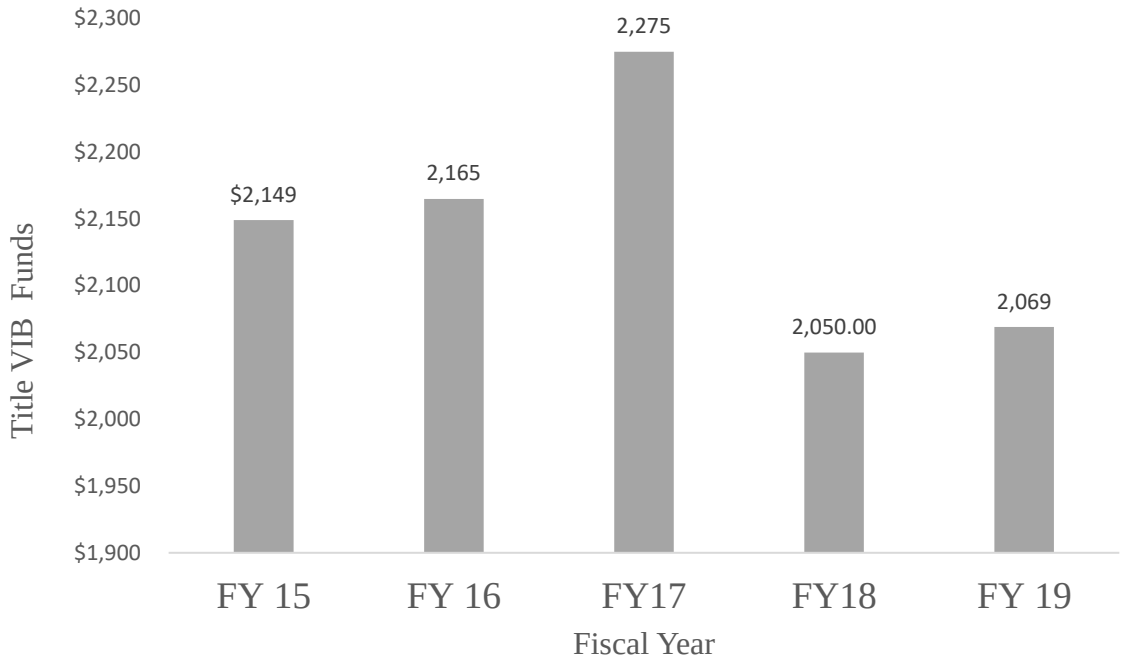
	EBD	SCI
Mean	15.71428571	10
Variance	61.9047619	0
Observations	7	2
Hypothesized Mean Difference	0	
df	6	
t Stat	1.921537846	
P (*T* < = *t*) one-tail	0.051523087	
t Critical one-tail	1.943180281	

Quantitative Data Fiscal Supports

The following section was presented to consider research question four, *How do district fiscal supports compare for students with emotional and behavioral disabilities and students with significant cognitive impairments?* In Arkansas, federal Title VIB funds are dispersed to districts based upon the state funding formula (ADE, 2021). The state retains a portion of Title VIB dollars to fund the operation of the special education unit (Bureau of Legislative Research, 2020). Each year, a per-pupil amount is calculated, and districts receive Title VIB allocations based upon this rate multiplied by the district's previous year's December 1st Child Count (Bureau of Legislative Research, 2020). The data in Figure 17 includes Title VIB allocations for District A for FY15 through FY19. Per-pupil allocations for Title VIB range from a low of $2,050 in FY18 to a high of $2,275 in FY17.

Figure 17

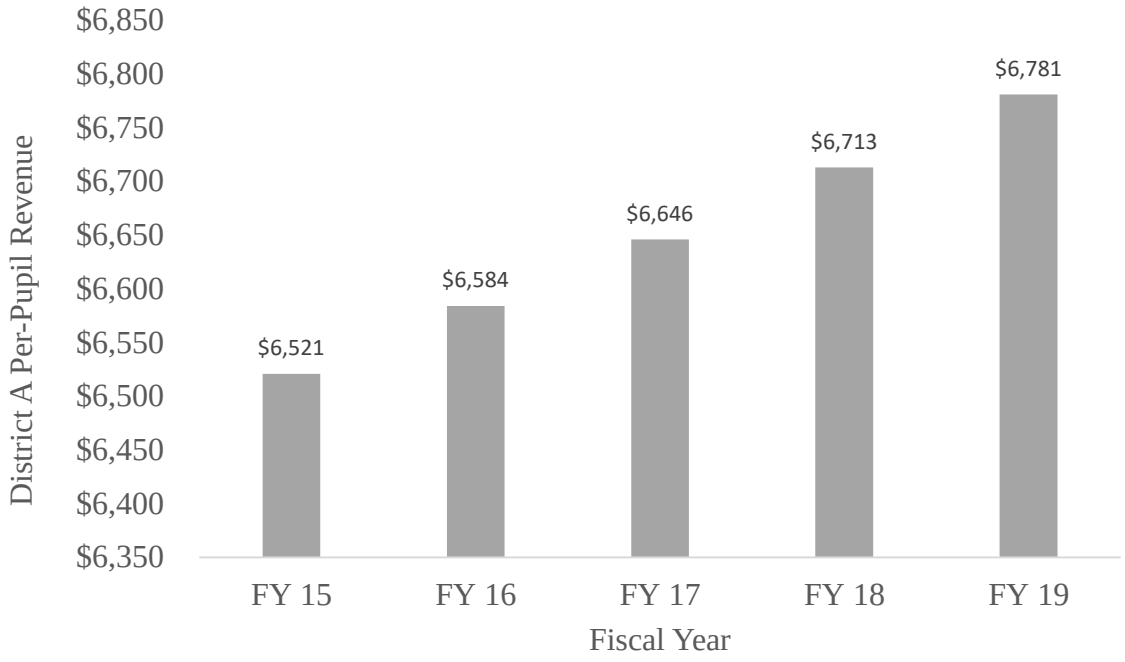
District A Title VIB Funds by Fiscal Year (FY)



District A also receives per-pupil revenue for all students enrolled in the district. The per-pupil revenue is the same for every district in the state and is multiplied by district enrollment to determine the final figure. Figure 18 is inclusive of District A's per-pupil revenue from FY15 through FY19. Amounts remain largely consistent and range from a low of $6,584 to a high of $6,781. Per-pupil revenue has increased each fiscal year.

Figure 18

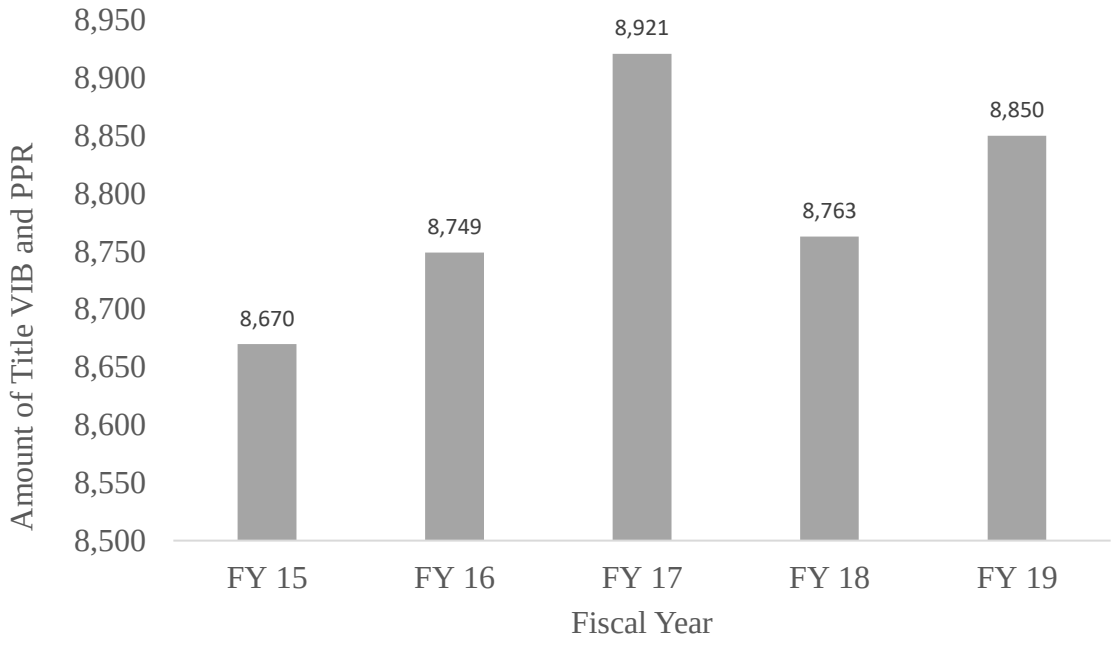
District A Per-Pupil Revenue by Fiscal Year



The base funding to educate students with disabilities in District A's revenue is the sum of per-pupil revenue and Title VIB funds. While there are other revenue sources such as Medicaid and ARMAC, these funds are distributed on a reimbursement basis and occur after services are provided (ADE, 2021). Additionally, not all students qualify for Medicaid, and services must be provided without regard to cost or funding source (ADE, 2021). Figure 19 shows per-pupil revenue and Title VIB per-pupil allocations combined. These values represent the baseline funding for educating students with disabilities.

Figure 19

District A Combined Title VIB Funds and Per Pupil Revenue by Fiscal Year

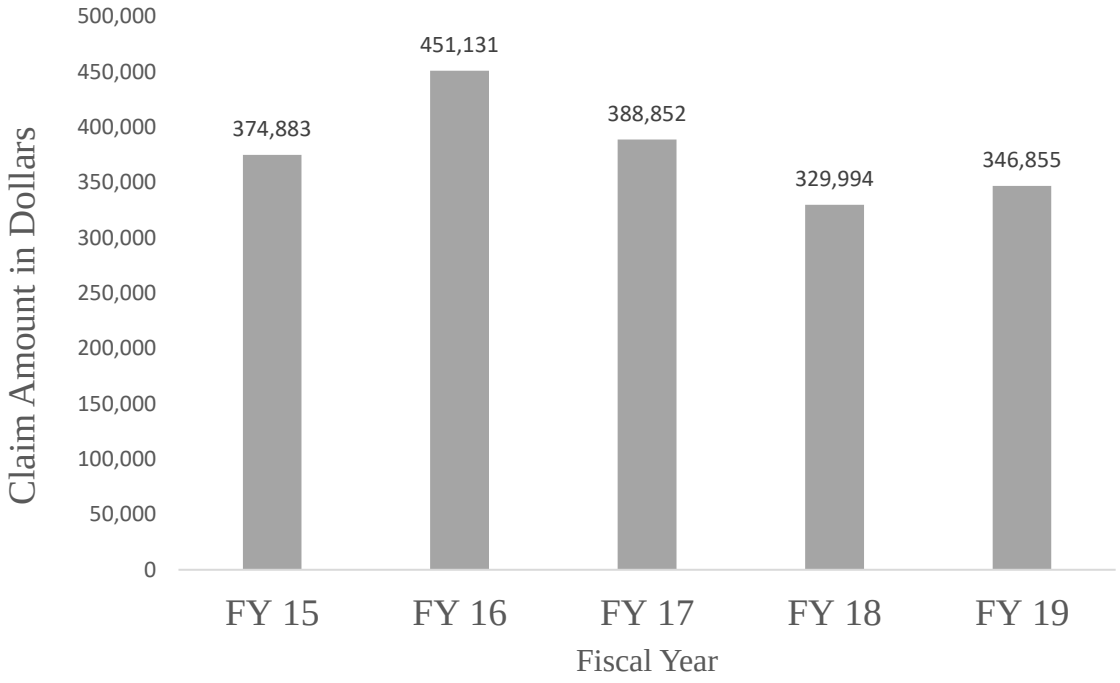


Note. PPR represents Per-Pupil Revenue.

District A submitted a high-cost occurrence application annually for students who were determined to meet the criteria. All students included in the high-cost occurrence submission could be considered students with SCI (ADE, 2021). Data in Figure 20 includes District A's high-cost occurrence submissions from 2014–2019 and represents district expenditures minus off-sets such as Title VIB funds and Medicaid. On average, District A sought $300,572 in reimbursement annually.

Figure 20

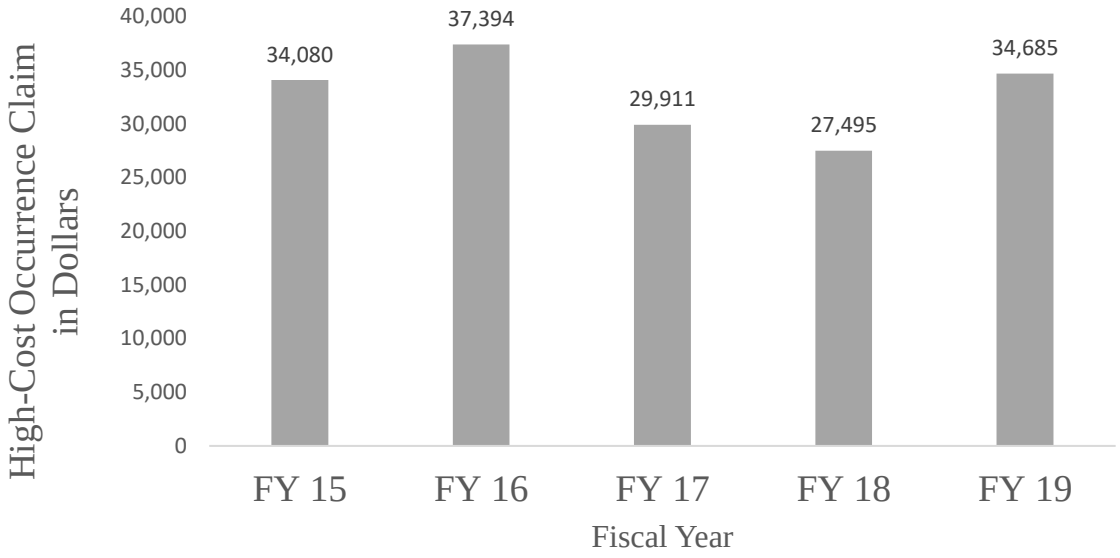
District A's High-Cost Occurrence Total Submission by Fiscal Year



High-cost occurrence submissions ranged from $329,994 to a high of $451,131 by fiscal year. District A also reported the average claim, and therefore expense, for each student. These data are reported in Figure 21 by fiscal year. District A expended annually, on average, $32,713 per student eligible for high-cost occurrence reimbursement.

Figure 21

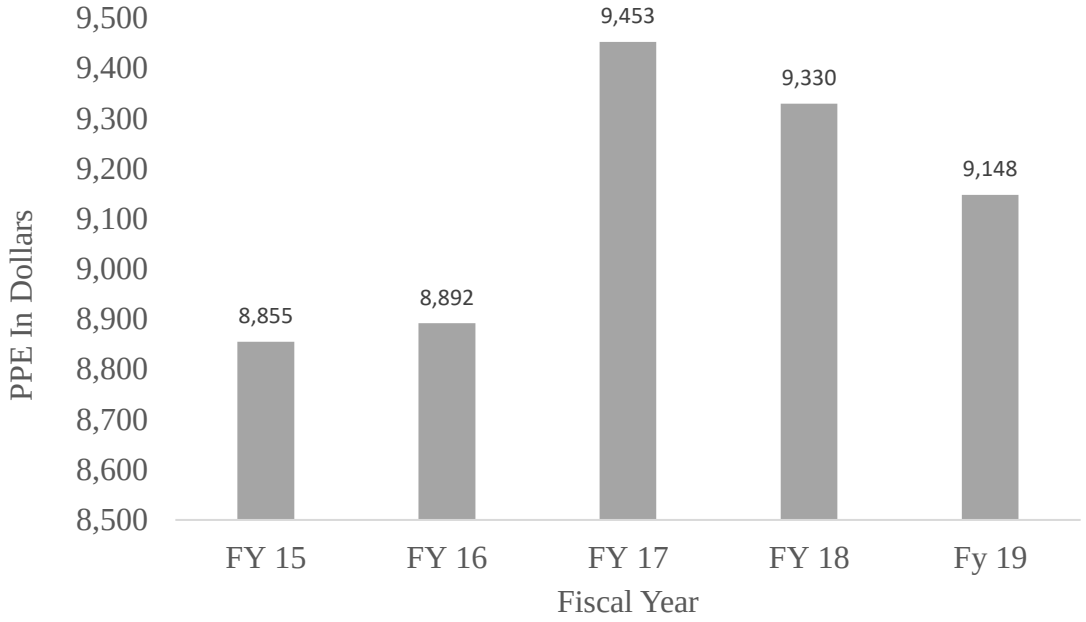
High-Cost Occurrence Average Claim Per Student by Fiscal Year



Arkansas reports per-pupil expenditures by district in the annual statistical report (ADE, 2021). The report includes expenditures for special education but does not itemize expenditures by disability category. In Figure 22, per-pupil expenditures for students in District A are reported. Amounts range from a low of $8,855 to a high of $9,453. According to the data, District A's per-pupil expenditures exceed per-pupil revenue each fiscal year.

Figure 22

District A's Per Pupil Expenditure by Fiscal Year

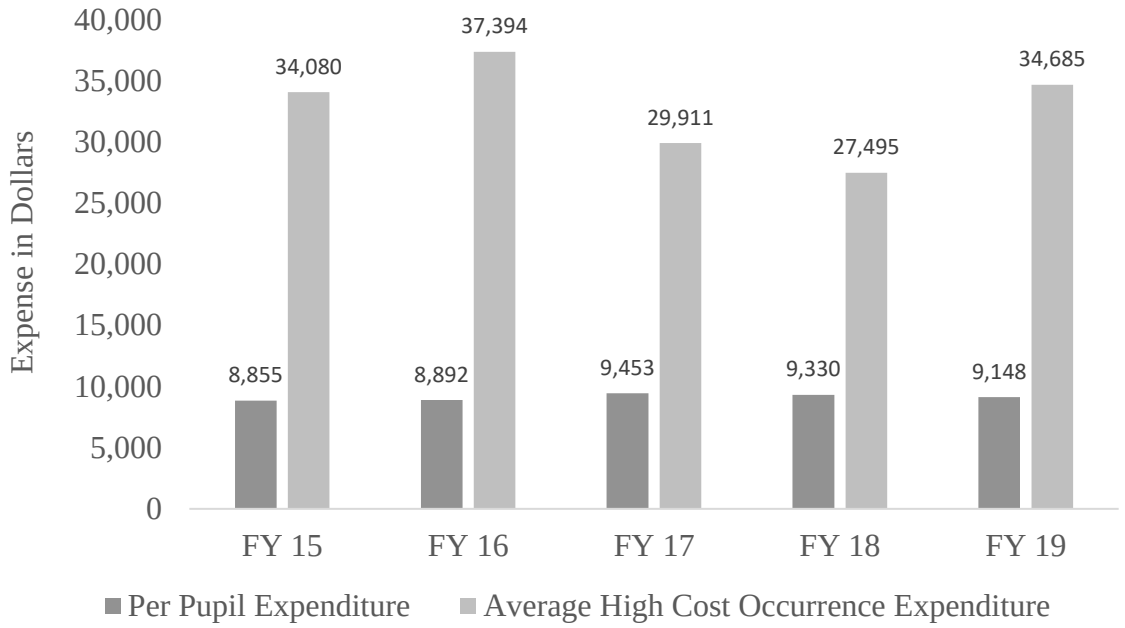


Note. PPE represents per-pupil expenditure.

To further consider district inputs, Figure 23 shows a comparison of District A's average per pupil expenditure and average high-cost occurrence expenditure by fiscal year. The difference between expenditures ranges from $25,225 to $28,502. The differences between each category by fiscal year were calculated. The average difference between per-pupil expenditure and high-cost occurrence expenditure is $23,577.

Figure 23

District A's Average Per Pupil Expenditure and Average High-Cost Occurrence Expenditure by Fiscal Year



Qualitative Data Interviews

Interview questions were designed to collect District A and Arkansas Department of Elementary and Secondary Education Special Education Unit member perceptions of programming and supports for sub-groups in special education in Arkansas. Responses were gleaned to support the further consideration of research question four, *How do district fiscal supports compare for students with emotional and behavioral disabilities and students with significant cognitive impairments?.* One-on-one interviews were conducted, and data were analyzed for each interview question to discover themes.

Interview participants were deidentified by assigning pseudonyms selected using a random name generator. Participants were asked what role they play in programming and allocating resources for students with disabilities in the state or district. Four

participants were state-level representatives, and four participants were district-level representatives. Mary, Dion, Janette, and Bryon represented district-level perspectives. While Aaron, Maggie, Heather, and Virginia represented state-level perspectives.

Interview Question One. Participants were asked what role they play in programming and allocating resources for students with disabilities in the state or District A. The state representatives' responses were from individuals responsible for budget allocation for state-level activities, fund allocation to districts and funding accountability, support for districts regarding Medicaid and personal care activities, and school-based mental health leadership. District-level representatives responded with a variety of building and district-level roles. District respondents indicated roles including classroom teacher in charge of overseeing programming, paraprofessionals, and medical needs; district-level representative responsible for budgeting federal, state, and local funds, federal programs and collaboration between programs; and building-level administrator responsible for overseeing high school special education teachers and providing resources.

Interview Question Two. Participants were asked how resources or supports were provided to students with disabilities in Arkansas or District A and were post-secondary outcomes considered when allocating resources. The responses varied greatly between the state- and district-level participants. District-level participants gave more student-specific responses based on individual programming needs. These needs included related service supports for students with significant needs such as speech and language therapy, occupational therapy, physical therapy, personal care assistants, and other paraprofessional supports. Janette stated, "We look at the broad spectrum of the district

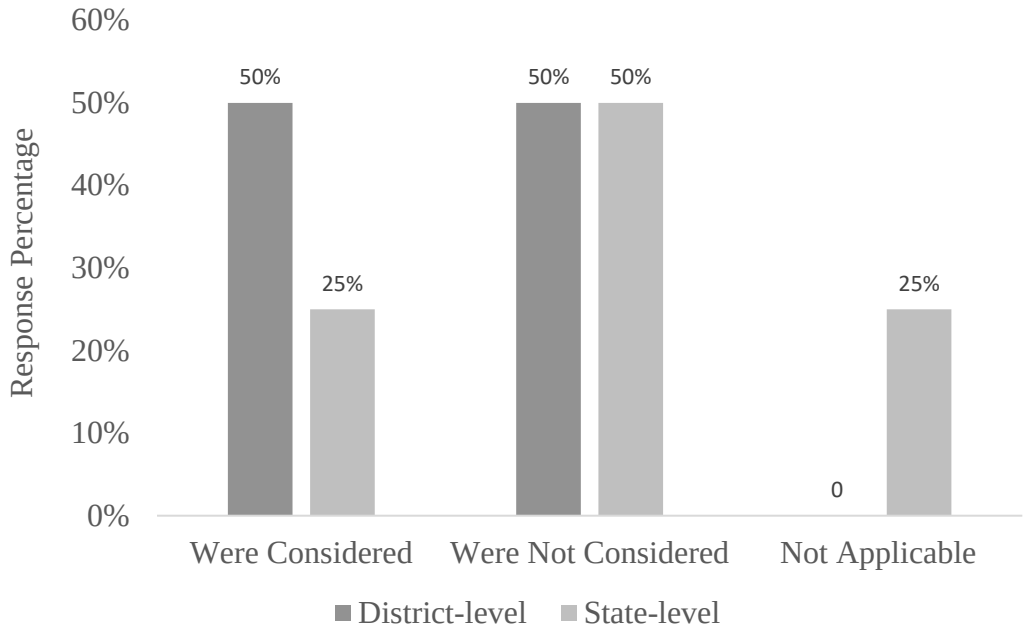
and think about what every child needs…and then we buy the materials and supplies needed."

In contrast, the state-level responses reviewed systemic structures in place to support district access to services or recoupment of Medicaid funds to provide services. Examples of systemic structures offered by the state include regional specialists and professional development, funding allocation as indicated in the state matrix, and targeted support to districts identified as underperforming. These systemic supports focused more on district needs to serve students instead of student-specific needs.

The question regarding the consideration of post-secondary outcomes yielded varied results (see Figure 24). Fifty percent of district-level participants indicated post-secondary outcomes were considered when allocating resources, and 50% indicated outcomes were not considered. However, 25% of state-level participants indicated post-secondary outcomes were considered when allocating resources. Fifty percent of state-level participants indicated outcomes were not considered when allocating resources, and 25% indicated the question was not applicable to their role.

Figure 24

District and State-Level Responses Regarding the Consideration of Post-Secondary Outcomes When Allocating Funds or Resources



On the district level, Heather and Byron did not indicate post-secondary outcomes were considered when allocating funds. However, Janette responded that outcomes were considered as they relate to the graduation rate. Likewise, state-level respondent Aaron indicated, “Yes, they [post-secondary outcomes] are [considered]. We do consider post-secondary outcomes, and one example would be schools. That’s how we funded the training that we did for schools that are in need of targeted support.”

Interview Question Three. Participants were asked to describe typical programming and supports offered to students with emotional and behavioral disabilities in Arkansas and District A. Eighty-eight percent of all respondents indicated school-based mental health as a support for students with EBD. Other district-level responses included social worker supports, homebound services, and more restrictive environments.

Janette shared District A's historical support of school-based mental health services, "I think originally when we just had two [mental health therapists], they were spread way too thin to try to service everybody…by hiring a third person now, they are able to kind of follow their people." Janette also stated, "I don't know what other schools in the state do, but I can't believe that other schools would have the services that we have for social-emotional support."

State-level responses included tiered systems of supports. In fact, two of the four state-level respondents referenced tiered systems of supports. Other participants included district behavior consultants, residential treatment facilities, and community resources. Virginia outlined state-level supports such as the Advancing Wellness and Resiliency in Education grant to support for specific mental health services. Virginia also stated,

> When you look nationally, we [Arkansas] are not where we need to be as far as a framework. So, the governor allocated five million dollars of COVID funds and matched 5 million dollars of state funds to develop a statewide multi-tiered system of support type framework.

This new initiative is in the beginning phase of development. Virginia shared,

> We have mental health, we have special education, we have all these things, but we have to find a way to build a framework where everybody can plugin, and we're all communicating on the same level. And so, it really took a pandemic for that to happen.

State-level respondent Aaron also spoke about systemic work around students with EBD. Aaron stated, "…work we are doing with school districts' curriculum specialists and leadership is around your instructional model, built from the ground up.

How are you educating the whole child?" Aaron shared there are many students in Arkansas without an official label that require emotional and behavioral support. Aaron continued,

> We have a lot of kids out there who don't have a diagnosis, who still have emotional and behavioral difficulties throughout their school career, and so when you think about those personal competencies because that would benefit all kids, that's where the model for learning comes in.

The Arkansas DESE has developed this model over the past two years, and the first pilot districts are completing their model for learning plans (DESE, 2021).

Interview Question Four. Participants were asked to describe typical programming or supports for students with significant cognitive disabilities. Three of the four district-level respondents indicated life skills or self-contained classroom environments as programming options for students with SCI. Related services therapies, paraprofessionals, and specialized services based on student needs were reported. Mary shared, "We looked at their abilities and needs. The students in my classroom required more support, just based on their medical, educational, and overall social needs."

State-level respondents shared programs offered by the state, including the School for the Blind, the School for the Deaf, Children and Youth with Sensory Impairments and Additional Disabilities Program (CAYSI). Nursing programs, personal care assistants, and Medicaid billable services were indicated as well. Fifty percent of the state-level respondents indicated medical supports necessary for students with SCI. Heather, a state-level respondent, shared the high-cost occurrence support, "The state has $13 million dollars that we have appropriated for high-cost occurrence, and that is based on the needs

of the child. They have to meet the criteria as well as the monetary amount." Heather also shared, "…the threshold [high-cost occurrence] is $15,000 minus any offsets such as VIB funds and Medicaid reimbursement."

Interview Question Five. Participants were asked to describe what resources are typically provided to students who qualify for high-cost occurrence reimbursement. District-level responses indicated needs such as major physical care, food preparation, health monitoring, toileting assistance, specialized transportation, and one-to-one paraprofessional support. Specialized furnishings, equipment, and health care staff were also indicated. Mary shared,

> I did have a student that qualified for those needs, and we had the support of a nurse for just looking at his overall health but also tube feeding. We had the additional para support to help with his changing needs, physical needs…and supporting him traveling to other classes.

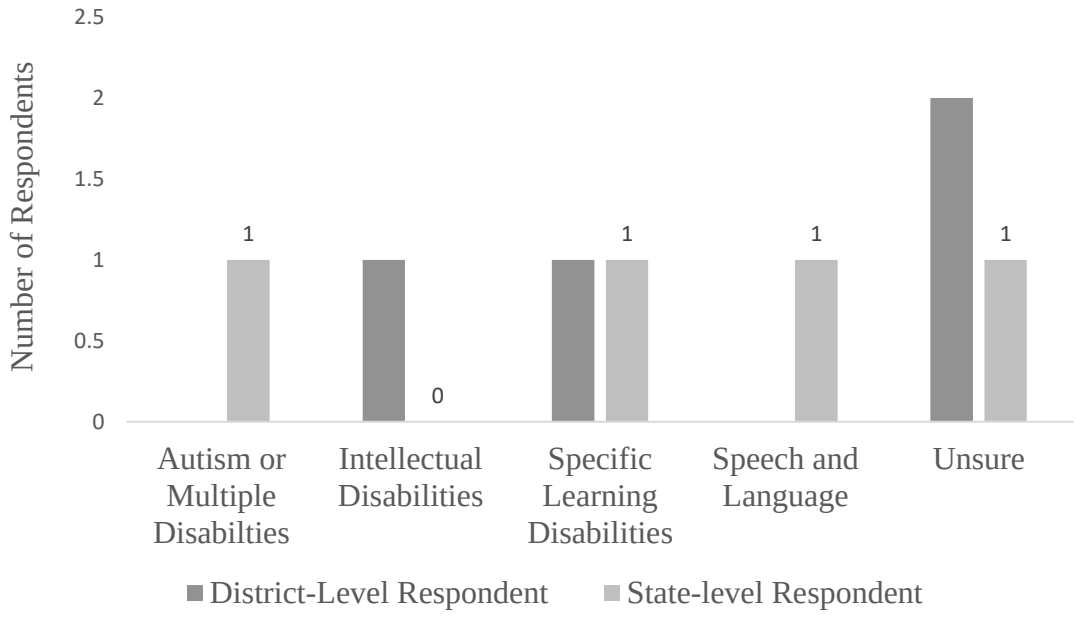
The state-level responses to Interview Question 5 mirrored the state-level responses to Interview Question 4. Supports for students who qualify for high-cost occurrence include assistive technologies, CAYSI, and staffing for medical needs. Heather stated, "A lot of them [high-cost occurrence students] do have therapy services…and have more needs such as occupational therapy, physical therapy, speech, personal care assistance, and private duty nursing."

Interview Question Six. Participants were asked to share their opinion on which disability category receives the most resources in special education. Responses were varied, with only one disability category receiving more than one response. Specific learning disability was indicated by both a district-level and a state-level respondent.

Other responses included intellectual disabilities, speech and language impairment, Autism, or multiple disabilities, and three respondents indicated they were unsure. Figure 25 shows the breakdown of responses.

Figure 25

District and State-Level Responses Concerning Which Disability Category Receives the Most Resources in Special Education



Themes

Qualitative research analysis can result in the evidence of themes (Creswell & Creswell, 2018). In this study, analysis of qualitative interview responses led to the discovery of two themes. Needs-based supports and state systemic work surfaced as common threads throughout respondents' interviews.

Needs-Based Supports

Needs-based supports were a common theme throughout both district- and state-level interview responses. District-level responses focused on student-specific needs,

which drive academic programming and supports such as related services, higher rates of staffing, and equipment. However, state-level respondents focused more on district needs in the form of professional development, funding, and targeted supports. Whether post-secondary outcomes were utilized when discerning programming needs yielded mixed results.

Systemic Work

Another theme that surfaced during the analysis of interview responses was the systemic work occurring on the state level. Different state groups are independently developing frameworks around serving students' individual needs. One framework, the learning plan, is nearing the end of development and is in the implementation phase in several pilot districts. This framework guides districts in the development of learning targets for students both academically, socially, and emotionally. The other systemic work is just beginning. This framework will guide districts from the state level on how behavior and mental health needs and services are connected and how they may stand alone.

Summary

Chapter Four contained the analysis of data collected during the mixed methods study. Quantitative and qualitative data were analyzed to answer the four research questions. District A's post-secondary outcomes were reported with charted frequency percentages. A *t*-test was conducted, and results indicated no statistically significant difference existed between EBD and SCI post-secondary outcomes. District A fiscal supports were graphically reported by fiscal year. Interview responses from both district

and state-level respondents were analyzed for common themes which were presented at the end of the chapter.

In Chapter Five, the findings and conclusions of this mixed methods study are presented. Implications for practice are identified for the education of students with EBD. Lastly, recommendations are outlined for future research opportunities regarding outcomes for students with EBD.

Chapter Five: Conclusions and Implications

For the last 50 years, a free and appropriate public education (FAPE) for students with disabilities has been a promise of the IDEA (IDEA, 2004). Since 1975, numerous court cases have shaped the definition of FAPE (Yell, 2019). The *Board of Education of Hudson Central School District v. Rowley* established the basic standard of a FAPE by stating students with disabilities must receive some educational benefit (Center for Education & Employment Law, 2020). This standard was further defined by *Endrew F. v. Douglas County School District*, RE-1, 137 S.Ct.988 which held "an educational program reasonably calculated to enable a child to make progress in light of the child's current reality as a FAPE and required students identified under IDEA make more than minimal progress (Center for Education & Employment Law, 2020).

In addition to the IDEA, the ESSA federal standard exists, which mandates the provision of the "opportunity to receive a fair, equitable, and high-quality education and to close achievement gaps" (National Council on Disability, 2018, p. 14). Despite the ESSA's higher standard of equity and academic progress and the IDEA's promise of a FAPE, post-secondary outcomes for students with emotional and behavioral disabilities have not kept pace with peers with disabilities or non-disabled peers (Freeman et al., 2019; Lloyd et al., 2019; Mitchell et al., 2019). Students with EBD have been identified as an under-identified and underserved population (Barnett, 2012).

Willis et al. (2019) claimed most resources and supports should be wrapped around students with the most significant needs. To achieve educational adequacy, sufficient funds must be provided to produce appropriate student outcomes based on specific student needs (Baker et al., 2015). Arkansas does not require districts to track fiscal supports by disability category (Bureau of Legislative Research, 2020). The

purpose of this mixed methods study was to compare post-secondary outcomes and fiscal supports for students with EBD and SCI in District A.

Chapter Five includes a review of the data analysis provided in Chapter Four. The research questions are answered in the findings of the study. Conclusions are provided based on information presented in Chapter Two. Next, implications for practice in the field of special education are presented. Recommendations for future research are provided.

Findings

A mixed methods study was conducted to determine if a significant difference existed between post-secondary outcomes for students with EBD and students with SCI in District A. Additionally, fiscal supports provided to both populations were examined to consider inputs and outcomes further. Quantitative and qualitative data were collected to answer four research questions. Quantitative data regarding post-secondary outcomes and fiscal supports were used to develop qualitative interview questions. Analysis of the quantitative data revealed which population had the most positive and negative post-secondary outcomes and which population received the most fiscal supports. Data analysis of the qualitative data yielded common themes and discovered two state-level initiatives relevant to this study.

Research Question One

To what extent do students with emotional and behavioral disorders access higher education or workforce participation? Analysis of secondary data provided by District A revealed 14% of graduates with EBD accessed higher education from 2014-2019. In contrast, 54% of other graduates with IEPs accessed higher education after graduation. A

gap of 40% demonstrated graduates with EBD accessed higher education at a considerably lower rate than other graduates with IEPs.

Regarding workforce participation, secondary data from District A revealed a smaller margin of difference between the two populations. Twenty-nine percent of students with EBD accessed the workforce after graduation. This represented a 9% difference from other graduates with IEPs who accessed the workforce at a rate of 38%.

To further consider the secondary data, respondents to the survey included seven graduates with EBD and 13 other graduates with IEPs. While both samples of the overall populations are small, it is clear other graduates with IEPs had the greater response rate to the survey. While both sample sizes were numerically small, 37% of graduates with EBDs responded to the survey compared to 50% of other graduates with IEPs responding to the survey.

Research Question Two

To what extent do students with significant cognitive impairment access higher education or workforce participation? Analysis of secondary data from District A revealed 0% of graduates with SCI accessed higher education from 2014-2019. This outcome represented a significantly lower participation rate than other graduates with IEPs who accessed higher education at a rate of 54%. The 54 percentage point span represented the largest difference of post-secondary outcomes in the secondary data.

Similar results were revealed regarding workforce participation. Zero percent of graduates with SCI accessed the workforce after graduation. However, 38% of other graduates with IEPs participated in the workforce. Data revealed graduates with SCI did not access higher education or the workforce after graduation.

Only two graduates with SCI responded to the survey. However, those two graduates represented 100% of graduates with SCI in District A from 2014-2019. Although this sample size was relatively small, it is an accurate representation of the population from District A.

Research Question Three

What is the statistical difference between post-secondary outcomes for students with emotional or behavioral disabilities and students with significant cognitive impairments? A *t*-test was administered to find if a significant difference existed between outcomes for graduates with EBD and outcomes for graduates with SCI. The chosen level of significance of .05 was not achieved. The results indicated $p = .52$; therefore, no statistical difference existed between post-secondary outcomes for students with EBD and students with SCI in District A. The null hypothesis was not rejected.

As Chapter Four provided secondary graphic data, which revealed a wide variation of results between graduates with EBD and all other IEP graduates, further data analysis was conducted. A *t*-test was also administered to compare post-secondary outcomes for students with EBD compared to post-secondary outcomes for all other graduates with IEPs. Results revealed a $p = .02$, indicating a significant difference between post-secondary outcomes for graduates with EBD and all other graduates with IEPs. Thus, the null hypothesis was rejected.

Additionally, the same consideration was given for post-secondary outcomes results for graduates with SCI compared to all other graduates with IEPs. A *t*-test was administered between the two populations. The results revealed $p = .004$, which indicated

a significant difference between outcomes for graduates with SCI and all other graduates with IEPs. Thus, the null hypothesis was rejected.

Research Question Four

How do district fiscal supports compare for students with emotional or behavioral disabilities and students with significant cognitive disabilities? In Arkansas, each child identified under IDEA yields the same allocation of Title VIB funds for the district to provide special education services regardless of disability category (Bureau of Legislative Research, 2020). This per-pupil amount is determined annually and multiplied by the district's December 1 Child Count (ADE, 2021). In Chapter Four, annual Title VIB funds were combined with District A's per-pupil revenue by fiscal year to illustrate the allocation of funds to provide special education services. The average combined revenue of these two funds sources from FY 2015-FY2019 in District A was $8,790.

Arkansas does not require districts to track expenditures by disability category; therefore, data do not exist to consider how District A specifically supported each disability category. However, because Arkansas' funding matrix was established to provide the same fiscal supports to each disability category and high-cost occurrence reimbursement for particular students that meet specific criteria, District A's per-pupil expenditure was compared to per-pupil revenue plus Title VIB per-student allocation. The average per-pupil expenditure for District A, which included both general education students and students receiving special education, from FY15 through FY19 was $9,135. This value exceeded the average per-pupil revenue plus Title VIB funds for the same fiscal years by $345. Therefore, District A spent more in the federal funds budget categories than the district received.

Additionally, District A expended on average $32,713 per student eligible for high-cost occurrence reimbursement. This amount exceeded District A's average per-pupil expenditures by $23,578 per eligible student. Therefore, students eligible for high-cost occurrence reimbursement, including students with SCI, received approximately three times as much financial support as other students.

Qualitative research was also conducted to consider research question four further. State and district-level representatives were asked a series of questions regarding supports for students with EBD and SCI. The majority of respondents indicated resources were provided to students based on students' needs. Needs-based supports and programming were themes discovered through the analysis of qualitative data. Most respondents indicated students with EBD needed school-based mental health therapy and behavioral supports. In contrast, respondents shared students with SCI required more related services and medical supports. Interview responses revealed half of both state- and district-level participants did not consider post-secondary outcomes when allocating resources for students with disabilities.

Another unexpected theme identified was the need for actionable systemic work, currently in progress in Arkansas, surrounding supports for students with EBD. During the qualitative interviews, both state- and district-level respondents articulated the need for more school-based mental health supports and collaboration amongst agencies to provide effective practices for students with mental health needs and students with EBD. District A has taken measures to develop and grow its own school-based mental health program. State-level leaders spoke of coordinated efforts to establish a systemic network of resources for students with mental health needs.

A surprising finding of the qualitative research was the conflicting answers to question 6 regarding which disability category received the most resources in special education. Previously, state- and district-level respondents agreed that supports were provided based on student needs. The lack of consistency amongst responses of which disability category demonstrated the greatest need, and therefore the most supports, was unexpected. The most often occurring response to the question were those who indicated they were unsure of which disability category received the most resources in special education.

Conclusions

To build on IDEA's mandate to provide a FAPE to all students with disabilities and ESSA's standard for equitable education for all, Baker et al. (2015) indicated the cost of services should be calculated to produce defined outcomes (National Council on Disability, 2018). By doing so, districts will provide equal opportunities across disability categories (Baker, 2015). The four research questions driving this study were designed to consider to what extent students with EBD accessed positive post-secondary outcomes compared to students with SCI and the supports wrapped around both populations. By considering this data, district and state-level leadership have an opportunity to examine current resource allocation and programming practices to drive policy and procedural changes.

Research Question One

To what extent do students with emotional and behavioral disorders access higher education or workforce participation? It is well-documented students with EBD experience poor post-secondary outcomes nationally (Mitchell et al., 2019; Freeman et

al., 2019; Smith et al., 2011). Much of the research compares students with EBD's outcomes to non-disabled peers. However, this study specifically compared graduates with EBD's outcomes to outcomes for graduates with SCI and all other graduates with IEPs.

Results indicated only 14% of graduates with EBD accessed higher education. This outcome is despite students with EBD possessing average intellectual capacity (ADE, 2020). Additionally, all other graduates with IEPs accessed higher education at a substantially higher rate of 54% despite being comprised of disability categories that may have characteristically sub-average intellectual capacities (ADE, 2020).

Results also indicated 29% of graduates with EBD accessed the workforce after graduation compared to 38% of all other graduates with IEPs. The total percentage of graduates with EBD who accessed either higher education or the workforce yielded 43% of graduates with EBD realized positive post-secondary outcomes. While 92% of all other graduates with IEPs achieved positive post-secondary outcomes.

Lewis et al. (2004) called for a best practice framework for educators to utilize when instructing students with EBD. The research on best practices exists, but there remains an implementation gap by special education practitioners (Lloyd et al., 2019). D'Angelo et al. (2018), Freeman et al. (2019), Lewis et al. (2004), and Mitchell et al. (2019) pointed to the MTSS as a model approach for behavior that encompasses a school-wide framework. While qualitative results did not indicate that District A currently has MTSS practices in place, the interviews of state-level representatives revealed Arkansas DESE is developing two separate frameworks to support both state systems of support and instructional models for districts.

To improve outcomes for students with EBD, highly-trained teachers must implement instructional and behavioral best practices (Lewis et al., 2004; McLeskey et al., 2017; Simpson et al., 2011). Research has shown teachers do not consistently implement evidence-based strategies (Lloyd et al., 2019). Additionally, chronic shortages of certified special education teachers had led to under-qualified staff being assigned to teach special education (Sutcher et al., 2016).

Research Question Two

To what extent do students with significant cognitive impairment access higher education or workforce participation? According to the findings of this study, 0% of graduates with SCI accessed higher education or the workforce. It is important to note the population for SCI was relatively low. Of the overall population considered for this study, only two were graduates with SCI.

Research Question Three

What is the statistical difference between post-secondary outcomes for students with emotional or behavioral disabilities and students with significant cognitive impairments? A *t*-test revealed a significant difference did not exist between post-secondary outcomes for students with EBD and students with SCI. The chosen level of significance for this study was .05, and the results indicated $p = .052$. Therefore, although a significant difference was not achieved, it was very close. Again, the sample size for the graduates with SCI was minimal, which may have impacted the findings.

Research Question Four

How do district fiscal supports compare for students with emotional or behavioral disabilities and students with significant cognitive disabilities? Full funding of IDEA for the provision of special education has not been realized (McCann & Libassi, 2014). Districts compensate for the lack of funding by utilizing state and local funds (CASE, 2021). Almost half of the special education funding is comprised of state dollars (McCann & Libassi, 2014). However, funding formulas vary by state and greatly impact how students with disabilities are supported (Baker et al., 2015; Congressional Research Service, 2019).

According to the Congressional Research Services (2019), the following formula types are used across the United States: weighted pupil (varied weights), weighted pupil (single weight), resource-based, percentage reimbursement, census-based, combination, and no separate special education formula. Strengths and weaknesses are identified for each approach (Congressional Research Services, 2019). Arkansas falls into the category with no separate special education formula (Congressional Research Services, 2019).

While Arkansas does not differentiate fiscal supports based on disability category, as other states do, the state does offer high-cost occurrence reimbursement for students with significant impairments (Congressional Research Service, 2019; DESE, 2020). High-cost occurrence funds can only be accessed if district expenditures for the student exceed $15,000 annually (DESE, 2020). Additionally, Medicaid reimbursement funds can be accessed to provide medically necessary supports that meet certain criteria (DESE, 2020).

In this study, quantitative data from District A revealed the greatest amount of financial support per student is provided to those students approved for high-cost occurrence reimbursement. On average, District A expended $32,713 per student eligible for high-cost occurrence reimbursement. This expenditure is substantially greater when compared to the $9,135 average per-pupil expenditure for District A. The average difference between the high-cost occurrence expenditures and per-pupil expenditures was $23,577.

Qualitative data from interviews with District A and state-level respondents indicated different supports for students with EBD and students with SCI. It was reported students with EBD often require school-based mental health therapy as additional support. In comparison, students with SCI required medical supports, additional staff support, and more extensive related services.

For interview question 6, respondents were asked which disability category receives the most resources in special education. Most respondents were unsure of which students received the greatest resources. The disability category of specific learning disability received the most responses as that category was perceived to be the one with the most students identified.

Willis et al. (2019) stated the greatest supports should be wrapped around students with the greatest need. Educational adequacy is realized when students achieve educational outcomes commensurate to their ability and consideration of their needs (Baker et al., 2015). Therefore, great emphasis must be placed on how states, districts, and IEP committees quantify student needs. However, considering how expenditures of services produce adequate student outcomes has not occurred (Baker et al., 2015). In this

study, 50% of both state and district-level interview respondents indicated post-secondary outcomes were not considered when allocating funds.

Students with EBD are recognized as an under-identified and under-served population with poor post-secondary outcomes (Barnett, 2012; Freeman et al., 2019; Mitchell et al., 2019; Smith et al., 2011). The IDEA mandates a FAPE be provided to students "without regard to the cost of these services," despite federal appropriations only providing 13% of the promised 40% of the IDEA funds to schools (Baker et al., 2015, CASE, 2021). With such substantial documentation of poor outcomes nationally, it could be argued a FAPE has not occurred at all.

Implications for Practice

The findings of the study resulted in critical implications for the field of special education. The first recommendation is to shift to outcome-based programming and funding. The next recommendation includes changing Arkansas' process on tracking post-secondary outcomes to make data more meaningful. Lastly, consideration is given to the equity and adequacy of supports across disability categories.

Outcome-Based Programming and Funding

The findings of this mixed methods study for District A confirmed similarly poor post-secondary outcomes for students with EBD, which is well documented in national research (Lloyd et al. 2019; Mitchell et al., 2019). Qualitative data revealed a theme of needs-based programming at both the state and district levels. However, there were mixed responses regarding whether post-secondary outcomes were considered when discerning student or district needs.

In order to provide an adequate education, outcomes must be considered. When comparing the resources provided to students with EBD to students with SCI, it is clear significantly more funds are provided to students with SCI. This disparity is due to the visible and tangible nature of the student's needs, such as intensive medical needs, support staff, and related service needs required to access education. However, according to this study, that access is not equaling higher education or workforce involvement.

In contrast, students with EBD receive less fiscal support, yet while experiencing better post-secondary outcomes than students with SCI, students with EBD experience lower rates of accessing higher education or the workforce than all other graduates with IEPs. Additionally, qualitative data indicated the most common support students with EBD require is mental health services. Interviews also revealed the lack of coordinated mental health services in Arkansas and subsequent initiatives to develop a statewide framework.

Post-Secondary Outcomes Tracking

Many districts view the graduation rate as one of the greatest indicators of success in education. However, if the goal of education is to produce productive citizens, the graduation rate falls short of that higher standard. Districts should look to post-secondary outcomes as a more accurate representation of success, and as further verification, a FAPE was provided.

Arkansas' current practice of data mining post-secondary outcomes does not provide districts with meaningful outcome data. Districts need student-specific data to make informed programming decisions. Additionally, district-specific post-secondary outcomes would guide leadership in appropriate fund and resource allocations.

District A's practice of completing phone surveys with graduates could be duplicated across the state. Another option would be to conduct an email survey which would be less labor-intensive for larger districts. A third option would be for the Arkansas DESE to outsource post-secondary surveys to a vendor, as has been done for COVID-19 engagement. In this instance, the Arkansas DESE utilized a vendor to reach out to disengaged students by phone to provide supports and urge students to reengage in learning.

Equity and Adequacy Across Disability Categories

The research exists for best practices in special education and specific best practices for students with EBD (D'Angelo et al., 2018; Freeman et al., 2019; Lewis et al., 2004; Mitchell et al., 2019). However, an implementation gap still exists (Lloyd et al., 2019; Mitchell et al., 2019). This issue is further compounded by the shortage of highly trained special education teachers (Sutcher et al., 2016). The provision of an adequate education can occur when highly trained teachers, skilled in best practices, are instructing students with disabilities (Lewis et al., 2004; Simpson et al., 2011).

Advocacy continues for fully funding IDEA and the provision of appropriate services for students with disabilities (CASE, 2021; Zerrer, 2016). When districts consider a FAPE, research-based best practices, and outcomes across disability categories, equity and adequacy in special education can be achieved (IDEA, 2004; Martin et al., 2018; Mitchell et al., 2019).

Recommendations for Future Research

This study provided a comprehensive understanding of inputs and outcomes of a small rural district in northwest Arkansas. Further research should be conducted to

consider equity and adequacy across disability categories. Specifically, duplicating this study with a larger population and in states with varying funding formulas would be of benefit. Also, further consideration of the implementation gap in special education and differences in post-secondary outcomes would be impactful.

Study Expansion

Data from this study revealed no significant difference between post-secondary outcomes for graduates with EBD and graduates with SCI. However, the sample of graduates with SCI was small, and the *p*-value was quite close to the level of significance. Therefore, additional research encompassing a larger population is needed to consider further trends in the way districts support students of different disability categories and resulting post-secondary outcomes. This information would be most valuable to leadership when considering the allocation of resources and funds.

Duplication of this study in states with differing funding formulas is another recommendation for future research. Overall, research on how different funding formulas impact post-secondary outcomes would provide data for states to consider in regard to funding policy change. This information would support educational adequacy for students with disabilities.

Implementation Gap

Through the course of this study, an implementation gap was referenced in the research. Meaning research exists and has existed for 30 years regarding educational best practices for students with EBD, but teachers are not utilizing these practices with fidelity. Additional research to consider why this implementation gap exists could assist

leaders in special education to make necessary changes to improve services for students with EBD and positively impact their post-secondary outcomes.

Under-Identification Verses Funding

Under-identification of students with EBD is cited throughout the research. Additionally, parent advocacy has been directly linked to increased funding for students with disabilities. The question then arises, do under-identified disability categories have lower rates of parent advocacy? Future research on funding for disability categories that are considered under-identified may be warranted to further consider equity amongst disability categories. This information would be impactful for district-level leadership when determining funding allocations, state-level leadership when considering the state funding matrix, and could advise future revisions of IDEA.

Summary

In Chapter One, in the background of the study, federal legislation and court cases that have shaped special education in America were considered. The minimal beginning of providing access to education for students with disabilities to later development of higher standards regarding a FAPE and meaningful educational progress. Poor post-secondary outcomes for students with EBD and funding practices provided the conceptual framework for this study. The lack of district-specific post-secondary data and tracking of expenditures by disability category were problems this study was designed to consider. Further, the purpose of the study was to discover if graduates with EBD experience different post-secondary outcomes compared to graduates with SCI and the fiscal supports wrapped around both populations.

A comprehensive literature review was provided in Chapter Two, which included comparing historical research of best practices for students with EBD and current educational practice. The under-identification of students with EBD was presented. Effective practices such as the maintenance of highly trained staff and tiered supports specific to students with EBD were outlined. Lastly, an analysis of special education funding, including federal, state, and local funding and high-cost occurrence funds, was conducted. Equity and adequacy, along with funding issues, were addressed.

In Chapter Three the mixed methods research design for this study was explained. Four research questions designed to compare the inputs and outcomes for graduates with EBD and graduates with SCI were shared. A description of the quantitative and qualitative data collection was addressed.

A thorough analysis of data collected as part of this study was detailed in Chapter Four. Quantitative post-secondary outcomes data were presented, and a *t*-test was utilized, which determined there was no significant difference between post-secondary outcomes for graduates with EBD and graduates with SCI. Qualitative interviews were conducted to consider supports wrapped around both populations, and responses were coded. The themes that emerged included needs-based programming and systemic work.

Chapter Five encompassed the findings and conclusion of this study. The research questions were answered, and conclusions were provided that revealed to what extent both populations achieved post-secondary outcomes and the district's fiscal support. Implications for practice included outcome-based programming and funding, post-secondary outcomes tracking, and equity and adequacy across disability categories. Recommendations for future research included expanding this study to a larger

population, further exploration of the implementation gap in special education, and further research on under-identification of disability category versus funding.

References

Advancing Wellness and Resiliency in Education. (2021, June 1). AWARE homepage. https://dese.ade.arkansas.gov/Offices/learning-services/school-health-services/arkansas-aware

Algozzine, B., White, R., Audette, R., Marr, M. B., & Ellis, E. D. (2001). Unified discipline: A school-wide approach for managing problem behavior. *Intervention in School and Clinic. 37*(1), 3–8.

Arkansas Department of Education. (2015). IDEA part B fiscal accountability procedures manual. https://arksped.k12.ar.us/documents/fundingFinance/

Arkansas Department of Education. (2021). Division of Elementary & Secondary Education Special Education. Retrieved January 13, 2021, from http://dese.ade.arkansas.gov/divisions/learning-services/special-education

Arkansas Department of Education Data Center. (2021) https://adedata.arkansas.gov/

Baker, B. D., Green P. C., & Ramsey M. J. (2015). *Financing education for children with special needs*. Retrieved March 6, 2021, from s://schoolfinance101.files.wordpress.com/2011/01/sef-baker-green-ramsey-final.pdf

Barnett, D. (2012). A grounded theory for identifying students with emotional disturbance: promising practices for assessment, intervention, and service delivery. *Contemporary School Psychology*, *36*, 21–31.

Berman, S. H. & Urion, D.K. (2021). *The misdiagnosis of special education costs*. Retrieved March 6, 2021, from https://aasa.org/SchoolAdministratorArticle.aspx?id=9248

Breen, R. L., (2006) A practical guide to focus-group research. *Journal of geography in higher education*. 30 (3), 463-475

Bureau of Legislative Research. (2020). *Bureau of Legislative Research report: Special education funding and expenditures report.* https://www.arkleg.state.ar.us/Calendars/Attachment?committee=410&agenda=3185&file=Handout%20F2%20Special%20Education%20Report.pdf

Center for Disease Control and Prevention. (2021, June 21) The ACE Pyramid. https://www.cdc.gov/violenceprevention/aces/about.html

Center for Education & Employment Law. (2020) *Students with disabilities and special education*. (Vol. 37) Center for Education & Employment Law.

Chartrand, S. (2019). Funding issues and proactive responses in special education. *Journal of Graduate Studies in Education, 11*(1), 17–21.

Congressional Research Service. (2019). *The Individuals with Disabilities Education Act (IDEA) funding: A primer*. https://crsreports.congress.gov/product/pdf/R/R41833

Council of Administrators of Special Education. (2021) *Legislative platform. https://drive.google.com/file/d/1NoeFf8xmKvVF2Ui6XKB0974DzQ5FRnQ0/view*

Creswell, J. W., & Creswell, J. D. (2018). *Research design, qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.

D'Angelo, J. H., January, S. A., Hurley, K. L. (2018). Supporting parents and students with emotional and behavioral disorders in rural settings: administrator perspectives. *Rural Special Education Quarterly, 37*(2), 103–112.

Delisle, D., & Yudin, M. (2014). *Dear colleague letter to Chief State School Officers on results-driven accountability*. United States Department of Education.

https://www2.ed.gov/about/offices/list/osers/osep/rda/050914rda-lette-to-chiefs-final.pdf

Division of Elementary and Secondary Education. (2021). *Arkansas Medicaid in the schools*. https://dese.ade.arkansas.gov/Offices/learning-services/school-health-services/arkansas-medicaid-in-the-schools

Division of Elementary and Secondary Education (2020). *High-cost occurrences funding guide*. https://arksped.k12.ar.us/documents/fundingFinance/FY2021-High-Cost-Occurences-Funding-Guide.pdf

Dufour, R., Dufour R., Eaker, R., Many T.W., Mattos, M. (2016). *Learning by doing (*3rd ed.). Solution Tree.

Education Commission of the States. (2021). *State funding for students with disabilities: All states all data.* Retrieved March 1, 2021, from https://www.ecs.force.com/mbdata/mbqest3D?rep=SD10

Fields, J., & Boaz, B. (2021, January 7). *Arkansas' post school outcome information*. https://www.arkansastransition.com/images/PSOFlyer.pdf

Foley, C. (2018). Catastrophic occurrence registry system user's guide. *Arkansas Department of Education Special Education Unit.* https://doi.org/https://arksped.k12.ar.us/documents/fundingFinance/CatastrophicOccurrenceUserGuide.pdf

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate research in education* (10th ed.). McGraw Hill.

Freeman, J., Yell, M. L., Shriner, J. G., Katsiyannis, A. (2019). Federal policy on improving outcomes for students with emotional and behavioral disorders: Past, present, and future. *Behavioral Disorders, 44*(2), 97–106.

Hattie, J., (2018). *Collective teacher efficacy (CTE) according to John Hattie*. Visible Learning. http://visable-learning.org/2018/03/collective-teacher-efficacy-hattie/

Individuals with Disabilities Education Act of 1990, 20 U.S.C. (2004). https://uscode.house.gov/view.xhtml?path=/prelim@title20/chapter33&edition=prelim

Jobe, S. (Host). (2021-present). *A.W.A.R.E.: Susan Jobe and G.U.I.D.E. For Life* [Audio podcast]. https://dese.ade.arkansas.gov/Offices/learning-services/school-health-services/aware-podcast

Kauffman, A. H. (2004). Equity and adequacy concepts as considered in school finance court cases. *IDRA Newsletter.* Retrieved April 11, 2021 https://www.idra.org/resource-center/equity-and-adequacy-concepts-as-considered-in-school-finance-court-cases/

Kauffman, J. M., Mock, D. R., Simpson, R. L. (2007). Problems related to underservice of students with emotional or behavioral disorders. *Behavioral Disorders, 33*(1), 43–57.

Kindall, B. (Host). (2021-present). *MTSS* [Audio podcast]. https://dese.ade.arkansas.gov/Offices/learning-services/school-health-services/aware-podcast

Landrum, T. J., Tandersley, M., Kauffman, J. M. (2003). What is special about special education for students with emotional and behavioral disorders? *Journal of Special Education*, *37*(3), 148–156.

Lewis, T. J., Hudson, S., Richter, M., Johnson, N. (2004). Scientifically supported practices in emotional and behavioral disorders: A proposed approach and brief review of current practices. *Behavioral Disorders*, *29*(30), 247–259.

Lloyd, B. P., Bruhn, A. L., Sutherland, K. S., & Bradshaw, C. P. (2019). Progress and priorities in research to improve outcomes for students with or at risk for emotional and behavioral disorders. *Behavioral Disorders, 44*(2), 85–96.

Lynch, M. (2011, December 19). Allocating resources to improve student learning. *HuffPost.* https://www.huffpost.com/entry/allocating-resources-to-i_b_1018778

Martin, C., Boser, U., Benner, M., & Baffour, P. (2018). A quality approach to school funding, lessons learned from school finance litigation. *Education K-12.* http://americanprogress.org/issues/education-k-12/reports/2018/11/13/460397/quality-approach-school-funding/

McCann, C. & Libassi, C. (2014). Federal funding for students with disabilities. *New America Report*, 1–29. https://files.eric.ed.gov/fulltext/ED556326.pdf

McLeskey, J., Barringer, M-D., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., Lewis, T., Maheady, L., Rodriguez, J., Scheeler, M.C., Winn, J., & Zieglar, D. (2017). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children & CEEDAR Center.

Mitchell, B. S., Kern, L., & Conroy, M. A. (2019). Supporting students with emotional or behavioral disorder: State of the field. *Behavioral Disorders*, *44*(2), 70–84.

Narisi, S., Tuychiev, H., Brownstein, A. (2021). *A Child's Best Hope: The Arkansas PLC Story* [Mini-documentary]. Solution Tree. https://www.solutiontree.com/st-states/arkansas-documentary

National Council on Disability. (2018). *IDEA series: Every Student Succeeds Act and Students with disabilities*. https://ncd.gov/sites/default/files/NCD_ESSA-SWD_Accessible.pdf

Office of Special Education Programs. (2015). IDEA part b supplemental regulations, local educational agency (LEA) maintenance of effort (MOE). *U.S. Department of Education.* https://arksped.k12.ar.us/documents/fundingFinance/july2015NonRegulatoryGuidance.pdf

Peacock Hill Working Group. (1991). Problems and promises in special education and related services for children and youth with emotional or behavioral disorders. *Behavioral Disorders, 16*(4), 299–313. https://doi.org/10.11177/019874299101600406

Powerschool. (2019). *The numbers behind increasing special education enrollment*. https://www.powerschool.com/resources/blog/the-numbers-behind-increasing-specialeducationenrollment/#:~:text=The%20number%20of%20U.S.%20students,from%2013%25%20in%20previous%20years.

Prasad, M., & Garcia, C. (2017). How to conduct a successful focus group. *Humans of Data*. https://humansofdata.atlan.com/2017/09/conduct-successful-focus-group-discussion/

Salle, T., George, H. P., McCoach, D. B., Polk, T., & Evanovich, L .L. (2018). An examination of school climate, victimization, and mental health problems among middle school students self-identifying with emotional and behavioral disorders. *Behavioral Disorders*, *43*(3), 383–392.

Samuels, C.A. (2018). Disabilities: Facts about this vulnerable population. *Education Week*. http://edweek.org/leadership/students-with-emotional-disabilities-facts-about-this-vulnerable-population/2018/03

Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *Crossmark, 2*(69), 107–131.

Shields, C. M. (2016). Chapter 5: Critical advocacy research: An approach whose time has come. *Counterpoints, 433*, 53–64.

Simpson, R. L., Peterson, R. L, & Smith, C. R. (2011). Critical educational program components for students with emotional and behavioral disorders: Science, policy, and practice. *Remedial and Special Education, 32*(3), 230–242.

Solution Tree (2021). Arkansas division of elementary and secondary education and solution tree announce fifth cohort of schools in professional learning communicates at work project. https://www.solutiontree.com/press-release/arkansas-dept-ed-solution-tree-announce-fifth-plc-cohort

Smith, C. R., Katsiyannis, A., & Ryan, J. B. (2011). Challenges of serving students with emotional and behavioral disorders: Legal and policy considerations. *Behavioral* Disorders, *36*(3), 185–194.

Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S. *Learning Policy Institute.* http://files.eric.ed.gov/fulltext/ED606666.pdf

Thomas, M. & Thomas, M.J. (2021) Tips for effective research interviews. *Disability Information Resources.* https://www.dinf.ne.jp/doc/english/asia/resource/apdrj/z13fm0300/z13fm0313.html

U.S. Department of Education, Office of Civil Rights. (2010). *Free Appropriate Public Education for Students with Disabilities: Requirements under Section 504 of the Rehabilitation Act of 1973*. Washington, D.C.

Warner, C., Roth, J. A., D'Agostino, T., & Brown, C. J. (2020). *Students with disabilities and special education law* (37th ed.). Center for Education and Employment Law.

Wiley, A. L., Siperstein, G. N., & Forness, S. R. (2019). School context and the academic achievement of students with emotional disturbance. *Behavioral Disorders, 36*(3), 172–184.

Willis, J., Krausen, K., Caparas, R., & Taylor, T. (2019). *Resource allocation strategies to support the four domains for rapid school improvement.* The Center on School Turnaround at WestEd.

Young, D., & Stripling, R. (2019). Guidance for IEP teams on participation decisions for the Arkansas alternate assessment program. *Arkansas Department of Education Special Education Unit.* https://doi.org/https://arksped.k12.ar.us/documents/curriculumAssessment/Guidance-for-IEP-Teams-on-Alternate-Assessment-2019-2020.pdf

Yell, M. L. (2019). Endrew f. v. Douglas county school district (2017): Implications for educating students with emotional and behavioral disorders. *Behavioral Disorders, 45*(1), 53–62.

Zerrer, L.M. (2016). *Political advocacy by parents of children with disabilities. https://www.specialneedsalliance.org/the-voice/political-advocacy-by-parents-of-children-with-disabilities/*

Appendix A

LINDENWOOD

Research Information Sheet

You are being asked to participate in a research study. We are doing this study to compare post-secondary outcomes for sub-populations in special education and the fiscal resources used to support the populations. During this study you will respond to 5-7 interview questions. It will take about 15-20 minutes to complete this study.

Your participation is voluntary. You may choose not to participate or withdraw at any time.

There are no risks from participating in this project. There are no direct benefits for you participating in this study.

> We are collecting data that could identify you, such as your name and job title. Every effort will be made to keep your information secure and confidential. Only members of the research team will be able to see your data.

Who can I contact with questions?

If you have concerns or complaints about this project, please use the following contact information:

Brigid Bright at [redacted], or BB022@lindenwood.edu

Dr. Kathy Grover, kgrover@lindenwood.edu

If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu.

Appendix B

LINDENWOOD

Research Study Consent Form

Does the Input Equal the Outcome for Students with Emotional and Behavioral Disabilities?

Before reading this consent form, please know:

- Your decision to participate is your choice
- You will have time to think about the study
- You will be able to withdraw from this study at any time
- You are free to ask questions about the study at any time

After reading this consent form, we hope that you will know:

- Why we are conducting this study
- What you will be required to do
- What are the possible risks and benefits of the study
- What alternatives are available, if the study involves treatment or therapy
- What to do if you have questions or concerns during the study

Basic information about this study:

- We are interested in learning about post-secondary student outcomes and fiscal resources utilized to support IEP students.
- You will participate in a brief interview of 4-6 questions regarding district practice in supporting students with disabilities.
- Risks of participation include risk of being identified within the study. However, your information will be deidentified in the dissertation.

Appendix C

LINDENWOOD

Research Study Consent Form

Does the Input Equal the Outcomes for Students with Emotional and Behavioral Disabilities?

You are asked to participate in a research study being conducted by Brigid Bright under the guidance of Dr. Kathy Grover at Lindenwood University. Being in a research study is voluntary, and you are free to stop at any time. Before you choose to participate, you are free to discuss this research study with family, friends, or a physician. Do not feel like you must join this study until all of your questions or concerns are answered. If you decide to participate, you will be asked to sign this form.

Why is this research being conducted?

We are doing this study to compare post-secondary outcomes for sub populations in special education and the fiscal resources used to support the populations. We will be asking about 5-7 other people to answer these questions.

What am I being asked to do?

You will participate in a one-on-one interview with the researcher during one session that should last 15-20 minutes. You will share your knowledge and experience of fiscal resource allocation and programs for students with disabilities in District A.

How long will I be in this study?

The session should last 15-20 minutes during one session.

Who is supporting this study?

Not applicable

What are the risks of this study?

- Privacy and Confidentiality

  We will be collecting data that could identify you, but each interview response will receive a code so that we will not know who answered each survey. The code connecting you and your data will be destroyed as soon as possible.

What are the benefits of this study?

You will receive no direct benefits for completing this survey. We hope what we learn may benefit other people in the future.

What if I do not choose to participate in this research?

It is always your choice to participate in this study. You may withdraw at any time. You may choose not to answer any questions or perform tasks that make you uncomfortable. If you decide to withdraw, you will not receive any penalty or loss of benefits. If you would like to withdraw from a study, please use the contact information found at the end of this form.

What if new information becomes available about the study?

During the course of this study, we may find information that could be important to you and your decision to participate in this research. We will notify you as soon as possible if such information becomes available.

How will you keep my information private?

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are: members of the research team, qualified staff of Lindenwood University, representatives of state or federal agencies.

How can I withdraw from this study?

Notify the research team immediately if you would like to withdraw from this research study.

Who can I contact with questions or concerns?

If you have any questions about your rights as a participant in this research or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Lindenwood University Institutional Review Board Director, Michael Leary, at (636) 949-4730 or mleary@lindenwood.edu. You can contact the researcher, Brigid Bright directly at [redacted] or BB022@lindenwood.edu. You may also contact Dr. Kathy Grover at kgrover@lindenwood.edu.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

Participant's Signature	**Date**
Participant's Printed Name	

Signature of Principal Investigator or Designee	**Date**
Investigator or Designee Printed Name	

Appendix D

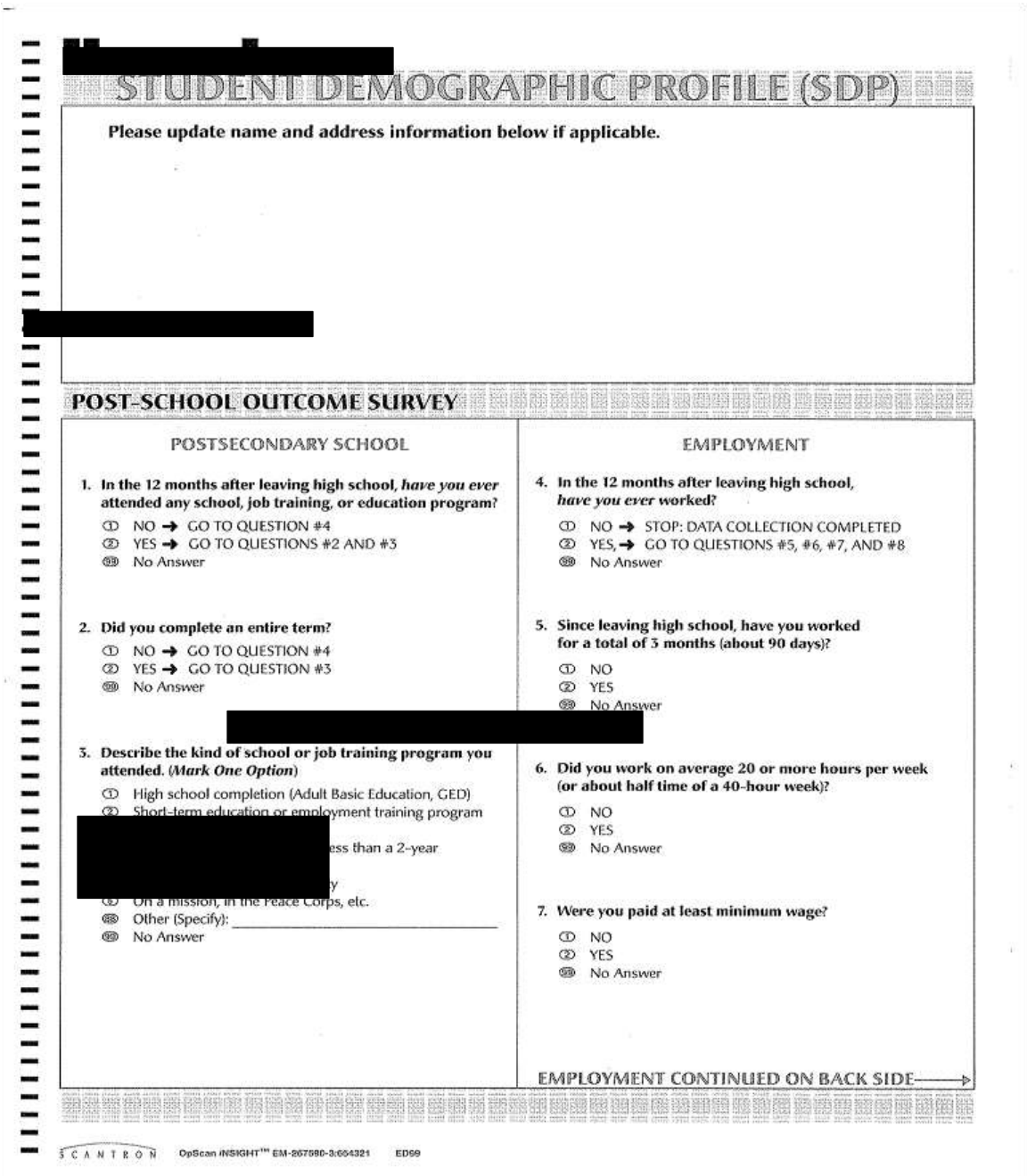
Preliminary Interview Questions

Please respond to the following questions for students accessing IEP services as high school students from 2014-2019.

1. What role do you play in programming and allocation of resources for students with disabilities in the state/district?
2. How were resources/support provided to students with disabilities in Arkansas/District A?
    1. Were student post-secondary outcomes considered?
3. Please describe typical programming/supports offered to students with emotional and behavioral disabilities in Arkansas/District A.
4. Please describe typical programming/supports provided to students with significant cognitive impairments in Arkansas/District A.
5. Please describe resources typically provided to students that qualify for high cost occurrence reimbursement.
6. In your opinion, which disability category receives the most resources in special education?

Appendix E

Post-school Outcomes Survey



[redacted]

STUDENT DEMOGRAPHIC PROFILE (SDP)

Please update name and address information below if applicable.

[redacted]

POST-SCHOOL OUTCOME SURVEY

POSTSECONDARY SCHOOL

1. **In the 12 months after leaving high school, *have you ever* attended any school, job training, or education program?**
   - ① NO → GO TO QUESTION #4
   - ② YES → GO TO QUESTIONS #2 AND #3
   - ⑨⑨ No Answer

2. **Did you complete an entire term?**
   - ① NO → GO TO QUESTION #4
   - ② YES → GO TO QUESTION #3
   - ⑨⑨ No Answer

[redacted]

3. **Describe the kind of school or job training program you attended. (*Mark One Option*)**
   - ① High school completion (Adult Basic Education, GED)
   - ② Short-term education or employment training program
   - [redacted] ess than a 2-year
   - [redacted] y
   - ⑥ On a mission, in the Peace Corps, etc.
   - ⑧⑧ Other (Specify): _____
   - ⑨⑨ No Answer

EMPLOYMENT

4. **In the 12 months after leaving high school, *have you ever* worked?**
   - ① NO → STOP: DATA COLLECTION COMPLETED
   - ② YES, → GO TO QUESTIONS #5, #6, #7, AND #8
   - ⑨⑨ No Answer

5. **Since leaving high school, have you worked for a total of 3 months (about 90 days)?**
   - ① NO
   - ② YES
   - ⑨⑨ No Answer

6. **Did you work on average 20 or more hours per week (or about half time of a 40-hour week)?**
   - ① NO
   - ② YES
   - ⑨⑨ No Answer

7. **Were you paid at least minimum wage?**
   - ① NO
   - ② YES
   - ⑨⑨ No Answer

EMPLOYMENT CONTINUED ON BACK SIDE→

SCANTRON OpScan iNSIGHT™ EM-267980-3:654321 ED99

Vita

Brigid E. Bright received her Bachelor of Science degree in P–4 special education from Henderson State University in 2002. Brigid taught special education at Forest Heights Elementary while earning her Master of Science in Special Education Instructional Specialist 4–12 from the University of Conway in 2008. Brigid taught special education on the secondary level before accepting a position as a due process data specialist for the Harrison School District. She earned her Curriculum and Special Education Leadership certification and has been the Director of Special Services for Harrison since 2013.

Brigid serves on numerous professional boards and committees. She served as president of the Arkansas Association of Special Education Administrators (AASEA) in 2018–19 and served on the AASEA board since 2014. Brigid is the 2020–21 president of the Arkansas Council of Administrators of Special Education (CASE) and is a policy and legislative committee member for CASE national since 2016. Brigid has served on both the paperwork reduction and guidance document task forces with the Arkansas Department of Education Special Education Unit.