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SPECIAL EDUCATION PRACTICES IN VERMONT

Assessing the Cost and Performance Efficacy of Current Programs

Presented to the Vermont House Committee on Education

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EXECUTIVE SUMMARY

We have been tasked by the Education Committee of the Vermont House of Representatives, chaired by Representative David Sharpe, to examine the efficacy of the current special education system in the state of Vermont. We begin by examining the legislative context of special education policy, focusing on the federal Individuals with Disabilities Education Act (IDEA) and Vermont state guidelines. Next, we examine current special education practices in Vermont relating to the Schoolwide Integrated Framework for Transformation (SWIFT) and paraprofessionals. Subsequently, our report discusses empirically-based special education best practices, utilizing interviews of experts in child development and special education to solidify the understanding of which practices are the most effective at enhancing educational outcomes for disabled students. The next component of this report is an analysis of Vermont's special education funding system in order to determine how funding influences special education service delivery. The last section of the report outlines policy options and potential barriers to improving the efficacy and cost-effectiveness of special education in Vermont. Proposed policy options, such as implementing proactive service delivery models, creating a census-based funding model, monitoring the use of paraprofessionals, and reducing the bureaucratic burden placed on special educators, aim to address the concerns of legislators and establish opportunities to provide an effective education for all of Vermont's students.

1. INTRODUCTION

Special education programs in the United States are currently governed by federal and state laws. Under this cooperative federalism model, states and local districts are largely autonomous as long as they adhere to the IDEA, the overarching federal legislation on special education. Each state utilizes a different formula to fund student accommodations and defines its own requirements for special education. Even within states, each district, or local education agency (LEA) possesses considerable independence. Each LEA has the authority to recruit paraprofessionals, identify students with disabilities, determine a student's individualized education plan, and evaluate students' progress. The lack of a uniform program is an obstacle in evaluating a state's performance in special education.

Two main issues serve as the focus of this report: research-based educational programs for disabled students and cost-efficiency in funding Vermont's special education system. To address the first issue, this report identifies best practices for special education, prioritizing programs that produce the greatest educational outcomes as determined through literature reviews and interviews with special education researchers. Of particular interest is the SWIFT program, funded by the U.S. Department of Education, which emphasizes full inclusion where all students are educated together, using a combination of general and special education teachers, paraprofessionals, and parent volunteers to promote individual student success in diverse group settings. Though this program is currently available in Vermont, implementation is limited, and the fiscal and legal flexibility that Vermont has to expand SWIFT or alter its current methods of special education implementation and funding may be considered.

To address the second issue, we look at the cost efficiency of current practices. The objective of this section is to examine special education funding and service delivery in Vermont. Specifically, we ask the following research question: What are the most cost effective ways for Vermont to maximize student educational and social outcomes in special education? Currently, Vermont's primarily reimbursement-based funding model may discourage the implementation of beneficial practices while simultaneously may incentivize ineffective practices such as the over-reliance on individual aides in classrooms. Accordingly, this report examines the cost-effectiveness of the current special education model as well as alternative special education practices.

2. LEGISLATIVE CONTEXT

In 2015, around 13 percent of students in the US (5,847,624 students) were affected by Part B of the IDEA, which oversees special education services for students ages six through twenty one. Comparatively, in Vermont around 15.6 percent of students received special education services.

2.1 Eligibility

There are two main mechanisms through which students can receive an evaluation under IDEA, based on either a teacher recommendation or a parental request. If the request is made by a school staff member, the school system is required to give the parent(s) prior written notice and obtain consent to evaluate the child. Parents must be fully informed throughout the process and receive an explanation of why the school will or will not complete the assessment, a description of the assessment process and IDEA guidelines, and a report of any other factors relevant to the child's evaluation.

IDEA requires that the initial evaluation for special education eligibility be completed within 60 days following the establishment of parental consent, authorizing states to set earlier deadlines within this timeframe. The child's disability evaluation must be individual and include the input of parents, teachers and professionals qualified to conduct developmental, functional, psychological or other relevant assessments. In order to receive special education under the IDEA, this team of individuals must determine that the child has a disability in one of the 13 categories defined by the IDEA: autism, deaf-blindness, deafness, visual impairment, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, specific learning disability, speech/language impairment, traumatic brain injury or other health impairment. The evaluation must also show that the child requires special education supports as a result of their disability, or, if the child is aged three through nine, is experiencing a developmental delay. If a child fails to meet one or more of these IDEA requirements—for example, they could be determined to have a disability but not be in need of special education—they may be able to receive supplemental educational assistance through Section 504 of the Rehabilitation Act of 1973.[1]

In addition to the identification of a disability and the need for special education supports, the state of Vermont requires a demonstration that the disability adversely affects the child's academic performance in one or more basic skill areas (oral expression, listening comprehension, written expression, basic reading skills, reading comprehension, mathematics calculation, mathematics reasoning, and motor skills). The determination of an "Adverse Effect" is made upon the documentation that, as a result of the disability, the student functions at the 15th percentile or below, 1.0 standard deviation or more below the mean, or the equivalent, on at least three of the following measures of school performance: grades, student work (such as language samples or portfolios), nationally normed individual achievement test, normed group achievement test, benchmark assessments, and criterion-referenced assessments.

2.2 Federal Guidelines

The IDEA mandates that all states provide students with disabilities a Free Appropriate Public Education (FAPE) that caters to their individual needs. If a student is found eligible under both the federal and state disability standards, his or her needs are addressed through an Individualized Education Program (IEP), a written document that outlines the student's needs and evaluates the student's progress. The IDEA encourages students to be educated in the least restrictive environment (LRE), requiring that special education students be educated with non-disabled students of the same age. The IDEA instructs that the removal of special education students from the regular classroom may only be pursued in extreme circumstances when the disability of the child is severe enough that education in a regular classroom, with the use of supplementary aides "cannot be achieved satisfactorily."

The Rehabilitation Act of 1973 protects students with disabilities from discrimination, ensuring that students are guaranteed accommodations such as individual aides, extended time on assignments, and testing modifications.

The U.S. Department of Education produces a yearly ranking that demonstrates how well states have complied with the requirements of the IDEA. There are three levels of compliance: "meets requirements," "needs assistance," and "needs intervention." Many states, including Vermont, meet the highest level of compliance according to the Department of Education. However, these rankings do not reflect educational outcomes.

2.3 Vermont State Guidelines

States bear the responsibility of implementing IDEA guidelines through regulations and some states go beyond the IDEA's basic requirements. In Vermont, a student is qualified for special education services if the student possesses a disability according to the state's disability criteria and this disability adversely affects educational performance. Once qualified, the students receives an IEP planning team that consists of the child's parent, a local education agency representative, administrator, a special education teacher, and regular classroom teacher.

Vermont state guidelines for special education build on the IDEA's LRE requirement, emphasizing the state's goal to ensure that all children have access to the general curriculum. Accommodations are not determined based on disability or age alone, but by the day-to-day capabilities and learning needs of each special needs child. Special education services can include, but are not limited to, the following: co-teaching with a special education teacher, individual aides, home instruction, speech-language pathology services, travel training, and technical education. Each individual district is responsible for assigning representatives and determining each child's accommodations, granting local districts the liberty to adjust services based on the available resources and the student's needs.

2.4 Five Types of Funding

Although the federal funding provided for the IDEA provides some relief for states, this funding typically comprises only eight percent of the total state budget for special education. States typically use one of five funding models to share the burden between LEAs and the state. The five models employed are resource-based, percentage reimbursement, census-based, student weights, and block grants; each of these will be discussed in more detail later on in the report in addition to the specific breakdown of funding sources utilized in Vermont. Funding mechanisms vary widely among states but, unfortunately, states often do not adequately explain their funding mechanisms to the public, and this information is difficult to find. In addition, these funding mechanisms may encourage states to over-report the number of students with disabilities and encourage services outside the regular classroom that do not support integration. We take a closer look at funding mechanisms and their effects on the quality of special education later in the report.

3. SPECIAL EDUCATION IN VERMONT

3.1 SWIFT

The Schoolwide Integrated Framework for Transformation (SWIFT) program is a system for school-wide reform, focusing especially on schools that struggle with issues of low achievement, high rates of problematic behavior or discipline issues, and exclusion of students who require supplementary learning accommodations. The SWIFT program is currently in place in eight of Vermont's schools and the program receives funding through a five-year grant from the U.S. Department of Education's Office of Special Education Programs, representing "an unprecedented national effort to bridge general and specialized education."[2] The SWIFT program recognizes that, in order to successfully address these systemic problems, reforms must address multiple levels of engagement and community support, including state governments, schools, districts, classrooms, individual students and families.

The SWIFT program is comprised of five primary features:[3]

- Integrated Education Framework: Equal access to the same general curriculum, school-related activities, and extracurricular activities among all students in the same grade level (with appropriate accommodations, if necessary)
- Multi-tiered System of Support: Use of research-based schoolwide practices like inclusivity in academic and behavioral instruction
- Family and Community Engagement: Creation of opportunities for educational participation and decision making for families and collaboration with neighborhood partners to meet school needs by utilizing services and resources in the community
- Administrative Leadership: Engaged leadership among school administrators and teachers for sustainable school reform and a strong educator support system (instructional coaching and professional support)
- Inclusive Policy Structure and Practice: Support for the full implementation of SWIFT by LEAs and the removal of policy barriers to SWIFT's success, as well as the extension of successful implementation cases to other schools

One of the central tenets of the SWIFT model is the inclusion of students of all backgrounds in age-appropriate classrooms. The program aims to enhance the social and academic environments in schools across the country by ensuring that all children are seen as valued and engaged members of their schools. All students benefit from inclusive classrooms, but the SWIFT model may be especially impactful among populations of the most vulnerable and disadvantaged students, particularly those who struggle to learn, live in poverty, are disabled, or belong to cultural or ethnic minority groups.[4]

In a typical SWIFT classroom, all students learn in the same classroom along with any academic or behavioral supports needed by the population of students. This results in a learning environment comprised of many types of individuals, including general educators, special education teachers, support staff, family, and community members. According to the SWIFT program, a typical classroom may include: "a parent volunteer practicing sight words with a student, a general educator and a specialized educator leading differentiated small reading groups, a speech/language therapist working on reading vocabulary with another group of students, and classmates collaborating on a reading comprehension activity."[5] These individuals all work together toward the goal of the SWIFT classroom: to ensure that all students have access to and fully engage with the general education curriculum of their state and/or school district.

3.2 Paraprofessionals

According to the U.S. Department of Education, Title I paraprofessionals who serve schools in any instructional capacity are permitted to complete any of the following tasks:

1. Provide individual tutoring outside of normal class time
2. Assist with classroom management, like organizing instructional materials
3. Provide instructional assistance in a computer laboratory, library, or media center

4. Conduct parental involvement activities
5. Act as a translator
6. Provide instructional support services under the direct supervision of a qualified teacher

Title I of the federal Elementary and Secondary Education Act (ESEA) provides federal funding to local education agencies to assist disadvantaged students, like those from low-income families, in achieving state academic standards. Congress reauthorizes the ESEA every five to six years, and the most recent reauthorization occurred in December of 2015.[6]

Policy changes from the reauthorization gave states and LEAs more power in deciding how to reform struggling schools, but also reformed Title I requirements for paraprofessional certification. Previously, paraprofessionals receiving Title I funds were not limited in their duties and were required only to have graduated from high school, although states were free to set higher requirements. LEAs are permitted to use federal Title I funds in order to assist paraprofessionals in meeting these new requirements.

Paraprofessionals now need to have a high school diploma and prove that they are "highly qualified" paraprofessionals (HQP). This can be done in one of three ways: completing an associate's degree, completing two years of college or demonstrating "knowledge of reading, writing, math, and the ability to assist in instructing these subjects." The only requirement for the third method is passing an academic assessment administered by a state or local education agency. In Vermont, this can be met through the ParaPro Assessment, where the passing score is a 458, or The ParaEducator Learning Network, where LEAs set the acceptable courses, modules and scores. The "highly qualified" standard can also be met through a locally developed portfolio process, whose requirements are managed by local education committees.

However, in non-Title I schools, paraprofessionals are not all required to be HQP. The only requirement in this case is that the supervising special educator must meet the content knowledge requirement for HQPs. In Vermont, there is no state certification for paraprofessionals, as all HQP eligibility and hiring decisions are made by local education agencies.

4. EMPIRICALLY-BASED BEST PRACTICES

In the past 40 years, the United States has made tremendous strides in increasing access to education for students with disabilities. However, there remains a significant achievement gap between those with and without disabilities. Empirical investigations of policies that aim to bridge this gap have supported specific approaches that are correlated with academic and social success in this vulnerable population of students. However, the foundation of special education is individualization, so schools and special education teachers are ultimately responsible for providing accommodations based not only on research, but the individual characteristics of students, their disabilities, and their social,

academic and behavioral needs.[7] Studies on improving educational and social outcomes for students with disabilities on a large scale tend to focus on the utilization of inclusive classrooms, fair disciplinary policies and the effective use of educational aides.

4.1 The Benefits of Inclusion

One widely supported practice in special education programs is the inclusion of special education students in general education environments as much as possible. This goal has broad institutional support in Vermont and throughout the world. Access to general education classrooms for students with disabilities has been deemed a universal human right by the United Nations Convention on the Rights of Persons with Disabilities and is a hallmark of special education legislation in numerous countries.[8] Apart from these legal and ethical foundations, inclusive educational practices for children with disabilities are also supported by empirical evidence.

Numerous studies have shown that combining special and general education students in classrooms allows disabled students to make significant gains in academic achievement.[9] Studies tend to find either no effect or a positive effect of inclusion on educational outcomes for disabled children, but this may be due to limited sample sizes and the effect of time in inclusive classrooms. For instance, one study found improvement in literacy skills among intellectually disabled students who were placed in general education classrooms (compared to similar students in the same district who attended separate special education schools), but significant improvements in the same population after four years, supporting the idea that inclusion benefit disabled students in the long term.[10]

Another study found a strong positive relationship between inclusion time and special education students' scores on standardized mathematics and reading evaluations, concluding that when comparing students with similar disabilities and backgrounds, the student that spent more hours a day in a general education classroom will tend to score eight to ten points higher on academic assessments than a student that spent little or no time in general education.[11] However, future research is needed to assess the impact of classroom variables, such as teacher performance, on this effect.

A common criticism of policies that attempt to maximize the inclusion of students with special needs in general education classrooms is that they can be disruptive and interfere with the right of general education students to a proper education, but research has shown that there is no detrimental effect of inclusion on non-disabled students, and that the utilization of non-disabled peer mentors for social and educational classroom support has positive social and academic effects for all students involved.[12] A study of parents of non-disabled students in Vermont public schools found that the vast majority of parents found the inclusion of special needs students beneficial. Some of the benefits described by parents included personal enjoyment and friendship among students, a productive sense of responsibility, a respect for individual differences, social and emotional growth, and a broadening of their children's personal experiences.[13]

4.2 Evidence-Based Disciplinary Approaches

Ineffective and biased discipline policies negatively impact educational outcomes for students with disabilities, and the reevaluation of these programs can improve educational and social outcomes. Data compiled by the U.S. Department of Education Office of Civil Rights indicates that students with disabilities are twice as likely to be suspended as non-disabled students.[14] For all students, but especially disabled students, zero-tolerance policies are associated with increased behavioral and discipline issues, lower academic achievement, heightened dropout rates and increased likelihood of entering the criminal justice system.[15]

Alternatives to these policies are most effectively established at the school or district level and emphasize that behavioral issues among disabled students stem not from a desire to be intentionally disruptive, but issues with communication.[16] For instance, positive behavior interventions and supports (PBIS) emphasize actively teaching students what is appropriate instead of merely expecting certain behaviors, creating a predictable, positive and safe learning environment.[17] The U.S. Department of Education has endorsed schoolwide PBIS, which have been implemented in over 9,000 schools across the country and have been shown to result in significantly fewer student suspensions and office discipline referrals.[18]

In the state of Vermont, a Vermont Positive Behavior Interventions and Supports (VTPBiS) Team was created in 2007 in a collaborative effort between the state Agency of Education and the UVM Center on Disability and Community Inclusion Collaboration, in a statewide effort "to help school teams form a proactive, school-wide, systems approach to improving social and academic competence for all students."[19] As of 2014, 43 percent of Vermont schools have implemented PBIS to some extent, resulting in a reduction of office discipline referrals (ODRs) in elementary, PreK-8, PreK-12 and high schools and fewer out-of-school suspensions (OSS).[20]

4.3 The Complicated Role of Individual Aides

An analysis of evidence-based special education interventions is incomplete without mentioning educational aides. The roles of these educational assistants include: (1) providing supplemental academic instruction; (2) addressing student behavioral challenges; (3) providing personal care; (4) facilitating peer interaction; and (5) compiling student data.[21] A study of educational aides in Vermont found that the most common justifications for individual special education paraprofessionals were instructional and behavioral supports.[22] The same study identified that the most common advocates for individualized special education paraprofessionals were special education teachers, followed closely by general education teachers, parents and school administrators, indicating that support for aides is relatively widespread.[23]

Paraprofessionals are commonly seen as essential by general education teachers to aid students that require extra support. However, there has been much research on the

efficacy of paraprofessionals in the last two decades, and the findings are not always so favorable. Empirical support for the use of aides is not as consistent as that of other special education practices. It is widely assumed that the use of paraprofessionals in the classroom improves academic and social outcomes for students with disabilities, but this theory has not garnered significant empirical support and remains under-researched.[24] A meta-analysis of 32 studies highlighted the absence of adequate preparation for special education paraprofessionals, but other research suggests that when paraprofessionals are well prepared to provide classroom support, students can benefit.[25]

Aides are not inherently helpful or harmful, but research suggests that the current system may reduce their potential to improve student outcomes. For instance, caseload stressors have been shown to lead to higher rates of attrition and general shortages in special educators as well as the research-to-practice gap that prevents the implementation of empirically supported student accommodations.[26] The bureaucratic requirements of special education programs may also be a burden on special educators, who may spend up to a quarter of their time filling out paperwork (Figure 1).[27] This weakens the argument that schools and teachers rely on aides primarily to provide educational and behavioral supports.

Though paraprofessionals are assigned with positive intentions such as helping students, complying with parent requests, and assisting special educators, research suggests they are often utilized inappropriately, thus reducing reduces their positive impact on special education service delivery and student outcomes. One study in Vermont illustrates that paraprofessionals deliver an average of 40 percent but up to 80 percent or more of instruction for students with disabilities who have been assigned a full-time aide.[28] Research also demonstrates that nearly half of all Vermont special education paraprofessionals are used as 1:1 supports for students with disabilities. A substantial body of research illustrates that utilizing paraprofessionals extensively or in close proximity to students (as in 1:1 situations as opposed to paraprofessionals assigned to larger groups or an entire classroom) results in several detrimental effects such as stigmatization, interference with peer interactions and teacher engagement, and unnecessary dependence.[29]

Additionally, the fact that three-quarters of instruction provided by special educators in Vermont schools may be provided by paraprofessionals may undermine disabled students' interactions with qualified teachers or special educators and potentially violate the FAPE provisions of the IDEA.[30] While students with disabilities often have the highest educational and developmental needs and may benefit from extra support in the classroom, they often receive large amounts of instruction from paraprofessionals who have the least educational training. Furthermore, paraprofessionals often work with disabled students one-on-one, creating a less than optimal learning environment for students with the most extensive learning needs. Many schools would not allow non-disabled students to spend three-quarters of their instruction time without a certified teacher, yet this can be the case for disabled students.

While there are issues with the use of paraprofessionals in Vermont schools, they cannot be solved simply by eliminating or reducing the number of educational aides. The most effective educators for students with disabilities are often certified special education teachers, but appropriately used paraprofessionals can indeed enhance the classroom learning environment. The most commonly proposed reforms presented by researchers concerning the use of paraprofessionals includes raising hiring and employment standards, setting appropriate roles, improving work benefits like pay, providing better training and increasing respect and acknowledgement for the position.[31]

5. SPECIAL EDUCATION FINANCE

When considering potential alterations to special education in Vermont, important aspects to examine are the mechanism currently used to allocate funding and any existing alternatives. Accordingly, the five models used to apportion special education funding are described below. In addition, certain issues with special education in Vermont, such as the escalating use of aides, are related to the current, primarily reimbursement-based funding model. Therefore, a thorough examination of Vermont's special education funding model and the relationship between this funding model and successful outcomes in special education is also included.

5.1 Funding Formulas for Special Education

The five models employed by states to fund special education are resource-based, percentage reimbursement, census-based, student weights, and block grants. In addition, some states utilize a combination of models or do not have any separate funding systems for special education.

Resource-based funding models allocate funding based on a set payment for a certain number of specific special education resources, such as the number of teachers or classroom units. The number of special education resources for a particular school or district is generally set by predetermined staff-to-student ratios that can vary based on student need, form of disability, or type of placement.[32]

Percentage reimbursement funding models provide funding based on a percentage of allowable, actual expenditures.[33] "Allowable" refers to expenditures that the state has agreed to reimburse and "actual" means that states will be reimbursed based on what they actually spend, not based on what they planned to spend.

Census-based funding models distribute a fixed dollar amount per total enrollment or average daily membership (ADM), the average number of students in the school district on any given day within a specified time period.[34]

Student weights funding models can be based on either single student weights or multiple student weights. The single student weights model dispenses funding per special education student. The funding amount is either a single, specific multiple of the general

education amount or a fixed dollar amount. The multiple student weights model provides funding per special education student that varies by student need, form of disability, or type of placement. The funding amount is either a series of multiples of the general education amount or tiered dollar amounts based on the above factors. [35]

Block grant funding models apportion funding based on base year or prior year allocations, revenues, and enrollment. [36] For instance, Utah, the only state to use a primarily block grant-based model, apportions additional funds based on specified ADM formulas.

Some states, such as Vermont, utilize a combination model that allocates funding based on a combination of two or more of the five formula types. Finally, some states do not have any separate systems for funding special education and simply roll funding to support special education into overall funding levels. [37]

When considering all the states, the most popular funding model is student weights, with seven states using single student weights and twelve states employing multiple student weights. Census-based models and no separate special education funding models were utilized by seven states each. Combination and percentage reimbursement models were used by five states each. Lastly, six states employed a resource-based model and one state utilized block grants.[38]

5.2 Special Education Funding in Vermont

As stated above, Vermont utilizes a combination funding model for special education. This combination funding model has three components with the primary component consisting of a percentage reimbursement funding system. Each of the three components has a portion that is funded by the state and the remaining amount requires a local match.

The first component is the mainstream block grant based on a statutory formula (16 V.S.A §2961). According to the formula, the state provides to each school district approximately 60 percent of the statewide average salary for:

- 9.75 full-time equivalent (FTE) special education teaching positions per 1,000 ADM
- The school district's share of 1.0 FTE administrators allotted to each supervisory union or supervisory district (consisting of member school districts)
- For any district within a supervisory union or supervisory district that has an ADM greater than 1,500, the school district receives additional funding based on a specified formula which accounts for ADM within the district relative to ADM in the largest supervisory union or district in the state.

The second component of Vermont's special education funding program is the extraordinary services reimbursement which applies to extreme individual cases. If a

district spends more than $50,000 for special education services for a single student, the state will reimburse the district for 90 percent of funds spend in excess of $50,000. [39]

The third and largest component is special education expenditures reimbursement which provides funding to school districts for expenses not otherwise covered. The state reimbursement percentage is adjusted annually to ensure a 60 percent state share when considering state contributions across all three components of the funding formula.[40] For instance, the projected expenditures reimbursement percentage for fiscal year 2016 is 56.27 percent.[41]

Outside of the special education funding formula outlined above, there are two additional components of special education funds. These two components are essential early education grants for preschool special education services and funding for special education services for students placed outside the district of parental residence by a state agency.[42]

For fiscal year 2016, the state budget for special education is approximately $315 million. Of the $315 million, 6.07 percent of funding will come from federal IDEA funding and another 10.03 percent will come from the mainstream block grant. In addition, 4.45 percent will come from extraordinary services reimbursement and 43.45 percent will come from special education expenditures reimbursement. The remaining 36 percent of funding will come from local districts themselves. Overall, 82.69 percent of funding from the state level takes the form of reimbursement, either from extraordinary services or special education expenditures.[43]

In order to obtain funds each year, every Vermont school district must submit a report including a service plan projecting the cost of special education for the upcoming year as well as expenditure reports during the year of actual costs incurred. Vermont Agency of Education staff then review these expenditure reports and determine the amount of state assistance, conduct audits of the special education expenditure reports to ensure accuracy and proper documentation, and oversee the distribution of federal IDEA-B and Preschool Flow Through funds to supervisory unions.[44]

5.3 Special Education Service Delivery and Funding Mechanism

Two areas that may be a cause for concern are special education service delivery within schools and the special education funding mechanism, which are closely related. Both the service delivery and funding mechanism limit the system's responsiveness and flexibility, resulting in myriad consequences for the system's efficiency and cost-effectiveness. Each of these two issues and their consequences are analyzed in this section of the report.

When designing special education service delivery models, school districts sometimes fail to build inclusive, proactive service delivery models that will be effective and cost-efficient as the needs of students with disabilities fluctuate over time. As a result, when faced with rising numbers of students requiring special education, school districts are

forced to respond reactively. An easily implemented and relatively low cost response is to increase the numbers of paraprofessionals.[45] This response is particularly prevalent in Vermont where, "when adjusted for changes in enrollment, the use of special education professionals has more than doubled during the same time period when [the] rates of regular class placements were declining by nearly 20 percentage points."[46] This reactive, ad-hoc approach is only a temporary solution that will not meet the long-term needs of students and only delays attention to root causes of the issue at hand.[47] Furthermore, this reactive response results in "well-documented practical, ethical, and instructional challenges" and contributes to the rising costs associated with special education.[48] In sum, Vermont has a long history of expanding special education services simply by adding paraprofessionals, but this response is neither sustainable nor desirable in terms of educational quality or equity.[49]

In the case of Vermont, the consequences arising from the largely reactive service delivery model are only exacerbated by the disadvantages of the primarily reimbursement-based funding model. For instance, reimbursement models tend to have more restrictive funding, are more paperwork intensive, and are subject to budgetary limits.[50] Though funding policy should be designed to further a state's special education priorities, the reality is that the opposite is occurring in Vermont. Programmatic decisions made by local educators are influenced by fiscal incentives created by the state's funding model. These fiscal incentives run counter to best practices in special education and effectively encourage undesirable practices, including the overuse of paraprofessionals[51]

Vermont's system of special education funding creates the following six issues.[52]

1. *Unnecessarily burdensome and time-consuming for schools.*

Vermont special educators report that they spend approximately one-quarter of their time on paperwork.[53] With such a high paperwork burden, it is clear why they need to rely on paraprofessionals who are often undertrained and unsupervised. For instance, data shows that on average a Vermont special educator supervises six paraprofessionals and spends approximately 12 percent of her time on their supervision, representing only two percent of her time for each paraprofessional under her direction.[54] Furthermore, "nearly 70 percent of special education paraprofessionals in 12 inclusive schools in Vermont reported that they make instructional or curricular decisions without always having teacher or special educator oversight."[55] Making navigation of the funding system less burdensome and time-consuming for schools and special educators would allow these special educators to spend more time working with students and supervising paraprofessionals.

2. *Discourages innovation in service delivery and practice for fear of financial penalties.*

The current funding system has strict rules regarding reimbursement. If schools deviate from current practices to try new methods such as different patterns staff utilization or new inclusion practices, they are likely to lose funding. Based on his research in numerous schools in Vermont, Professor Michael Giangreco writes, "An all-too-often

heard refrain in schools is that they would like to pursue and innovation, but feel constrained by financial rules or regulations."[56] For instance, if schools wanted to reduce their reliance on individual aides in favor of classroom aides, these schools would lose funding but still faces the same number of students needing support.

3. *Inadvertently incentivizes identification of students as disabled and financially disadvantages schools that appropriately keep certain students out of the special education system.*

An important issue is that Vermont continues to identify increasing numbers of students as disabled. This figure is now 15.6 percent of all students which exceeds the national average of 13.0 percent and signifies an increase over time within the state.[57] Though several factors contribute to this increase, a factor to consider is that, based on Vermont state laws, one path for schools to garner additional resources is to identify students as disabled, place them in special education, and potentially provide them with an individual aide, whether or not this arrangement is necessary or the least restrictive, most inclusive way to educate particular students.

On the other hand, if a school appropriately keeps certain students out of special education and desires to support them outside of that system, they face financial penalties. Research illustrates that "when schools reduce their special education eligibility numbers by effectively implementing stronger general education supports, they simultaneously may lose special education personnel resources because those resources were linked exclusively to services designated as special education, despite the fact that their student populations is unchanged, merely categorized/labeled differently."[58]

4. *Encourages "gamesmanship" between schools and the state.*

Schools desire to maximize their reimbursement and the state desires to impose new rules and restrictions to keep reimbursement levels low and avoid misuse. This form of "game-playing" is not productive for either the state or school districts and works against producing, stable, predictable funding levels for school districts.

5. *Includes components that drive special education away from promising, evidence-based best practices.*

Special education funding can only be used for students with disabilities. In addition, the reimbursement system incentivizes assigning aides one to one with students or clustering students with special needs together. Evidence-based best practices on inclusion in special education promote grouping students with and without disabilities in natural proportions and flexibly using personnel to meet student needs.[59] The funding system works at cross-purposes with inclusion and other evidence-based practices.

6. *Expends substantial amounts of "hidden costs" in personnel time.*

An ideal special education funding model must be designed to encourage good practices and foster innovation while at the same time avoiding excessive paperwork, restrictions, and other hidden costs in personnel time. One example that arises out of the current system is the time studies recorded by special educators. Though these time studies were created to prevent school districts from utilizing funds for purposes other than special education, they increase the paperwork burden on special educators. Regular education

teachers do not have to complete the lengthy time studies required of special educators. The state is paying special educators to complete these time studies as well as paying personnel to collect and audit allowable/reimbursable expenses. There is potential for this money to be saved or spent on supporting students while allowing teachers to be more flexible or innovative without the restriction of having to record what they are doing with each portion of their time.

Overall, the service delivery model and funding mechanism of special education in Vermont are associated with negative externalities, as discussed above. To remedy these issues, Vermont may consider restructuring its special education service delivery and funding mechanisms.

6. POLICY OPTIONS AND POTENTIAL BARRIERS

6.1 Implement Proactive Special Education Service Delivery Models

Vermont's overreliance on paraprofessionals is a sign of underlying dysfunction in special education service delivery. While providing more training to paraprofessionals and reducing the number of paraprofessionals are worthwhile endeavors, paraprofessionals are not the source of the problem and a solution focused only on paraprofessionals will not solve Vermont's issues.[60]

Accordingly, implementing proactive special education service delivery models will reduce the overreliance on paraprofessionals in a sustainable way by introducing effective alternatives.[61] Deploying a proactive service delivery model will allow for more innovation and flexibility when implementing best practices and utilizing funds.

The three examples described below could be potential foundations for developing inclusive, proactive delivery models.

The Vermont Agency of Education offers a field guide and assessment to aide schools and districts in implementing Multi-tiered System of Supports Response to Intervention and Instruction (MTSS-RTII) programming. MTSS-RTII is a "comprehensive and systematic process for assessing and maximizing the opportunities to learn for all students within any content area. It emphasizes the importance of effective, culturally responsive, and differentiated first teaching and effective early intervention supports for both academics and behavior for all students, prior to making a referral for a special education evaluation."[62] Similar measures are incorporated within the SWIFT program used in eight Vermont schools. Accordingly, expanding the SWIFT program to a larger number of schools may also be an option.

Another potential model is illustrated by the *Guidelines for Selecting Alternatives to Overreliance on Paraprofessionals* by Michael Giangreco and Stephen Broer. Williston Schools in northwestern Vermont successfully implemented a plan based on the *Guidelines* and achieved several improvements in special education including reducing

the number of special education paraprofessionals, shifting resources from individually-assigned paraprofessionals to classroom-assigned special education paraprofessionals, and developing a model of proactive service delivery. The changes in service delivery and resource reallocation led to improved student outcomes while also saving $169,000 annually. [63]

A third possibility is outlined in "Precarious or Purposeful? Proactively Building Inclusive Special Education Service Delivery on Solid Ground" by Michael Giangreco and Jesse Suter. This model is based on personnel utilization data from 69 schools and offers examples of resource allocation and proactive service delivery models. Overall, this exemplar model is meant as a starting point to foster discussion, problem solving, and model development.[64]

6.2 Reform the Funding System to Reflect Best Practices in Special Education

A November, 2013 letter from the Vermont Special Education Advisory Council to Rebecca Holcombe, the Secretary of the Vermont Agency of Education, states:

"Any approach to special education funding in Vermont should: (a) be simplified, (b) reduce the paperwork and reporting time burden on schools, (c) provide increased flexibility for public schools to use State-appropriated funds within a planned approach that ensures accountability for student outcomes, (d) encourage innovation, (e) be consistent with evidence-based and promising practices, (f) provide funding predictability for schools, and (g) provide mechanisms that allow for ongoing innovations as practices in the field change."

This quote succinctly states the most important factors when selecting an alternative funding mechanism. Because of Vermont's issues with the current percentage reimbursement model, the four remaining models can be considered as alternatives. These four models include resource-based, census-based, student weights, and block grants. Of these four models, a census-based system best fits the requirements stated above.

Census-based funding models distribute a fixed dollar amount per total enrollment or average daily membership (ADM), the average number of students in the school district on any given day within a specified time period.[65] Because ADM tends to be stable or change predictably over time, funding levels may be more stable. In addition, funding in a census-based system is detached from counts of special education students or needs and thus does not incentivize identifying students as disabled. Because the funding is not tied to the number of special education resources or students, the funding model is simplified and reduces the paperwork burden on special educators. Schools may also have more flexibility to implement innovative or evidence-based practices because funding allocations based on student placement have the tendency to limit the flexibility of local leaders and educators with regard to how special education populations are best

accommodated. In contrast, a census-based model which is placement neutral allows for more discretion in the placement and services provided for students.[66]

Overall, a census-based model fits the criteria identified by the Vermont Special Education Advisory Council. If such a system is implemented, several important issues will need to be discussed.[67]

These include:

- Special adjustments based on poverty, number of English-language learners, small school sizes, and extraordinary costs
- Calculating expected percentages of students with special needs
- Setting the minimum, base-level supports available in all schools
- Determining which MTSS supports should be provided (literacy and math specialists, speech-language pathologists, behavior specialists, ELL teachers, etc.)

Another important issue separate from service delivery specification is a mechanism for transition. States such as California, Pennsylvania, and New Jersey have restructured their special education funding mechanisms to a census-based model, largely to control rising or above average special education expenditures. The transition methods as well as practices utilized in these other states with census-based models may inform policy in Vermont. [68] For instance, during Pennsylvania's transition to a census-based system, local districts became responsible for an increasing share of special education funding due to caps at the state level. Vermont could avoid this issue by maintaining its current policy of a constant 60 percent state share for special education funding.[69]

6.3 Evaluate and Monitor the Use of Paraprofessionals

The fact that three-quarters of instruction for special education students in Vermont schools may be provided by paraprofessionals has the potential to undermine disabled students' interactions with qualified teachers or special educators. If the separation of special education students from the general education classroom results in a reduced quality of education, as would be the case for students who receive a substantial portion of their instruction from aides, this violates the Free Appropriate Public Education provisions outlined in Section 504 of the Rehabilitation Act of 1973, which states:

"No otherwise qualified individual with a disability in the United States… shall, solely by reason of her or his 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."

According to the U.S. Department of Education, these FAPE requirements were established to protect the civil rights of disabled students and individuals, and must be followed by any entity that receives federal funding, including public school districts, colleges and universities, and other state and local education agencies. Since paraprofessionals are not required to meet the same rigorous standards placed upon

general and special education teachers, differences in educational quality arise when special education students receive substantial portions of their instruction from untrained personnel.

Paraprofessionals are considered by many general education teachers as "an essential support" for disabled students in general education classrooms, and are commonly favored by parents of disabled students. While paraprofessionals are often assigned to special education students with benevolent intentions, restricting these students' access to fully-trained and certified educators is a double standard that would likely be perceived as inappropriate for the education of non-disabled students. The utilization of under qualified personnel can also result in interference with normal peer interactions, an unnecessary dependence on paraprofessionals, stigmatization of disabled students and behavioral infractions, opening schools up to potential legal risks if disabled students are not given the same opportunities.

One vital step that schools and districts may take to begin to address these issues and encourage more appropriate accommodations for disabled students is conducting a systematic assessment to determine the extent of their overreliance on paraprofessionals. For instance, Giangreco and Broer developed a 16-item screening tool that identifies the extent to which paraprofessionals are being over-utilized and/or being used inappropriately, addressing issues like physical separation in classroom activities, supervision of paraprofessionals, and knowledge of IEP goals and expectations, among others.

Field testing of the screening tool indicated that, in a sample of 27 schools (12 of which were in Vermont), 26 schools reported that the number of paraprofessionals had increased in recent years, in part because of an assumption that paraprofessionals are one of the best ways to support disabled students. In the same study, 24 schools indicated that (1) paraprofessionals sometimes or often provided academic instruction in areas in which they were not formally trained and (2) some disabled students spent the majority of their time with paraprofessionals. Twenty-three schools indicated that many students with disabilities "are highly and unnecessarily dependent on paraprofessionals."[70]

While the dependence on paraprofessionals often surpasses what is necessary, paraprofessionals themselves are not inherently harmful to the education of students with disabilities, and they may meaningfully support students when they are appropriately qualified and prepared to ensure FAPE for all students. The following are steps that schools and LEAs may take to ensure that paraprofessionals are being utilized appropriately and effectively: [71]

1. IEP teams identify why paraprofessionals are being considered in the context of the needs of an individual child
    a. Focusing on a student's learning needs rather than categories or characteristics like a specific disability, the team can determine what personnel or accommodation is best equipped to meet those needs

2. If the IEP team determines that a paraprofessional is needed to ensure FAPE, the selection process should include all members of the team whenever possible
    a. Soliciting teacher, parent and even student input when deciding if and how a paraprofessional should be utilized can improve the quality of services as well as accountability
3. Include the paraprofessional in IEP meetings when possible to make the overarching learning goals set for the student clear, as well as clearly describe the duties of paraprofessionals and how they will be monitored
    a. Duties should include the implementation of IEP team-approved instruction, the collection of data to assess the progress of team-determined goals, and possible interventions regarding student safety and health concerns
4. Develop plans to increase student independence and social interaction with peers and set clear expectations for how paraprofessionals will help meet these goals
5. IEP teams should be required to explore a variety of supplemental accommodations and services to meet student learning needs and maximize inclusion
    a. Whenever possible, assigning paraprofessionals should not be the only option presented to parents and students

6.4 Reduce the Bureaucratic Burden Placed on Special Educators

Special educators in Vermont report that they spend approximately one-quarter of their time on paperwork.[72] This bureaucratic paperwork burden is excessive and prevents these special educators from spending more of their time with students, general education teachers, and paraprofessionals. Because some of the paperwork burden is the result of federal law, there is nothing that Vermont can do individually as a state to reduce the federally-mandated portion of the paperwork burden. However, Vermont may consider enacting policies to reduce the paperwork burden imposed at the state level. One example of a state-imposed paperwork burden is the time studies for special educators. While these studies are completed in order to ensure financial accountability in the reimbursement model, the use of these time studies works at cross purposes with increasing innovation and flexibility in special education.

Accordingly, there are a few questions Vermont may consider: What might the benefits and costs be of reducing the paperwork burden at the state level? What, if any, non-federally mandated paperwork is the state asking for that could be reduced or eliminated? Are the current bureaucratic requirements allowing schools to utilize resources and funds to promote flexibility and innovation?

6.5 Proceed Cautiously with Potential Reforms

Due to the complex nature of school finance, any potentially cost-saving reforms may have unintended consequences.[73] For instance, though a census-based funding system is placement neutral, it creates incentives for less costly placements. While this may be

beneficial and potentially cost-saving if the lower-cost services meet the needs of the student, placing students with disabilities in regular class environments without the funding to ensure adequate supports may actually result in a more restrictive education for these students. [74] In addition, each LEA is unique and reforms may have largely different effects depending on the underlying characteristics of the local area. Thus, policymakers may consider soliciting input from Vermont educators, families, and other stakeholders in order to carefully analyze and consider any new policies.[75] Potential reforms may be more likely to succeed if supported by both policymakers and school communities throughout Vermont.

In order to ensure that any policy revisions are achieving the necessary goals without unintended consequences or negative impacts on students, an evaluation component could be added to any legislation enacted. This would allow policymakers to identify any issues that arise that may need to be addressed with future legislation.[76]

7. CONCLUSION

While special education is a complex issue, the aim of this report is to provide a thorough analysis of the legislative context, empirically-based best practices, and financial considerations of special education for Vermont. Due to the complexity of the special education system, any potential reforms will likely need to be multi-faceted. In particular, policy options include implementing proactive service delivery models, creating a census-based funding model, monitoring the use of paraprofessionals, and reducing the bureaucratic burden placed on special educators. Any reforms enacted may need to be monitored and evaluated to prevent unintended consequences. In sum, a careful consideration of the current state of special education in Vermont reveals room for improvement and the policy options outlined in this report should aid Vermont legislators in the goal of cost-effectively maximizing student educational and social outcomes in special education.

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